

ICOH-WOPS 2008



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3^e CONFÉRENCE INTERNATIONALE CIST SUR LES FACTEURS PSYCHOSOCIAUX AU TRAVAIL

Québec (Québec) Canada ■ 1^{er} au 4 septembre 2008

Hôtel Loews Le Concorde

3rd ICOH INTERNATIONAL CONFERENCE ON PSYCHOSOCIAL FACTORS AT WORK

Québec (Québec) Canada ■ September 2008, 1st to 4th



Institut national
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RÉSUMÉS / ABSTRACTS

Troisième conférence internationale CIST sur les facteurs psychosociaux au travail

Third ICOH International Conference on Psychosocial Factors at Work

DE LA CONNAISSANCE À L'ACTION / FROM KNOWLEDGE TO ACTION
Québec (Québec) Canada
1^{er} au 4 septembre 2008 / September 2008, 1st to 4th

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RÉSUMÉS / ABSTRACTS
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CONFÉRENCE I

KEYNOTE I

Études d'intervention psychosociale

Tage S. Kristensen

*Centre de recherche national sur le milieu de travail
(Copenhague, Danemark)*

Les études d'intervention revêtent une grande importance, et ce, pour plusieurs raisons. D'abord, on considère que les devis d'intervention fournissent de très bonnes preuves des associations causales. Ensuite, ces études permettent d'élucider des problèmes liés à la mise en place de meilleures conditions de travail. Finalement, les études d'intervention démontrent avec force qu'il est en fait possible d'améliorer les conditions de travail ou la santé. Les essais cliniques randomisés sont souvent considérés comme la règle d'or dans la recherche intervention, mais l'on doit tout de même savoir qu'il est possible d'obtenir des données probantes sans ce type de devis. Il est toujours important de distinguer les problèmes théoriques (le comprimé a-t-il l'effet voulu?), des problèmes d'implantation (le patient prend-il le comprimé?). Parallèlement à cette distinction, il y a la différence entre l'échec de la théorie et l'échec du programme. En recherche psychosociale, le nombre de bonnes études d'intervention augmente rapidement depuis quelques années. Dans la plupart des cas, les résultats sont assez modestes, ce qui est souvent attribuable à la portée et à l'ampleur plutôt limitées des interventions. On doit se rappeler toutefois que les milieux de travail ne sont pas des laboratoires de recherche. En effet, les facteurs internes et externes présents dans le milieu de travail jouent souvent un rôle plus important que les interventions amorcées par les chercheurs.

Psychosocial intervention studies

Tage S. Kristensen

*National Research Centre for the Working Environment
(Copenhague, Denmark)*

Intervention studies are important for a number of reasons. First, the intervention design is considered to give very good evidence about causal associations. Second, intervention studies can elucidate the issues related to the implementation of better working conditions. And third, intervention studies are convincing because they demonstrate that it is actually possible to improve working conditions or health. The controlled randomized trial is often considered the golden standard of intervention research but it should be kept in mind that good evidence can be reached without such a design. It is important always to distinguish between theory issues (does the "pill" have the intended effect) and implementation issues (does the "patient" take the "pill"). Corresponding to this distinction is the difference between theory failure and programme failure. In psychosocial research the number of good intervention studies has been increasing rapidly during recent years. In most cases the effects have been rather modest, which often is due to the rather limited magnitude and scope of the interventions. It should be remembered that workplaces are not laboratories for intervention research. Internal and external factors at the workplace will often play a much larger role than the interventions initiated by the researchers.

CONFÉRENCE II

KEYNOTE II

Incapacité et retour au travail

Karen Nieuwenhuijsen

*Centre médical universitaire de l'Université d'Amsterdam
(Amsterdam, Pays-Bas)*

Les troubles mentaux communs sont associés à une importante incapacité à travailler. La présentation, portera sur des manifestations de cette incapacité, comme la diminution de l'efficacité au travail, l'absentéisme, l'invalidité permanente et le sous-emploi. Elle abordera ensuite les facteurs qui peuvent influencer le degré et la manifestation de l'incapacité. En plus du trouble en soi, des facteurs individuels, le milieu de travail et la législation connexe agissent sur l'incapacité. En outre, les données probantes appuyant les interventions visant à réduire l'incapacité des travailleurs ayant des troubles mentaux seront présentées. Finalement, une extension du concept de retour au travail à celui de retour au fonctionnement optimal au travail sera proposée, tant dans la pratique que dans la recherche.

Disability and return to work

Karen Nieuwenhuijsen

*Academic Medical Center/University of Amsterdam
(Amsterdam, Netherlands)*

Common mental disorders are associated with considerable work disability. In this presentation the manifestations of this work disability such as reduced work functioning while at work, absenteeism, permanent work disability, and underemployment will be discussed. The presentation will then focus on factors that may influence the degree and manifestation of disability. Apart from the disorder, factors on the level of the individual, the workplace, and the disability legislation impact disability. Further, the evidence base of interventions aimed to reduce work disability in workers with common mental disorders will be presented. Finally, I will argue for expanding our concept of return to work to return to optimal work functioning in both practice and research.

CONFÉRENCE III

KEYNOTE III

Antécédents et conséquences de l'intimidation et du harcèlement dans les entreprises

Ståle Einarsen

*Université de Bergen
(Bergen, Norvège)*

Cette conférence fournit un aperçu de la recherche empirique sur les antécédents et les conséquences de l'intimidation et du harcèlement en milieu de travail. Le terme « intimidation et harcèlement » renvoie à toutes les situations dans lesquelles un ou plusieurs employés se sentent soumis à des comportements négatifs répétés au travail pendant une période de temps et dans un contexte où, pour différentes raisons, ils ne peuvent se défendre. Généralement, une victime est constamment taquinée, critiquée et insultée et sent qu'elle a peu de recours pour riposter, ce qui engendre des conséquences négatives graves pour les personnes exposées, notamment des symptômes de stress post-traumatique. L'exposition à de l'intimidation systématique au travail peut causer de nombreux effets nuisibles sur la santé tant chez la victime que chez ceux qui en sont témoins. Un aperçu des principales découvertes à ce sujet sera présenté conjointement aux résultats d'une étude en réadaptation effectuée auprès de victimes d'intimidation grave et répétée. Bon nombre d'études montrent que la personnalité ou d'autres caractéristiques individuelles des personnes en cause ne constituent qu'une explication partielle de l'intimidation. Il y a davantage de données liant l'intimidation à des variables organisationnelles ou à l'échelle des groupes ou des entreprises, particulièrement à des facteurs touchant l'environnement psychosocial du travail ou des pratiques de leadership. Un modèle théorique de leadership destructeur sera présenté, établissant les dilemmes auxquels sont confrontées les entreprises dans la gestion des plaintes contre leurs propres leaders au comportement intimidant.

Antecedents and consequences of bullying and harassment in organisations

Ståle Einarsen

*University of Bergen
(Bergen, Norway)*

This keynote provides an overview of empirical research on the antecedents and consequences of bullying and harassment in the workplace. The term "bullying and harassment" refers to all situations where one or more employees feel subjected to repeated negative behaviours from others at work over a period of time and in a situation where they for different reasons are unable to defend themselves against these actions. Typically, a victim is constantly teased, badgered and insulted and perceives that he or she has little recourse to retaliate in kind, leading to severe negative consequences for those exposed, including symptoms of post-traumatic stress. Exposure to systematic bullying at work causes a host of negative health effects in the target, as well as in bystanders. An overview of the main findings in this respect is presented together with results from a rehabilitation study among targets of severe and long lasting bullying. A host of studies show that only to a limited degree may bullying be explained by the personality or other individual characteristics of those involved. More data exist linking bullying to group or organisational level variables, especially to factors related to the psychosocial work environment in the department and to leadership practices. A theoretical model of destructive leadership will be presented which pinpoints the dilemmas organisations face when managing claims of bullying behaviours among its leaders.

CONFÉRENCE IV

KEYNOTE IV

Le droit, les politiques publiques et la santé mentale au travail

Katherine Lippel
Université d'Ottawa
(Ottawa, Canada)

Cette présentation abordera différents enjeux juridico-politiques associés à 1. la prévention des problèmes de santé mentale au travail, 2. le droit à l'indemnisation pour les atteintes à la santé mentale reliées au travail et 3. la prévention des incapacités au travail pour les personnes souffrant de problèmes de santé mentale.

En s'appuyant sur des illustrations juridiques empruntées à des pays divers, la présentation examinera le droit et les politiques conçus pour mieux protéger la santé mentale des travailleuses et travailleurs et pour assurer un meilleur succès de la (ré)intégration et du maintien en emploi des personnes souffrant de problèmes de santé mentale. Elle examinera également comment les lois et les politiques peuvent parfois inciter, directement ou indirectement, divers acteurs à adopter des comportements pathogènes qui contribuent à leur tour au développement ou à l'aggravation de la maladie.

Parmi les questions particulières qui seront touchées, soulignons le rôle des inspecteurs du travail dans la prévention des risques psychosociaux, l'accès à l'indemnisation pour les incapacités attribuables aux problèmes de santé mentale reliés au travail, la prévention de la violence au travail/harcèlement psychologique et l'indemnisation pour ses conséquences, la prévention des incapacités et le rôle des politiques publiques dans l'expérience de retour au travail des personnes souffrant de problèmes de santé mentale, les nouveaux défis que présentent le travail précaire et le marché du travail en restructuration, et les politiques sur l'accommodement raisonnable et la promotion de l'embauche de personnes souffrant de problèmes de santé mentale.

En conclusion, après avoir identifié certains défis particuliers que présentent les questions juridico-politiques pour les chercheurs et les praticiens, nous inviterons les participants à travailler à identifier, parmi les pratiques juridiques en vigueur dans différents pays, celles qui leur semblent le mieux contribuer à promouvoir la santé mentale des travailleuses et travailleurs.

Law, policy and workplace mental health

Katherine Lippel
University of Ottawa
(Ottawa, Canada)

This presentation will address a broad spectrum of policy issues relating to 1. the prevention of workplace mental health problems, 2. compensation for the consequences of those health problems and 3. prevention of work disability for those suffering from mental health problems.

Relying on regulatory illustrations drawn from different jurisdictions around the world, the presentation will examine law and policy designed to improve outcomes for the protection of worker health, and return to work after illness. It will also examine ways in which law and policy can actually contribute directly or indirectly to behaviours that may lead to increasing illness and disability.

Specific themes to be addressed include the role of labour inspectorates in the prevention of psycho-social risk factors, access to workers' compensation for disability associated with mental health problems, prevention and compensation for workplace violence, including psychological harassment, disability prevention strategies and the role of policy in facilitation of return to work for those suffering from mental health problems, new challenges presented by precarious employment and restructuring of the labour market, and policy relating to reasonable accommodation and promotion of hiring of people with mental health problems.

The presentation will conclude by identifying some of the challenges that policy issues may present for researchers and practitioners and with an invitation to work towards identification of best regulatory practices around the world to ensure the promotion of worker mental health.

RÉSUMÉS / ABSTRACTS
SYMPOSIUMS / SYMPOSIUMS

Symposium 1

S1

L'approche de la psychodynamique du travail : un regard différent sur les facteurs psychosociaux au travail

*Responsables : Louise St-Arnaud & Marie-France Maranda
Université Laval (Québec, Canada)*

Ce symposium fait état de différentes études réalisées au Québec et en France dans le champ de la psychodynamique du travail. Les conférences présentées abordent la souffrance et le plaisir au travail, les règles au sein des collectifs de travail et les stratégies défensives de métier à travers le vécu de médecins, pompiers, secrétaires médicales, agents de services correctionnels ou gardiens de prison. En ouvrant davantage d'espace à la subjectivité et à l'intersubjectivité, ces recherches tentent d'offrir aux travailleurs une meilleure intelligibilité de leur expérience de travail, offrant ainsi de précieux leviers pour l'action.

S1

The Psychodynamics Approach to Work: a Different Perspective on Psychosocial Factors in the Workplace

*Chairs : Louise St-Arnaud & Marie-France Maranda
Université Laval (Québec, Canada)*

This symposium reports on various studies carried out in Quebec and France in the field of psychodynamics of work. The papers presented address suffering and pleasure at work, rules within work groups, and occupational defensive strategies based on the experience of physicians, medical secretaries, firefighters, or correctional service officers. By giving more room to subjectivity and intersubjectivity, these studies seek to help workers make sense of their work experience, and thus provide them with invaluable levers for action.

Approche et méthode en psychodynamique du travail pour comprendre le lien travail et santé mentale

Louise St-Arnaud* (1), Marie-France Maranda (2)

(1) Chaire de recherche du Canada sur l'intégration professionnelle et l'environnement psychosocial de travail, Université Laval (Québec, Canada); (2) Centre de recherche et d'intervention sur l'éducation et la vie au travail (CRIEVAT), Université Laval (Québec, Canada)

Au cours des dernières années, de nombreux changements ont profondément affecté l'organisation du travail qui est de plus en plus orientés vers la flexibilité dans la gestion du temps de production et d'utilisation de la main-d'œuvre. Aussi, une somme de travail de plus en plus grande est demandée aux travailleurs, et ce, souvent avec de moins en moins de personnel et de ressources financières. Les pressions exercées par ces transformations ne sont pas sans effets sur la capacité de travail et de maintien en emploi des individus, mais aussi sur leur santé. En mettant l'accent sur l'analyse des processus psychiques mobilisés par le travail, les recherches réalisées dans le champ de la psychodynamique du travail ont apporté un éclairage particulièrement intéressant sur l'organisation collective de métier et les processus de régulation des contraintes de l'environnement psychosocial de travail (Dejours, 1993; Carpentier-Roy, 2000). La psychodynamique du travail s'appuie sur les sciences herméneutiques pour comprendre ce qui pousse l'individu à l'action. Face à un contexte organisationnel en mouvance, à la pluralité et à l'éclatement des statuts d'emploi dans les entreprises, au recours à la sous-traitance et à l'instabilité des liens d'emploi, on assiste à un éclatement des collectifs de travail et à une fragilisation des identités professionnelles. Nos recherches visent à mieux comprendre les mécanismes qui lient et délient les personnes dans leur investissement et leur rapport au travail. La méthode de recherche proposée s'appuie sur la participation collective des travailleurs à l'analyse et à la compréhension de leur situation de travail. On s'intéresse aux rapports sociaux de travail à travers des notions comme les collectifs de travail, la reconnaissance et le soutien social.

La santé mentale des médecins et l'organisation du travail

Marie-France Maranda* (1), Louise St-Arnaud (2), Marc-André Gilbert (3), Michel Vézina (4)

(1) Centre de recherche et d'intervention sur l'éducation et la vie au travail (CRIEVAT), Université Laval (Québec, Canada); (2) Chaire de recherche du Canada sur l'intégration professionnelle et l'environnement psychosocial de travail, Université Laval (Québec, Canada); (3) Université du Québec à Trois-Rivières (Trois-Rivières, Canada); (4) Université Laval (Québec, Canada)

L'objectif de la communication est de présenter les principaux résultats d'une enquête de psychodynamique du travail (Dejours, 2000; Vézina, 2000) réalisée auprès de médecins qui ont vécu un épuisement professionnel (détresse psychologique, dépression, consommation d'alcool et de drogues).

Deux groupes de participants volontaires de Montréal et de Québec (n=6 et n=7), composés principalement de médecins généralistes ont accepté de témoigner et de lever le voile sur les contextes organisationnels dans lesquels ils oeuvrent (hôpitaux, services sociaux, cabinets privés). La communication fera état d'une situation pathogène du côté de l'organisation du travail : la lourdeur et l'intensification du travail, le manque de ressources humaines et financières, la difficile conciliation travail-famille, l'absence de solidarité chez les collègues et l'hésitation, de la part des structures professionnelles, à s'impliquer dans la prévention de ces problématiques. L'hypertravail a été identifié comme une stratégie défensive collective destinée à faire face aux demandes élevées du travail. Cette stratégie plus ou moins consciente, et néfaste sur le plan de la santé mentale, s'inscrit dans une culture de l'endurance très forte dans le contexte professionnel et culturel des médecins (Maranda, Gilbert, St-Arnaud, Vézina, 2006). La construction identitaire des médecins reposerait, en effet, sur trois pôles qui encadrent l'activité du médecin : les normes ou exigences professionnelles, les attentes de la société et l'idéal vocationnel.

Analyse psychodynamique et intervention préventive sur l'organisation du travail

Michel Vézina* (1), Renée Bourbonnais (2), Nathalie Jauvin (3), Julie Dussault (3)

(1) Institut National de Santé Publique (Québec, Canada);

(2) Université Laval (Québec, Canada); (3) CSSS de la Vieille-Capitale (Québec, Canada)

La recherche a été réalisée auprès de 96 agents en services correctionnels (ASC) provenant de l'ensemble des 18 centres de détention du Québec et répartis en 9 groupes. Chacun des groupes a été rencontré une fois par trois chercheurs, lors d'une entrevue d'une durée de trois heures.

Les deux principales sources de plaisir identifiées par les participants sont : l'appartenance à un collectif de travail investi d'une autorité pour protéger le public et la réinsertion sociale des détenus. Quant aux sources de souffrance au travail, elles concernent : l'affaiblissement des collectifs et de l'autorité nécessaire pour exercer son travail, la non reconnaissance et les obstacles à la réinsertion.

L'analyse de trois centres regroupant environ 500 ASC a permis de mieux connaître l'origine des problèmes et les interventions souhaitées. L'affaiblissement des collectifs a été relié à la sélection et à l'intégration des recrues. La solution proposée repose sur l'implication des ASC d'expérience. Aussi, dans le but de rendre l'agent fonctionnel dès son entrée, le contenu de la formation initiale a été revu et son niveau rehaussé. En lien avec le manque de soutien de la part des chefs d'unité, leur temps de présence sur les unités a augmenté grâce au partage de certains mandats spéciaux avec les ASC d'expérience. Au chapitre de la reconnaissance, diverses mesures ont été proposées, dont la remise d'un badge officiel et la modification des formulaires d'absence temporaire des détenus afin de reconnaître leur responsabilité dans la réinsertion.

L'impact de l'ensemble des interventions a été évalué en termes de réduction des contraintes psychosociales et du niveau de détresse psychologique. Les résultats montrent que la situation s'est nettement détériorée dans les centres témoins et qu'elle est demeurée relativement stable dans les 3 centres expérimentaux.

Stratégies collectives des pompiers pour préserver leur santé psychologique

Jacinthe Douesnard*(1) , Louise St-Arnaud (2)

(1) Université Laval (Québec, Canada); (2) Chaire de recherche du Canada sur l'intégration professionnelle et l'environnement psychosocial de travail, Université Laval (Québec, Canada)

Les pompiers œuvrent dans un contexte comportant de nombreux risques inhérents à la nature de leur métier. En plus de gérer l'urgence et la pression, ils peuvent être confrontés à la peur générée par la situation dans laquelle ils interviennent. Malgré ce contexte, ils semblent peu atteints psychologiquement par leur travail.

À ce sujet, les recherches en psychodynamique du travail démontrent que, face à la peur et à la souffrance vécues au travail, les travailleurs ne restent pas impassibles: ils développent différentes stratégies pour y faire face. Le but de notre recherche était de comprendre ces stratégies collectives mises en place par les pompiers pour préserver leur santé psychologique. Pour ce faire, huit entretiens de groupe ont été réalisés dans deux villes québécoises (37 pompiers rencontrés). Chaque groupe a été rencontré à deux reprises: tout d'abord pour la collecte d'information puis, pour la validation et l'approfondissement des informations recueillies.

Analysées sous l'angle de la psychodynamique du travail, les conclusions de cette recherche mettent en lumière certaines stratégies ayant pour but de gérer la peur et la proximité interpersonnelle élevée vécue quotidiennement à la caserne. Cette étude révèle aussi la place importante du soutien entre les collègues et certains autres éléments d'un collectif de travail particulièrement fort (rapports entre co-équipiers, confiance, règles, intégration, etc.). De plus, nous avons identifié les pratiques de métier permettant aux pompiers de travailler ensemble à l'atteinte d'un objectif commun, à savoir: être en tout temps le plus efficace possible et réduire la marge d'erreur lors de leurs interventions. Contrairement à certaines recherches visant à comprendre pourquoi certains travailleurs «s'écroulent psychologiquement» dans leur travail, cette recherche apporte un regard nouveau sur la compréhension des éléments permettant aux pompiers de «tenir le coup» dans un travail comportant de nombreux risques.

Réorganisation du travail infirmier en soins de longue durée : effets sur le sens au travail

Micheline Saint-Jean* (1), Marie Alderson (1), Jacques Rhéaume (2)

(1) Université de Montréal (Montréal, Canada); (2) Université du Québec à Montréal (Montréal, Canada)

Cette recherche vise à mieux comprendre les liens entre, d'une part, le travail infirmier tel que structuré et organisé au moment de l'étude dans les unités de soins de longue durée et, d'autre part, l'expérience subjective de travail des infirmières œuvrant dans ces unités. Trois éléments organisationnels venaient d'être implantés et ne sont pas sans impacts sur le travail; il s'agit de l'instauration de l'approche milieu de vie substitut, l'implantation du SICHELD (Système d'Information clientèle en Centre d'Hébergement Et de soins de Longue Durée) et l'instauration du système modulaire des soins.

Méthode: La démarche de recherche s'appuie sur le cadre de la psychodynamique du travail. Les collectifs d'enquête étaient constitués d'infirmières volontaires. Toutes les unités de soins et tous les quarts de travail étaient représentés. Un total de 26 infirmières, sur une possibilité de 76, ont participé à l'étude. **Résultats:** D'importantes sources de souffrance, prenant souvent la forme de paradoxes, entravent le sens du travail des infirmières. L'organisation du travail contribue à des ambiguïtés et conflits de rôle, lesquels viennent questionner l'identité professionnelle et le sens au travail des participantes.

Symposium 2A

S2A

Measuring Return to Work I: from Being «Off Work» to «Work Re-entry»

Chairs: Ivan Steenstra (1) & Radoslaw Wasiak (2)

(1) Institute for Work & Health (Toronto, Canada); (2) Center for Disability Research, Liberty Mutual Research Institute for Safety (Hopkinton, USA)

Return to work (RTW) is an often used outcome measure in prognostic and intervention research in work and health. With delayed RTW having become a critical social problem in many societies, there is a growing interest in evaluating RTW outcomes in both mental health and musculoskeletal disorders research fields. We propose to organize two symposia during which an exchange of ideas between researchers in both fields on various ways of assessing RTW outcomes will take place. This endeavour follows earlier initiatives aimed at bringing the two fields together (Briand et al. 2007).

The proposed symposia will be build upon the following premise: "Return to work is an evolving process, comprising of four key phases: i.e., off work, work re-entry, maintenance, and advancement," as advanced by Young et al. (Young, Roessler, Wasiak, McPherson, van Poppel, & Anema 2005a) and elaborated on by Wasiak et al. (Wasiak et al. 2007). All contributors will be asked to address the practical implications and consequences of their research. Our main objectives for the proposed symposia is to increase cross pollination between the fields, improve understanding of the RTW outcomes, and to work towards a common language for future research projects addressing both mental and MSD issues.

The first symposium will provide the introduction to the issue of RTW outcome measurement and focus on measurement of RTW outcomes during the time that the worker is off work or attempts work re-entry.

S2A-1

Measuring Return to Work

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Background: It is argued that one of the factors limiting the understanding of return to work (RTW) following work disability is the use of measurement tools that do not capture a complete picture of workers' RTW experiences. To facilitate the investigation of RTW, the current authors proposed a developmental conceptualization of RTW, which argues for an expanded awareness that encompasses four phases: off work, work reintegration, work maintenance and advancement. This paper reports on work undertaken with the aim of operationalizing the conceptualization. Methods: A review of the RTW and related literature was conducted. Details of RTW instruments used by previous researchers were extracted and interpreted within the context of the RTW phases. Using the International Classification of Functioning, Disability, and Health (ICF) to inform our thinking and coding structure, we conceptualized phase-based RTW outcomes and categorized them as 'tasks and actions', 'contextual' or 'process driven'. Iteratively, we reviewed existing instruments for their use as measures of RTW. Where gaps in instrumentation were found, the wider vocational and career assessment literature was searched for instruments that could be adapted for use in RTW research. Results: Results indicate that, although numerous research instruments have been used to assess RTW within the scientific literature, some important dimensions of RTW lack instrumentation. In particular, we found that outcomes such as goal setting, motivation, expectation, job seeking, work maintenance, and career advancement require operationalization. Amongst the outcomes that had been operationalized, we found considerable variation in conceptual development and application. Conclusions: The lack of consistency and comprehensiveness of RTW measurement is one of the factors compromising the advancement of the field of RTW research. It is suggested that a more complete and psychometrically sound array of research instruments, grounded within a commonly adopted paradigm, would further the understanding of RTW and the factors affecting it.

S2A-2

Health and Illness Representations as Recovery Outcomes in Work Disability

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Introduction: Work disability due to a musculoskeletal (MSK) pain can have considerable psychosocial and financial repercussions. Every year many workers are excluded from work because of a work disability due to a MSK pain. For workers engaged in a work rehabilitation process because of a work disability due to persistent MSK pain, very limited information is available on the perception of the recovery associated with return to work or not. Health and illness perception/representation as broader concepts could help understand the perception of recovery.

Aim: to conduct a thorough investigation of health and illness representations among workers having work disability due to persistent MSK pain, engaged in a work rehabilitation process.

Methods: A multiple case-study design using a qualitative methodology was conducted. Semi-structured interviews with 16 participants (male, female) recruited at the beginning of interdisciplinary work rehabilitation program were conducted at three points during the program and one month after discharge. A grounded theory approach was used for data analysis.

Results: Common reference points on health and illness representations were observed, with very limited variation during the work rehabilitation program. The MSK pain causing work disability was described by all participants at the beginning of the program using terms related to the consequences of being ill. However, they did not defined themselves as ill or healthy people. By the end of the program, workers who successfully returned to work used terms from their health representation when describing their partial or full recovery. For workers who failed to return to work, the use of illness representation terms were so similar to those used in the representations of their disability that they could almost define themselves as ill.

Conclusion: Components of health and illness representations were used as barometer for defining the recovery process.

S2A-3

Return to Work Outcomes and Processes for People with Severe Mental Illness

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Based on the terminology of Wasiaak et al. (2007), this communication describes the evaluation of significant determinants of return to work (RTW) outcomes and processes, for people with severe mental illness registered in vocational programs. The objective of a prospective study conducted in Montreal (Canada) on people with severe mental illness registered in vocational programs, was to identify individual characteristics predicting RTW outcomes (e.g. vocational participation, work maintenance), and processes (e.g. time to return to workplace). Regression and survival analyses allowed us to explore an individual's most typical characteristics that could explain work integration. The results suggested that both variables linked to work (e.g. engagement to work) and background variables (e.g. financial aid) predicted vocational participation and, more specifically, obtaining competitive employment. Cognitive and clinical variables were associated with a delay in return to work. The number of hours worked per week was explained by the individual's feeling of self-efficacy in overcoming health problems as well as other motivational and psychosocial variables. With respect to the results from survival analyses, significant variables were related to background variables (financial aid), work-related variables (length of absence from the workplace), cognitive (executive functions), and clinical aspects (paranoid symptoms). In conclusion, these results lead us to propose not only to assess RTW outcomes and processes to better understand work integration for people with severe mental illness, but also to conduct a systematic evaluation of the job site.

Defining Return to Work, Examples from Two Studies

Ivan Steenstra*

Institute for Work & Health (Toronto, Canada)

Description of the problem

How do we define successful RTW? A definition of an episode of (occupational) low back pain (LBP) has been proposed (1). We examined outcomes of RTW in workers with LBP in the Early Claimant Cohort (ECC) study, and the Amsterdam Sherbrooke Evaluation (ASE) study: a RCT on interventions for RTW (2;3).

Methods

The outcomes in the ECC study are: 1. Days on 100% wage replacement benefits followed by > 1 day without these benefits (C-RTW) (1), 2. Sustained RTW (SRTW): days off disability benefits (DB) for > 28 days without future economic loss (FEL) award within the episode. 3. Recurrences (R): DB for > 1 day followed by <1 day without DB. The outcomes in the ASE study are: 1. C-RTW: work absence (WA), preceded and followed by > 1 day at work (1). 2. S-RTW: WA in calendar days until 100% RTW in own/equal work for > 4 weeks 3. Return to job site (RJS): WA until any RTW and 4. Recurrence: 100% drop out after 100% RTW.5. % at work after 1 year. Follow up was 1 year. Descriptives and Cox regression results are provided.

Results

The number of days until RTW can differ as much as 60 days depending on the definition. FEL, recurrences and % at work after 1 year provides interesting information on long term consequences. 15% (ECC) and 40% (ASE) of workers have one recurrence or more at work can be as big as 4%. Hazard ratios were almost identical between the outcomes.

Conclusions

Recurrences and work status provided better understanding of RTW. LRTW is the definition resulting in the lowest % RTW. Scores on outcomes differed substantially. Scores were correlated and might show the path to recovery. The RTW process goes beyond first return to the job site.

Symposium 2B

S2B

Measuring Return to Work II: How to Assess Return-to-Work Maintenance and Advancement?

Chairs: Ivan Steenstra (1) & Radoslaw Wasiak (2)

(1) Institute for Work & Health (Toronto, Canada); (2) Center for Disability Research, Liberty Mutual Research Institute for Safety (Hopkington, USA)

Return to work (RTW) is an often used outcome measure in prognostic and intervention research in work and health. With delayed RTW having become a critical social problem in many societies, there is a growing interest in evaluating RTW outcomes in both mental health and musculoskeletal disorders research fields. We propose to organize two symposia during which an exchange of ideas between researchers in both fields on various ways of assessing RTW outcomes will take place. This endeavour follows earlier initiatives aimed at bringing the two fields together (Briand et al. 2007).

The proposed symposia will be build upon the following premise: "Return to work is an evolving process, comprising of four key phases: i.e., off work, work re-entry, maintenance, and advancement," as advanced by Young et al. (Young, Roessler, Wasiak, McPherson, van Poppel, & Anema 2005a) and elaborated on by Wasiak et al. (Wasiak et al. 2007). All contributors will be asked to address the practical implications and consequences of their research. Our main objectives for the proposed symposia is to increase cross pollination between the fields, improve understanding of the RTW outcomes, and to work towards a common language for future research projects addressing both mental and MSD issues.

The second symposium will extend a debate started among researchers investigating experience of individuals with musculoskeletal disorders (MSDs) about best ways to measure "successful" or "sustained" return to work (Baldwin & Butler 2006;Wasiak et al. 2003;Wasiak 2006;Wasiak, Pransky, & Webster 2003;Young et al. 2005a;Young et al. 2005b) and delineate methods to assess durability of RTW gains.

S2B-1

How to Analyze Recurrent Disability Outcomes

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Publication not authorized.

S2B-2

Durability of Employment Following Prolonged Work Absence

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Problem & Objectives

Given the difficulty often encountered in initiating employment following work-disabling injury, the maintenance of employment gains deserves research attention. This project sought to determine the durability of employment following work-related injury that resulted in the worker being off work for at least 6 months and unable to return to their pre-injury position.

Methodology

This prospective study (N=150) involves the interview of vocational rehabilitation recipients who found post-injury employment. In this project, durability is not conceived of as merely the continuation of work, rather it accepts that additional absence may be needed before, or even in order for, a successful return to work to be achieved.

Results

While results indicate that the majority (81%) of people did maintain the job they were in at the time of first interview, all participants experienced difficulties. Some of these led to workers leaving their post-injury positions. Such setbacks included additional time off work, layoff and the need to change or resign from jobs because they were not working out for them. While nine individuals left the job they had at the time of initial interview, five of these were working at the time of final follow-up.

Conclusion

There are times where post-injury employment may not be able to be continuously maintained. Individuals can require additional time away from the workplace, but this does not mean that their return to work has failed. Similarly, leaving a position of employment is not always a bad thing. Job turnover should be expected. Rather than an event, return to work is a complex process and often not a linear one. This needs to be taken into consideration when assessing the success of an outcome. Not doing so may lead to a label of failure when this is not really the case.

S2B-3

RTW-Outcomes (CO-OP Study): RCT on Counseling of Common Mental Disorders

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(1) EMGO, VU Medical Center (Amsterdam, Netherlands); (2) VU Medical Center (Amsterdam, Netherlands)

Description of the problem

Common mental health problems often lead to long-term sick leave. Primary care usually focuses on recovery of symptoms instead of return to work. In 2000, the Dutch Society of Occupational Medicine (NVAB) has published a practice guideline on the management of workers with common mental health problems. This guideline promotes an active role of occupational physicians (OPs) in counseling workers according to the principles of graded activity and cognitive-behavioral therapy.

Objective

To evaluate the effectiveness of counseling by OPs on return to work (RTW), compared to usual care for police employees with common mental health problems.

Methods

In a randomized controlled trial, workers in the intervention group were treated according to the NVAB-guideline. Workers in the control group received usual care with minimal involvement of the OP and easy access to a psychologist. The primary outcomes of the study were RTW-characteristics as time to RTW (gross and net) and recurrences, during a follow-up period of one year. Data on RTW were examined using Kaplan Meier curves and Cox proportional hazards models.

Results

From 2002 to 2005, 240 police workers on sick leave due to common mental health problems were recruited from two police departments. Counseling by OPs did not result in earlier RTW than usual care. Subgroup analysis showed a small effect in favor of counseling for workers with administrative functions and for workers with 'minor' stress-related symptoms, when taking recurrences of sick leave into account. In the intervention group, significantly more workers gradually returned to work compared to usual care.

Conclusions

Counseling of common mental health problems by OPs did not clearly differ in RTW compared to usual care. However, workers with 'minor' stress-related disorders may benefit from this guideline-based care.

What Does Return to Work Mean? Viewpoints from Different Perspectives

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Publication not authorized.

Health Outcomes and Return-to-Work Trajectories in Lost-Time Claimants with MSD

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Problem: Traditional work outcome measures of return-to-work and time lost from work do not capture important information about the burden of injury. So far, little is known about the health status, in particular depressive symptoms, and limitations at work in injured workers with musculoskeletal disorders. Moreover, it is largely unclear how injured workers ‘transit’ in their working status over time.

Objectives: To examine the health status and limitations at work in injured workers with musculoskeletal disorders one month follow-up stratified by return-to-work status, and to document their return-to-work trajectories during follow-up.

Methodology: In this prospective cohort study, workers filing a lost-time injury claim for a musculoskeletal disorder of the back or upper extremity were interviewed 1 month (n=632) and 6 months (n=439) post-injury. Workers were grouped into three mutually exclusive return-to-work status categories: sustained first return-to-work, return-to-work with recurrence of work absence, and no return-to-work. Health outcomes, such as pain intensity, functional status, depressive symptoms, and physical and mental health-related quality of life, as well as limitations at work were measured at baseline and follow-up.

Results: One month post-injury, 47% of the participants report a sustained first return-to-work, 14% a return-to-work with recurrence of work absence and 39% no return-to-work. Poor physical health, high levels of depressive symptoms and high work limitations are prevalent in workers, including in those with a sustained first return-to-work. Six months later, the rate of recurrence of work absence in the trajectories of injured workers who have made at least one return to work attempt is high (38%) - even in workers who have initially made a sustained first return-to-work at baseline (27%).

Conclusion: There are return-to-work status specific health outcomes in injured workers. A sustained first return-to-work is not equivalent to a complete recovery from musculoskeletal disorders.

Regulatory Instruments and Psychosocial Risk Factors: an International Overview

Chairs: Katherine Lippel (1) & Michael Quinlan (2)

(1) Canada Research Chair in Occupational Health and Safety Law, University of Ottawa (Ottawa, Canada); (2) University of New South Wales, School of Industrial Relations & Organisational Behaviour (Sydney, Australia)

Historically, occupational health and safety legislation has focused on physical hazards and, until recently, has largely ignored risks to health specific to psycho-social risk factors but the right to the protection of mental health has become increasingly important both in international law (Laflamme) and in national jurisdictions throughout the world. Several jurisdictions have introduced regulatory instruments, and inspection practices that take into consideration the importance of protecting mental health as well as physical health. In this regard, the mandate for labour inspection has expanded in various countries, yet little is known about successful implementation strategies used by inspectors (Quinlan and Johnstone; Frick).

In some jurisdictions, such as Sweden, France, Belgium, Saskatchewan and Québec, legislation designed to specifically address risk factors such as psychological harassment and bullying has been introduced, and preliminary studies of the effective application of some of Québec legislation is starting to emerge (Cox & Lippel).

Work (re)organisation (Quinlan, 2007) in general, working hours (Baril-Gingras this session) and the increasing prevalence of various types of precarious employment in particular (Quinlan and Bohle, 2001), have presented further challenges to both scholars and regulators, and illustrations of ways in which regulatory systems have failed to protect workers abound (Thébaud-Mony, 2007).

Illustrations from France (Thébaud-Mony) and Australia (Underhill) document regulatory failure in the protection of the precariously employed and those undergoing restructuring processes, while Walters addresses the risks encountered by those who work at sea, and the failure of regulation to provide protection to some of the most precarious of workers working in an industry strongly affected by globalization. Rawling addresses new forms of regulation in Australia that attempt to better protect the health of sub-contractors, regardless of their location in the supply chain. Research has also shown that practices in implementation of existing workers' compensation legislation in various jurisdictions has led to the emergence of mental health problems associated with the compensation process itself (Lippel, 2007, MacEachen et al 2007, Roberts-Yates, 2003, Sager & James, 2005). Eakin's recent findings on the perspectives of the front line adjudicators managing workers' compensation claims in Ontario, shed light on the perspectives of those working within the compensation system itself.

Instruments juridiques et facteurs de risque psychosociaux : un survol international

Responsables: Katherine Lippel (1) & Michael Quinlan (2)

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Historiquement, la législation sur la santé et la sécurité du travail a porté sur les risques physiques et, jusqu'à récemment, a ignoré les risques pour la santé reliés spécifiquement aux facteurs de risques psychosociaux. Cependant, le droit à la protection de la santé mentale a pris graduellement de plus en plus d'importance, tant au niveau du droit international (Laflamme), qu'au niveau des juridictions nationales. D'ailleurs, plusieurs juridictions ont introduit des instruments juridiques ainsi que des pratiques d'inspection qui prennent en considération l'importance de protéger la santé mentale tout comme la santé physique. À cet égard, le mandat des inspecteurs du travail a été élargi dans plusieurs pays bien que l'on comprenne encore très peu les stratégies de mise en oeuvre utilisées avec succès par les inspecteurs (Quinlan et Johnstone; Frick). Dans certaines juridictions, comme en Suède, en France, en Belgique, en Saskatchewan, et au Québec, certaines législations ont ciblé spécifiquement les facteurs de risques comme le harcèlement psychologique et l'intimidation, et des études préliminaires examinant l'application effective de certaines de ces législations au Québec émergent présentement (Cox et Lippel).

La (ré)organisation du travail (Quinlan, 2007) en général, les heures de travail (Baril-Gingras) et l'augmentation de la prévalence d'une variété de types de travail précaire en particulier (Quinlan and Bohle, 2001), sont source de défi tant pour les chercheurs que pour les responsables de politiques, et il existe nombre d'exemples de situations où le système juridique en place n'a pu protéger les travailleurs (Thébaud-Mony, 2007). D'autres exemples tirés de l'expérience française (Thébaud-Mony) et australienne (Underhill) documentent l'échec du système juridique pour protéger les travailleurs précaires ainsi que ceux qui vivent des processus de restructuration, alors que Walters cible les risques encourus par ceux qui travaillent en mer et l'échec du système réglementaire qui n'offre que peu ou pas de protection à ces employés qui œuvrent dans un des domaines les plus précaires, dans une des industries les plus affectées par la globalisation. Quant à la recherche de Rawlings, menée en Australie, elle touche de nouvelles approches législatives qui visent à protéger la santé de sous-contracteurs, sans tenir compte de leur position hiérarchique dans la chaîne de production.

D'autres recherches ont également démontré que les pratiques de mise en oeuvre des législations régissant l'indemnisation des travailleurs dans certaines juridictions ont mené à l'émergence de problèmes de santé mentale reliés au processus même d'indemnisation (Lippel, 2007, MacEachen et al 2007, Roberts-Yates, 2003, Sager & James, 2005). Les récentes conclusions de Eakin, portant sur le point de vue des décideurs de première ligne de la commission d'accidents du travail qui gère les demandes d'indemnisation des travailleurs ontariens, éclairent la perspective des personnes qui travaillent au sein du système d'indemnisation comme tel.

Ce symposium double réunit des chercheurs de cinq pays et de disciplines variées, incluant la sociologie, le droit, et les relations industrielles, afin d'examiner bon nombre de questions reliées aux politiques et qui affectent la santé mentale des personnes qui travaillent partout dans le monde.

Evaluating the Swedish Method Development to Inspect Psychosocial Working Conditions

Kaj Frick*

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In 2001-2003, the Swedish Work Environment Authority ran a project (MU) to develop better methods to inspect psychosocial risks at work, notably of stress and poor work organization. Our evaluation of MU indicated that it did not reach its goals, to set a standard of method development within SWEA, and to develop methods which enabled most inspectors to effectively inspect such health risks. A major reason for this was that MU got little policy input from the rest of SWEA. Yet, which inspection methods are needed and possible, depend on the nature of the risks, on the requirements of the ordinances, on previous policies and practices of SWEA to apply the ordinances, and on the inspectors' varying competences. The practical guidance on how to prioritize and conduct this very ambitious development project was also limited. Behind this was a possible preoccupation with major other internal reforms and a limited competence on organizational development – and thus what MU required – within SWEA's top management. Yet, MU probably had indirect positive effects, by raising the awareness within SWEA of the psychosocial risks at work and of the complexities in inspecting such risks, and thus of developing methods for such inspection.

OHS Inspectors and Psychosocial Risk Factors: Evidence from Australia

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Changes to legislation giving greater prominence to work organisation and increased awareness of psychosocial risk factors in the community have changed the role of government occupational health and safety inspectors (OHS) in many countries. However, there has been little systematic investigation of how inspectorates have responded to these challenges. This paper seeks to begin filling this gap.

Between 2003 and 2007, a large Australian Research Council funded project was undertaken on the activities of OHS inspectorates in four jurisdictions. The project entails detailed documentary and statistical analysis together with extended interviews with 170 managers and inspectors together with information collected when researchers accompanied inspectors on 118 'typical' workplace visits. Drawing on this evidence, this paper explores three specific issues. First, how do inspectors view the shift to process standards and increased recognition of psychosocial factors? Second, how have inspectors handled issues of bullying, harassment and occupational violence in the workplace? Third, how has fear of victimization affected worker reporting of problems, including psychosocial hazards? Findings highlight the role of training, mentoring, resourcing, legislative provisions and the industrial relations context, in terms of inspectors effectively addressing psychosocial risk factors.

How Does Law Protect Mental Health in the Workplace?

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In the new economy, mental health problems and all costs related thereto have reached alarming proportions. Studies show that such problems are mainly attributable to the major transformations that have taken place in the world of work. The new methods of work organization and the development of technologies have brought additional emotional and cognitive constraints. Furthermore, the global economy has imposed very demanding standards on businesses that wish to remain competitive, and such new standards have mostly been assumed by employees. Hence, even if physical risks may have been reduced over the years, psychosocial risk factors have been constantly on the rise.

Based on the foregoing, the author submits the results of an exegetical study on the existence and the efficiency of a right to the protection of mental health at work. The study reveals that it is a fundamental right that falls under the scope of several human rights' treaties, as well as many national constitutions. This right forms an integral part of the fundamental human right to health, which encompasses the underlying determinants of health such as a healthy work environment, and the workers' social right to be protected from exploitation, including their right to be treated with dignity.

The implementation of the right to the protection of mental health requires both medical and social standards. As is the case for traditional occupational health and safety protection, mental health protection requires hazard recognition, evaluation and control. Therefore, international organizations are more and more contemplating the implementation of this right under the prevention of a psychosocial risks approach, as an integral part of the occupational health and safety protection plans. This approach is very promising and it should influence the international community.

Psychological Harassment Legislation in Québec as Applied in Unionized Workplaces

Rachel Cox*, Katherine Lippel

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In June 2004, amendments to Québec's Labour Standards Act introduced a right to a work environment free from psychological harassment. Non-unionized workers may file a complaint with the Labour Standards Commission. In unionized workplaces, a complaint of psychological harassment is considered to be a grievance arising out of the collective agreement. Thus, even though the right to be free from harassment is a fundamental and individual one, unions have exclusive carriage of workers' complaints. This paper reports on preliminary results of a study on the effects of unions' mandate with regard to psychological harassment, both with respect to workers and to unions.

Methodology: We present material drawn from a classic legal analysis as well as a review of scientific literature. We put forward results of a qualitative study based on in-depth interviews with union representatives who handle complaints. Analysis draws on techniques from Grounded Theory.

Results: In light of different unions' disparate and contrasting capacity to mobilize resources to handle complaints of psychological harassment, giving unions the exclusive mandate to represent workers leads to different results in different workplaces. For most unions, worker-on-worker harassment presents a major challenge, leading them to develop new ways of processing complaints and forcing them to re-define their role vis-à-vis their members. The multiple recourses available (grievance arbitration, workers' compensation, occupational health and safety mechanisms) also make unions' task a complex one, particularly with regard to the right to safe return to work.

Conclusion: The variable application of psychological harassment legislation in unionized workplaces points to the need for further research. Union representatives could benefit from additional tools and resources to assist them in carrying out their responsibilities. The complex framework in which unions must act, both to protect the rights of harassed workers and to mediate the conflicting interests of members, support this conclusion.

S3A-5

The “Extensification” of Work: What Protection is Provided by Québec Legislation?

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The search for increased “flexibility” is reflected in both an intensification of work and in its “extensification”. According to the literature, the negative effects of long hours of work on mental health are increased or attenuated by factors such as: whether or not the person in question has chosen to work so much, the gender and status associated with the work, the effects of overtime, the pressure to work overtime, whether the overtime is being done voluntarily or otherwise, its psychological demands, and the degree to which the work is recognized.

How does the society’s legal framework protect people working long hours and unsolicited and non-remunerated overtime? After having described the phenomenon, we carry out a comparative examination of legislation from Québec, the United States (Fair Labor Act) and the European Community (Directive).

The Québec Act respecting Labour standards includes a definition of the normal work week but not of the normal day or of the maximum number of hours to be worked per week. The limits of the protection extended by the right to time off (at least 32 consecutive hours per week) and the right to refuse overtime (beyond a certain limit) are discussed.

The use of the employer’s general duty clause concerning prevention and the right to refuse as stipulated in the Act respecting occupational health and safety, are examined by way of an analysis of the case law (SOQUIJ CLP summaries (Azimut, 1998-present) and CALP summaries (Azimut, 1986-1998), by section (51 (3), 53, 223, 12) and by keyword, such as (in French) day, time, working long hours or overtime, refusal, risk, safety or danger, etc.).

Also examined is the case law with respect to the psychological damage that may result from working long hours or overtime (SOQUIJ CLP summaries (Azimut, 1998-present)). Issues concerning length and what constitutes “normal” working hours, including their voluntary and authorized character, as found in the case law, are discussed.

S3A-6

Suicide in French Automobile Industry

Annie Thébaud-Mony*

Inserm (Bobigny, France)

In 2007, in several companies of the French automobile industry, cases of suicide occurred between employees, at the workplace or when the person indicated that the act was the result of an at work physical and psychological pressure impossible to overcome.

At Renault-Guyancourt Technocentre, four cases of work-related suicides have occurred among employees in one year. A trade union mobilization led to a request by the Committee for Occupational Health, Safety and Working Conditions of an independent study on the psychosocial risk factors. Using a combined quantitative (questionnaire) and qualitative (interviews) approach, the study done by OHS consultants highlights the frequency of so-called «over-stress» situations, the contradictions between the productive objectives and the means to achieve them, the lack of individual and collective latitude to discuss the organization constraints, as well as the weight of a structural insecurity generated by permanent use of subcontracting and blackmail to relocate the car industry plants in “low-cost” countries.

Beyond immediate issues of mental suffering often mentioned in these situations, trade unions have questioned time, hierarchical and organizational constraints on employees. The labour inspectors have identified infringements of the Labour Law, involving the non-compliance by the employer of their general safety duty and the non-application of the rules on working time. In addition, the information gathered by families and unions regarding suicide cases show practices of harassment and of violation of the dignity of the people concerned.

Based on cooperation between researchers and workers’ unions, this communication will show how the choices of work organization determine the conditions for the possibility of suicide and the failure of OHS regulations to protect workers against such a danger.

S3B-3

Managing Psychosocial Risks at Sea: Globalisation, Precarious Work and Regulation

David Walters*

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Despite improvement in health and safety performance overall during the last century, statistics suggest that seafaring remains among the most hazardous of occupations. The most significant challenge to health, safety and well-being of seafarers does not concern, as might be supposed, the natural environment, but the failure of the shipping industry and its regulators to effectively manage the known risks of seafaring. In recent decades, this failure has been exacerbated by the process of globalization, which has served to both reduce the role of regulation and increase practical difficulties in the application of conventional approaches to health and safety management. At the same time, rather than acting to reduce hazards in the industry, recent developments in shipping technology and port infrastructures, also prompted by globalisation, have resulted in increased psychosocial challenges for seafarers' health, safety and well-being. The industry has no obvious strategies to address these challenges.

Psychosocial risks to health, safety and well-being are experienced in everyday work at sea by multinational crews. They work in precarious forms of employment, with fragmented and long chain contractual relationships with the owners and managers of the ships on which they sail, and in companies in which health and safety management structures are highly fragmented. The paper will review international research findings on these situations and present an understanding of their underlying causes.

The main response from the industry and its regulators to these challenges has been the introduction of the International Safety Management Code. The paper reviews the evidence for the effectiveness of this measure but it was found that ten years after its first introduction, there is little sign of it having made a significant contribution to addressing the problem. The paper argues that the Code is a conceptually flawed approach to dealing with the issue of psychosocial risk in a globalised industry.

S3B-4

Regulatory Gaps and Injured Agency Workers' Return to Work Experience

Elsa Underhill*

Deakin University (Burwood, Australia)

The regulation of return to work processes in Australia has been relatively effective in promoting the return to work and rehabilitation of permanent employees. The expansion of contingent employment, however, has challenged that effectiveness. This paper examines the return to work experience of one group of contingent workers, temporary agency workers, and analyses the factors contributing to their low return to work and rehabilitation rates. The paper draws upon a matched sample of 400 injured temporary agency and direct hire employees' workers' compensation claims in the state of Victoria, Australia. These workers have low levels of job security whilst employed. That insecurity becomes more pronounced once injured. Research has identified the negative health and well being outcomes for temporary agency workers associated with employment insecurity. The findings presented in this paper point to the need for recognition of the additional risk to health and well-being associated with temporary agency workers' profound sense of powerlessness once injured at work.

Government inquiries in Australia have acknowledged that return to work practices amongst temporary agency employers are problematic. Nevertheless, statutory agencies responsible for return to work and rehabilitation continue to emphasize the role of premium incentives and market forces as a remedy to this problem. The paper concludes that market forces cannot offer sufficient incentives for temporary agency employers to comply with their obligations to return injured workers to work and offer suitable rehabilitation processes. A regulatory response is needed which recognises the triangular nature of agency employment, acknowledges the gaps in regulation which allow agency employers to avoid their responsibilities, and extends responsibility for the rehabilitation of injured agency workers to host employers.

Using Supply Chain Regulation to Promote Precarious Workers' Health

Michael Rawling*

Australian National University (Canberra, Australia)

This paper examines a novel, mandatory regulatory initiative called supply chain regulation. This regulatory initiative is designed to achieve a range of positive outcomes for precarious workers, including positive occupational health and safety (OHS) outcomes. Precarious work almost invariably involves worker vulnerability caused by insecure and/or stressful work conditions which arise from macro-economic changes such as outsourcing, downsizing and changed governmental budgetary policies and their effects on public sector workforces. This in turn may result in increased incidence of OHS illness and injury for those in precarious employment, including adverse psychological health consequences. This paper notes, in particular, the psychosocial health effects on precarious workers who carry out long haul trucking (such as factors resulting from fatigue, stimulant abuse and overwork) and precarious workers who manufacture clothing or garments (such as vulnerability to occupational violence). The paper then examines in some detail consequential regulatory initiatives in Australia, designed to protect workers in precarious work arrangements, particularly in the long haul trucking and garment production industries. In particular, the paper will consider the extent to which the design of 'supply chain regulation' an integrated package of mandatory state laws is conducive to reducing psychosocial work risk factors, by improving a range of labour standards including OHS, industrial relations and workers' compensation standards. In order to assess the effectiveness of supply chain regulation, the paper will fan out to consider the enforcement aspects of the design of supply chain regulation. The paper will also consider the implications of these regulatory initiatives in Australia for international/cross-jurisdictional regulation of supply chains.

Shaping the Regulatory Space: the Context for Action on Stress

Andrea Shaw* (1), Verna Blewett (2), Tony LaMontagne (3)

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OHS political processes are often hidden, with a veneer of "objectivity" masking unequal power relationships. In contrast, controlling psychosocial risk requires that the political context of OHS is overt, because effective control requires that the power relationships are themselves changed. This makes the role of the OHS regulator more difficult than usual, since the social and political license of the regulator depends upon the "objectivity" veneer to a large extent. As a result, a systematic study of the context for job stress regulatory efforts is essential to provide critical evidence for designing effective interventions. This paper examines the context for regulatory action on job stress in two states of Australia. In one state, an in-depth stakeholder interview study characterised the context for initiatives on job stress in Victoria. Thematic analysis of interview transcripts showed that while the situation was dominated by individually-focused tertiary interventions, the inadequacy of existing approaches was recognised by the full range of stakeholders. However, there was only limited leadership from the regulator on the need to implement primary prevention interventions. Emphasis on stress-related workers' compensation issues by the regulator had hampered a focus on primary prevention. Similarly, in NSW, a project to develop an intervention model for job stress in the Health and Community Services Industry revealed that all industrial parties defined job stress as an organisational rather than a medical problem. Despite this industry context, the relevant OHS regulator determined to implement secondary and tertiary treatment-oriented interventions rather than follow the other stakeholders' lead to address primary causes. These examples demonstrate that effective regulatory interventions must be based on a clear understanding of stakeholders' existing understanding of job stress and this may allow the regulatory space to be expanded when stakeholders have a more sophisticated approach than the regulator.

Symposium 4

S4

Addressing Work-related Stress and Occupational Psychosocial Risks in Low- and Medium-Income Countries

Chairs: Stavroula Leka (1) & Juliet Hassard (2)

(1) Institute of Work, Health and Organizations (Nottingham, United Kingdom); (2) University of Nottingham (Nottingham, United Kingdom)

This WHO Symposium will discuss our current understanding of work-related psychosocial risks and stress in low- and medium-income countries. We see a trend of a gradually growing experience of work-related stress and the ensuing health consequences due to a number of developments, including the changing structural nature of work, company policies of multi-nationals in developing countries that strive for reduced production costs. Also the processes inherent in globalization and their consequences on working populations are not to be neglected in terms of its impacts on employment and working conditions, such as organizational restructuring in terms of substitution of the labour force with machinery causing increased competition and feelings of job insecurity, emerging industries characterized by unstable jobs, low wages, long working hours, sexual and psychological harassment, precarious contracts, unrealistic production quotas, productivity incentives, and inadequate controls on overtime that create pressures for highly intense work. The stress generated in this working environment has been documented to produce cardiovascular and psychological disorders.

Particularly challenging issues to be addressed in the longer term are those concerning workers in the informal economic sector where the largest workforce can be found in most developing countries. The informal economic sector is growing rapidly, however, the economic activity is not recognized, recorded, protected or regulated by the public authorities. They are rarely covered by any occupational health legislation, or social protection programmes, although they are often the outsourced workers of large local and international companies.

The symposium will present an array of experiences from different countries, in particular in working with stakeholders or members of the research community and how the particular problems may be addressed.

S4

La prise en charge du stress lié au travail et des risques psychosociaux au travail dans les pays à faible et moyen revenus

Responsables : Stavroula Leka (1) & Juliet Hassard (2)

(1) Institute of Work, Health and Organizations (Nottingham, United Kingdom); (2) University of Nottingham (Nottingham, United Kingdom)

Ce colloque de l'OMS sera l'occasion de faire le point sur l'état de nos connaissances actuelles sur les risques psychologiques et le stress lié au travail dans les pays à bas et moyen revenus. On constate une tendance à la hausse des cas de stress lié au travail et des conséquences que cela engendre sur la santé du fait de la nature changeante du travail ou de politiques de réduction des coûts menées par les multinationales dans les pays en développement. Il convient également de ne pas négliger les effets de la globalisation sur les salariés en terme d'impact sur l'emploi ou sur les conditions de travail comme c'est le cas lorsque les restructurations de l'outil de production aboutissent à un remplacement des personnes par les machines et où la compétition est alors plus fortement ressentie ainsi qu'une insécurité de leur emploi. Ces effets sont aussi ressentis dans les industries émergentes caractérisées par de l'emploi instable, de bas salaires, des heures de travail étendues, du harcèlement sexuel et psychologique, des contrats précaires, des objectifs de production irréalistes, des primes au rendement, et des contrôles inadaptés des heures supplémentaires créant ainsi toutes sortes de pressions sur un travail déjà excessivement exigeant. Le stress généré par de telles conditions de travail est reconnu pour favoriser l'apparition de problèmes cardiovasculaires et de l'instabilité psychologique.

Plus préoccupante encore, est la prise en compte sur du long terme des travailleurs du secteur de l'économie informelle où l'on trouve la majorité des travailleurs dans la plupart des pays en développement. Ce secteur croît à un rythme rapide, mais toutefois, l'activité économique n'est pas reconnue, prise en compte, protégée ou régulée par les autorités publiques. La législation sur la santé au travail ou les programmes de protection sociale sont souvent inexistantes pour ces travailleurs malgré qu'ils soient souvent employés par de grandes entreprises locales ou des compagnies internationales.

Des exemples de situations dans différents pays ainsi que la façon dont les problèmes peuvent être pris en compte seront discutés durant le symposium en particulier avec les parties prenantes ou les membres de la communauté de recherche.

S4-1

Setting Priorities in Addressing Work-Related Stress in Low-Income Contexts

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Publication not authorized.

S4-2

Psychosocial Risk Factors and Psychological Effects in Mexican Oil Workers

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Description. Current status in Psychosocial factors research in México, as in many Latin-American countries, is characterized by heterogeneous conceptual frameworks, incipient methodological development and low impact on occupational health and social protection. In those conditions, the psychosocial research department at FES Iztacala-UNAM, has conducted several studies in different populations, intended to adapt and validate different evaluation tools.

Objective. Describe the results and discuss the methodological implications of one recent study conducted with 315 workers from different work centers of petroleum industries.

Results. The following psychosocial risk factors showed high incidence in this study population: mental load and job insecurity (19%), low social support (17%), personality type "A" (16%), lack of human values (14%), low perceived self-efficacy and psychological harassment (13%), few resources for work (12%), work in confined spaces (7%), low decision latitude (6%), authoritarian relationships and lack of cooperation (5%), time pressure, low psychosocial support and high job demands (4%). The most important psychological effects are: perceived stress (19%), fatigue (16%), dissatisfaction (15%) and burnout and depression (12%).

Conclusions. This is an ongoing study through which authors want to confirm the validity of some measurement scales in this work population for future implementation of PSF periodical evaluation in the company's health administration system and want to propose its use in other work centers. The results will be useful for some organizational actions such as work design, improvement of the cultural environment, human resources selection, ergonomic evaluations, and to better adequate individual and group health services.

Psychosocial Risks and Work Related Stress in a Rural Area

Ashish Sinha* (1), Ankita Bansal (1), Gayatri Tahiliani (2), Nitin K Sinha (3)

(1) Rural Medical College (Loni, India); (2) (Loni, India); (3) DY Patil Medical College (Pimpri, India)

Objectives. Identify and find solutions for the various psychosocial risks and work-related stress at the workplace in a rural area in state of Maharashtra in India.

Methods. The preliminary study was done via selective questionnaires to identify the psychosocial state of mind among the working population in a rural area, in the state of Maharashtra, India. The setup of the rural area included: one hospital having a 800-bed capacity, two schools, six colleges (medical, dental, physiotherapy, nursing, engineering and biotechnology colleges), sugarcane factory, milk dairy and agriculture.

The preliminary study spanned 366 volunteer participants, from all the strata of working fields. It encompassed medical & surgical consultants, medical residents, students from all the colleges, professors, farmers and factory workers. Demographic and clinical data were collected from the participants by the interviewer and the physicians in the hospital. The prospective study focuses on at least 2600 individuals of the group as done in the preliminary study.

Results. In the preliminary study, prevalent problems noted were alcoholism, depression, smoking, mania, drug addiction, hypertension, anorexia or overeating, insomnia or somnolence, infertility and diabetes. We found out that some factors had an important impact on increasing the psychosocial risks at workplaces. Those factors were: no dignity of labor, illiteracy, ignorance, people below the poverty line, caste system in India, parental pressure, social pressure, unhealthy competition, unwillingness to learn or take up new ventures and families with more than two children. More than 50% of individuals (185 of 366) showed signs of depression and wanted to escape from their current situation.

Conclusions. Psychosocial hazards and work related stress are on a rise in India as the country becomes closer to being a developed country. There is no complete cure or prevention for these hazards. Curative measures are through psychology, psychiatric treatment and counselling.

Methodological Development to Address Gender in Studying Psychosocial Factors

Leonor Cedillo*

Instituto Nacional de Ecologia (Mexico, Mexico)

Description. Various cross-sectional studies of psychosocial factors were conducted in Mexico among female dominated occupations. A quantitative approach has been preceded by semi-structured interviews in order to adapt the instruments to the local worries. Some similarities are expected among women workers attributable to gender, work and social organization bias.

Objective. Review differences and similarities in the identified psychosocial factors among women workers from different sectors and occupations to include a gender profile in psychosocial factors studies.

Results. Unbalanced work - life responsibilities and experienced violence from clients have been reported as major worries by the majority of the studied women populations during the interviews. These factors were measured through built scales and were quantified, they showed high prevalence. Among manufacture workers, unbalanced work-life responsibilities was reported by most of the workers whatever their hierarchical level and education background. When analyzing all psychosocial factors, demands, control and job insecurity, the contribution of unbalanced work-life was the higher contributor to the development of psychological distress symptoms in the manufacture studied population (17%). Among the workers in the telephone industry, the exposure to clients violence contributed the most to the psychological distress symptoms (33%). In that population, unbalanced work-life contributed even more to psychological distress symptoms, compared with the manufacture workers population (26%).

Conclusions. In this study, most of the social behaviors associated with gender translated into risk factors for women's health. These include violence, unequal job opportunities, higher family demands, based in power relationships in the family, social life and work. It is expected that gender oriented behaviors such as being demanding of physical strength, affect men's health and should be addressed as a psychosocial factors as well. Identifying gender oriented work and social organization in psychosocial factors studies is needed in order to design more accurate interventions in women dominated occupational environments and, in fact, in most types of organizations.

S5

Academic Researcher and Labor Union Collaboration in Work and Health Studies – Opportunities and challenges

Chairs: Paul Landsbergis (1) & Birgit Greiner (2)

(1) Mt. Sinai School of Medicine (New York, USA);

(2) University College Cork (Cork, Republic of Ireland)

Collaborative labor union/academic researcher studies have provided important contributions to the field of occupational stress. Mainly based on the paradigm of participatory action research, a considerable body of feasible, practical and successful strategies to improve working conditions and worker health have been developed, including interventions with longitudinal control group designs. However, despite these efforts, there appears to be a researcher/practitioner gap in the occupational stress arena. For example, some theoretical research questions may be considered not very relevant from the perspectives of practitioners and workers. Limited awareness of current research results by practitioners may result in limited implementation of these results into practice. Researchers may have limited knowledge about the specific sources of stress in a workplace, or feasible strategies to create change in specific workplaces.

This symposium is designed to critically address opportunities and challenges of labor union/researcher collaboration for a variety of research scenarios in addition to presenting results from collaborative studies.

“Collaborative research” is a broad term and may relate to different forms of working together and different levels of mutual involvement in the research process. A framework that describes different forms of unionist/researcher collaboration will introduce the symposium. Dimensions used in the framework are the stage of the research process when collaboration takes place (e.g., shaping the research question, study design, data collection, data analysis, publication and dissemination of results), whether collaboration takes place jointly with management or solely with the union, the general purpose of the research (descriptive, showing causation, evaluating intervention, prognosis) and the specific purpose of the research (increasing scientific knowledge, informing policy, activating and empowering, advocating).

S5

Collaboration entre chercheurs universitaires et syndicats dans le cadre d'études sur le travail et la santé – Occasions et enjeux

Chairs: Paul Landsbergis (1) & Birgit Greiner (2)

(1) Mt. Sinai School of Medicine (New York, USA);

(2) University College Cork (Cork, Republic of Ireland)

Les études en collaboration entre les syndicats et les chercheurs universitaires ont apporté une contribution importante au domaine du stress professionnel. Principalement basé sur le paradigme de la recherche action participative, un nombre considérable de stratégies réalisables, pratiques et réussies pour améliorer les conditions de travail et la santé des travailleurs ont été développées, y compris des interventions comportant un devis longitudinal incluant un groupe témoin. Cependant, en dépit de ces efforts, il subsiste un espace à combler entre les chercheurs et les praticiens dans le domaine du stress professionnel. Par exemple, certaines questions théoriques de recherche peuvent être considérées inappropriées du point de vue des praticiens et des travailleurs. La connaissance limitée qu'ont les praticiens actuels des résultats de la recherche en cours peut avoir comme conséquence l'utilisation limitée de ces résultats dans la pratique. Les chercheurs peuvent aussi avoir une connaissance limitée des sources spécifiques de stress dans les milieux de travail, ou des stratégies réalisables pour favoriser le changement des milieux spécifiques de travail.

Ce colloque vise à aborder de façon critique les opportunités et les défis de la collaboration entre les syndicats et les chercheurs à travers une variété de scénarios de recherche en plus de présenter les résultats d'études menées en collaboration.

«La recherche en collaboration» couvre un champ très vaste et peut désigner différentes façons de travailler ensemble et différents niveaux de participation mutuelle dans le processus de recherche. Un cadre décrivant différentes formes de collaboration entre des syndicats et des chercheurs sera présenté pour introduire le colloque. Les dimensions utilisées dans ce cadre représentent les étapes du processus de recherche en collaboration (par exemple, la précision de la question de recherche, le devis de l'étude, la collecte des données, l'analyse des données, la publication et la diffusion des résultats), que la collaboration ait lieu de façon paritaire entre le syndicat et la gestion ou seulement avec le syndicat, l'objectif général de la recherche (qu'elle soit descriptive, étiologique, évaluative de l'intervention ou pronostique) et le but spécifique de la recherche (développement des connaissances scientifiques, information pour les décideurs, mobilisation et pouvoir d'agir et promotion).

We Know the Question; Finding the Answer is your Job

Deborah Vallance*, **Anthony D. LaMontagne**, **Tessa Keegel**
University of Melbourne (Parkville, Australia)

Problem: Trade unionists and academics each carry images and expectations of what the other can do, does do and fails to do. There is ample knowledge about risks, but for many worker groups, it is the legacy of a lack of action which is familiar. So, for many trade unionists, relevance means practical implications or solutions, not knowledge. This is the basis for the creative tension of collaborations.

Objectives: To raise discussion points regarding the interchange between researchers and trade unions; particularly the expectations of each about the other, including some suggestions for improving outcomes.

Discussion: An oral presentation of case studies based on the personal experience and observations of an Australian trade union OH&S officer working in numerous roles; either serving as a link between the trade union formal structures and researchers or as the link from researchers to trade union health and safety events. Needs identified include: forums “to get to know each other” would improve mutual understanding to ensure that “unrealistic expectations and images” are dispelled; better appreciation by researchers of the hostile environment in which trade unionists can be forced to negotiate, researchers expanding their notions of the expertise of the “non expert”, recognition by both groups that they use specialized language (e.g., industrial relations or practitioner health and safety or that of a researchers’ discipline).

Conclusions: Both groups need to examine their assumptions and increase dialogue to enhance these essential relationships, which can improve both the quality of the experience and the outcomes for each.

At the Heart of Workplace Transformations : the Commitment of Stakeholders

Renée Bourbonnais* (1), **Michel Vézina (2)**, **Nathalie Jauvin (3)**,
Julie Dussault (3)

(1) Université Laval (Québec, Canada); (2) Institut National de Santé Publique (Québec, Canada); (3) CSSS de la Vieille-Capitale (Québec, Canada)

The mission of correctional facilities has changed dramatically from traditional disciplinary prisons to protect society from criminals by controlling them through confinement techniques, to current prison philosophy geared more towards social reinsertion. Inevitably, these ideological changes and correctional policy reforms have resulted in organizational upheaval. The role of correctional officers (COs) has also changed significantly. They must ensure security, facilitate the rehabilitation process and provide services to inmates. At the same time, they face difficult work conditions, particularly regarding the help relationship with incarcerated individuals and a limitation of the authority needed to perform their job. Following a request from the unions’ representatives concerned by this widespread malaise and by an increase in depression and in other mental health problems that caused a lot of absenteeism among COs, a large-scale intervention research program was initiated involving all correctional facilities in Quebec. A steering committee led by the researchers was created involving the participation of representatives from the Ministry of Public Security, prisons’ chief officers, national and local union leaders and COs. We used a participative approach with an Intervention Team, including correctional officers and managers, in three experimental prisons (500 workers) matched with three control prisons. A second control group included the 12 other provincial prisons. Partnership is a major challenge for researchers who conduct applied research in workplaces and especially when work transformations are needed and planned. Partnership is a mean to facilitate a common and shared mission. It goes further than simple collaboration. It necessitates cooperation in all the stages of the research, as well as the involvement and the commitment of all stakeholders. Facilitating factors and obstacles to collaboration in the transformation of work will be presented and discussed.

Labor-Academic Researcher Cooperation in Spain

Paul Landsbergis* (1), Peter Schnall (2)

(1) Downstate Medical Center-State University of New York (New York, USA); (2) University of California at Irvine (Irvine, USA)

An October 2007 conference on work organization and health sponsored by the health and safety institute of a major labor union federation in Spain, *Comisiones Obreras*, will be discussed. The institute and the conference have provided a forum for union/researcher collaboration. This occurs within the context of an occupational health and safety law, which requires all employers to conduct a risk assessment and intervention on work stressors, and which provides workers and their representatives the right to participate in all aspects of this process. The institute also developed, helped conduct and is analyzing data from a national survey, which includes the Copenhagen Psychosocial Questionnaire. This provides national averages for work stressors, which can be compared to other countries, and to workplaces (or departments within workplaces) within Spain. The first author was a keynote speaker at the conference.

Participatory Work Stress Research: Influenced by Academic Research Agendas?

Marnie Dobson*, Peter Schnall

Center for Social Epidemiology (Santa Monica, USA)

Participatory action research (PAR) should serve as an important guidance process in evolving ethical projects with a workplace change agenda. However, PAR has been slow to be taken up within much epidemiological research on work and health. We focus on the dilemmas of collaboration by discussing our experiences in working on studies designed to investigate the role that work organization and psychosocial work stressors play in the development of cardiovascular diseases in several workforces in distinct industries (including firefighters, communication workers, and hotel workers). Although we developed “collaborative” relationships with both unions and/or management in each of these workforces, we did not employ PAR procedures. We participated in some initial meetings with key labor representatives and conducted some preliminary focus groups and participatory-observation studies. In these respects, our experiences mirror many other researchers’ experiences.

As academic researchers, particularly in epidemiology, we find that our research is often focused on designs which isolate and control for “variables” in order to make causal statements about how X affects Y. A PAR approach, by introducing complexity and new “untested” constructs is risky business in the competitive grant world as there is often a precarious balance between “testing” academic knowledge and the needs of labor union collaborators. Epidemiologists in academics are mostly rewarded for publishing research in scientific journals and for obtaining grants, but not for organizing change.

Researchers need to be trained in PAR methodologies for traditional models to be transformed. Institutional support needs to be given to longer “start up” times. In research designs, qualitative methods need to be more than supplemental “adds-on”. Moreover, feedback processes with labor-union collaborators are needed throughout the study period, especially during the data analysis process. This needs to be included in grants.

Longitudinal Relations between Psychosocial Factors at Work and Mental Health: New Results and Challenges

Chair: Jan Fekke Ybema

TNO Work and Employment (Hoofddorp, Netherlands)

The aim of this symposium is to exchange results of longitudinal studies on the relation between psychosocial factors at work and mental health. Most research in this field is cross-sectional, which means that it remains unclear how to interpret relations between psychosocial factors at work and mental health. One of these issues is the direction of causation: do psychosocial factors influence mental health? Or is the causation reversed and does mental health influence the actual or perceived psychosocial factors at work? Another issue is optimal time lag: do psychosocial factors have an immediate effect on mental health or are delayed effects more likely? Longitudinal research has the potential to throw light on these issues, and to give insight in psychological or social processes that explain the relationships between psychosocial factors and mental health.

In this symposium, a number of important topics will be considered, including the effects of organizational justice, the effects of psychosocial work characteristics, long term effects of combat exposure, and day-to-day effects of stressors among teachers. In the symposium, different types of longitudinal research are covered to examine these topics, including a three wave study with time lags of a year, a 9-wave study with time lags varying from 3 months to 2 years, a 14 year follow-up study among combat veterans, and a diary study among teachers. The diversity of topics and methodologies in our symposium illustrates that longitudinal research can take many forms and is relevant for many areas in the field of psychosocial factors at work and mental health. In the symposium we will give special attention to the different methodological approaches and analytical methods to examine longitudinal data in an optimal way.

Relations longitudinales entre les facteurs psychosociaux au travail et la santé mentale : nouveaux résultats et enjeux

Responsable: Jan Fekke Ybema

TNO Work and Employment (Hoofddorp, Netherlands)

L'objectif de ce symposium est d'échanger sur les résultats d'études longitudinales portant sur la relation entre les facteurs psychosociaux au travail et la santé mentale. La majorité des recherches dans ce domaine sont transversales et l'interprétation des relations entre les facteurs psychosociaux au travail et la santé mentale demeure incertaine. Une question importante soulevée concerne la direction de la causalité : les facteurs psychosociaux influencent-ils la santé mentale ou la causalité est-elle inversée et est-ce la santé mentale qui influence les facteurs psychosociaux au travail réels ou perçus? Une autre question porte sur la période d'exposition optimale : les facteurs psychosociaux ont-ils un effet immédiat sur la santé mentale ou des effets à retardement sont-ils plus vraisemblables? Les devis de recherche longitudinaux ont le potentiel de faire la lumière sur ces questions et d'améliorer la connaissance des processus psychologiques ou sociaux qui expliquent les relations entre les facteurs psychosociaux et la santé mentale.

Au cours de ce symposium, un certain nombre de thèmes importants seront considérés, incluant les effets de la justice organisationnelle, les effets des caractéristiques psychosociales du travail, les effets à long terme de l'exposition au combat et les effets quotidiens des agents stressants chez les enseignants. Le symposium couvre plusieurs types de recherche longitudinale afin d'examiner ces thèmes, comprenant une étude en trois phases avec des intervalles d'un an, une étude en 9 phases avec des intervalles variant de 3 mois à 2 ans, une étude de suivi après 14 ans auprès des anciens combattants et une étude à partir de journaux chez des enseignants. La diversité des thèmes et des méthodologies dans notre symposium illustre le fait que la recherche longitudinale peut prendre de nombreuses formes et s'applique à de nombreux domaines touchant les facteurs psychosociaux au travail et de la santé mentale. Au cours du symposium nous mettrons l'accent sur les différentes approches méthodologiques et les méthodes d'analyse qui permettent d'examiner de façon optimale les données longitudinales.

Organizational Justice and Work Outcomes: a Longitudinal Perspective

Jan Fekke Ybema*

TNO Work and Employment (Hoofddorp, Netherlands)

Many studies show that perceptions of procedural justice and distributive justice in organizations are related to the well-being of people at work. However, it is largely unclear whether these justice considerations are the cause or the effect of psychological work outcomes. The objective of the present study was to unravel the direction of causation in the relationship between perceived organizational justice and work outcomes in a longitudinal design. It was predicted that perceived justice and work outcomes would mutually influence each other over time (reciprocal causation).

A longitudinal three-wave study among 1597 employees was carried out with a time lag of 1 year between waves. The data were analyzed using structural equation modeling (LISREL). Analyses focused on the longitudinal relationships between procedural and distributive justice on the one hand, and job satisfaction and burnout on the other hand. In addition, analyses were prepared on the longitudinal relationships of perceived justice with work behavior, including absenteeism and turnover.

In line with the predictions, the results showed that organizational justice and work outcomes were reciprocally related. Distributive injustice enhanced burnout a year later, whereas burnout in turn enhanced future procedural injustice. Furthermore, procedural justice and job satisfaction mutually augmented each other: higher procedural justice enhanced job satisfaction a year later, and higher job satisfaction also enhanced future procedural justice. This research confirms the importance of justice in organizations, as a means to enhance the well-being of people at work. At the conference, the results of the additional analyses on perceived justice and work behavior will also be presented.

A 9-Wave Study on Relations Between Psychosocial Work and Satisfaction

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The proposed research aims to shed more light on the important following question: which length of time lag(s) is (are) needed to demonstrate an impact of work characteristics on indicators of mental health across time? Researchers often base the length of their time lags on practical convenience, as little information is available about the “right” length of time lags in occupational health research. However, this procedure may result in using too short as well as too long time lags and in an underestimation of the true causal effects. There is quite some diversity in the length of time lags employed and the recommendations made for these time lags in examining longitudinal relationships between work and mental health (Williams & Podsakoff, 1989; Zapf et al., 1996). While Zapf et al. (1996) recommend that the same time lag be used if a study includes more than two measurements, Frese (1984) argues that in such cases, processes may be better captured using different time lags. One way to provide more information about the correct length of time lag for a particular relationship is to examine as many different causal lags as possible (De Lange, Taris, Kompier, Houtman & Bongers, 2003; 2004). In this chapter, we will address this unresolved issue by a) discussing several methodological challenges in determining the correct length of time lag for the relation between work and mental health, and by b) examining data of the prospective cohort PROMO study among 2461 Dutch office workers (Ijmker et al., 2006) with (un)evenly spaced time lags. More specifically, we will examine the effect sizes and implications of using different lengths of time lags (3-, 6-, 9-, 12- versus 15-months time lags) for the cross-lagged relation between work characteristics and job satisfaction.

Combat and Mental and Physical Health Comorbidity in Vietnam Veterans

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Post-traumatic stress disorder (PTSD) is a well-known mental health outcome in veterans exposed to military combat. The relationship between PTSD and other outcomes such as depression is less well studied. We evaluated the prevalence of PTSD, depression and general health in a cohort of 3,403 members of The American Legion, 853 of whom had experienced medium or high levels of combat in Vietnam. Study participants completed a mailed questionnaire in 1984, and again in 1998. Combat, PTSD, and depression were assessed using the same validated scales at both times and SF-36 at time 2 only because of its unavailability at time 1. Subjects were classified according to whether they had PTSD at 0, 1, or both time periods and whether they served in Southeast Asia. Men who served in Southeast Asia had significantly lower scores for four SF-36 scales: general health, mental health, vitality, and physical functioning. We have previously reported a strong dose-response between combat intensity and occurrence of PTSD. In the present analysis, the prevalence of depression was significantly greater among those who had PTSD in both 1984 and 1998 compared to those with PTSD at only one time period, and this was in turn significantly greater than among those who did not experience PTSD at either time. PTSD was a stronger determinant of comorbid depression than was combat intensity. The comorbid relationship was relatively stable over the 14-year longitudinal observation period. A similar predominating effect of PTSD was observed for three other PERI scales: irritation, anger, and helplessness/hopelessness. These findings underscore the need for a complete evaluation of mental health needs of veterans returning from combat zones and for innovative medical and social strategies to prevent and treat PTSD.

Three Ways to Look at Daily Process Data

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Daily process research that examines workers over a few hours or days contrasts with traditional longitudinal designs that follow workers over months or years. Daily process studies are longitudinal, albeit covering brief periods of time. They provide an up-close examination of the day-to-day transactions that are thought to give rise, cumulatively, to adverse outcomes such as depression and low levels of job satisfaction.

The focal concern of this study is teachers. A number of multi-wave longitudinal studies have linked adverse teaching conditions to poor outcomes. None of the studies examined teachers' day-to-day transactions at work.

The present study extends daily process methods to an examination of 252 novice New York City public school teachers (mean years taught = 2.6) who completed an online Teacher Daily Diary (TDD) every day for up to two weeks. The TDD covered demanding events, and was organized thematically (e.g., difficult adults, problematic classroom management events short of violence, violent events). The most commonly occurring demands events involved classroom management difficulties.

All analyses controlled for included negative and positive affectivity as well as whether TDD pertains to a weekday or a weekend day. The TDD included three dependent variables (DVs): negative mood, enervation, and job satisfaction. Three types of HLM analyses were conducted in which the DVs were regressed on: (1) stressors occurring the same day, which is the type of analysis most commonly conducted in daily process research; (2) stressors occurring the previous day; and (3) the sum of stressors accumulated over all previous days.

The results of the analyses look different depending upon the type of analysis. At the conference I will compare and contrast the three analytic approaches.

Progress Toward the Future JCQ 2.0: Proto-Pilot studies in Korea and China, and New Demand/Control Theory Platform

Chairs: Robert Karasek (1) & Norito Kawakami (2)
University of Massachusetts Lowell (Lowell, USA);
(2) University of Tokyo (Tokyo, Japan)

The current Job Content Questionnaire (1.7) may be the most internationally used work stress hazard instrument. The need for development of a new version of this instrument (JCQ 2.0) has been the focus of a sequence of international JCQ symposia and workshops in recent years. An ICBM symposium in 2000 in Brisbane reviewed of psychometric properties of the JCQ in different countries. At the 3rd ICOH Work and CVD conference in Dusseldorf in 2002, a critical evaluation of the current JCQ was undertaken. At the NIOSH/APA conference on Work and Stress in Toronto in 2003, themes for development of a new JCQ were evolved. At the 4th Work/CVD ICOH conference in Los Angeles in 2005, initial pilot study results and early progress toward a new JCQ 2 were presented. At TNO, in Amsterdam in 2005 a JCQ regional workshop on macro decision latitude was held to support development of a second pilot instrument for China.

Recently, JCQ board members and researcher BongKyoo Choi have coordinated JCQ 2.0 dialogues and proto-pilot studies in Korea (9,000 subjects, guided by Sungil Cho, Seoul National University) and China (4,000 subjects, guided by Jian Li, at Fudan University). Furthermore, a new “associationalist” version of the Demand/Control model – which can potentially better address globalization, boundary-less and flexible work, and complex social relation demands - supplies theoretical guidance for a new JCQ 2.0.

This symposium provides a forum for review of recent findings with the two JCQ 2.0 Proto-pilots (#1 and #2, respectively, from Korea and China), and discussion of theoretical implications of a more dynamic and generalized D/C model for JCQ 2.0 – also now in the context of multi-level social demands. The presentations are a platform for further discussion in a JCQ Workshop to occur in conjunction with the 3rd ICOH-WOPS, and should provide guidance for a 3rd proto-pilot study and a final JCQ 2.0 in the near future.

Reliability, Scale Structure, and Findings from Chinese JCQ 2.0 Study

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Objective: To examine the reliability and validity of a proto-pilot version of JCQ 2.0 in Chinese working population.

Methods: With an intensive discussion within the JCQ International Board, a 67-item «Proto–Pilot» version of JCQ 2.0 was released in 2006, which consisted of «job demands» (14 items), «task decision latitude» (11 items), «task and macro social support» (8 items), «job insecurity» (5 items), «macro decision latitude» (23 items), «benefits and life postponement» (2 items), and «work-family conflict» (4 items). The SF-8 health functioning questionnaire was also used for validation purpose. The field survey was conducted in three sites in China among general working population in 2007.

Results: The data from one Chinese site (2178 workers) is now ready for analysis. The Cronbach's alpha coefficients ranged from 0.67-0.82 for scales. The exploratory factor analysis showed that the scale of «macro decision latitude» was loaded on two factors, the same pattern was found in the scales of «job demands» and «task and macro social support». The others scales were loaded on their respective factors. Evidence of criterion validity was obtained from the association between the scales and health functioning. It was found that workers with «high job demands», «low task decision latitude», «high job insecurity» and «high work-family conflict» had elevated risk of poor physical health (the ORs ranged from 1.53 to 2.42). And «high job demands», «low task decision latitude», «low task and macro social support», «high job insecurity» and «high work-family conflict» were related to poor mental health (the ORs ranged from 1.41 to 2.82).

Conclusion: The findings suggest that the JCQ 2.0 has acceptable internal consistency reliability and criterion validity, while the structure of some scales need to be re-constructed, particularly the scale of «macro decision latitude». Further analysis is called for.

Emotional Demand Items in the JCQ 2.0 Korean Proto-Pilot Study

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Objective: To examine factor and predictive validities of eight emotional demands items in the Korean JCQ 2.0 proto-pilot study (Cho et al., 2005).

Methods: Seven emotional demand items were chosen through a literature review and were slightly modified. One additional item was created. Initially, the eight emotional demands items were grouped into three scales: Emotional Demands (ED: 3 items); Emotional Labor (EL: 2 items); Emotional Demands Indicator (EDL: 3 items). They were administered with other JCQ 2.0 items among 9,500 Seoul Metropolitan Subway workers (response rate, 78%). Exploratory factor analyses (principle axis factoring and promax rotation) were conducted with the emotional demands items, five JCQ quantitative work demands items and two exhaustion symptom items. The predictive validity of emotional demands items were examined using their partial correlations with psychological distress (3 items) and exhaustion.

Results: Two EDL items were not separated clearly from exhaustion items in factor analysis. More importantly, they were also similar to exhaustion items in terms of item wordings. Only three items (two from ED and one from EL) were clearly separated from quantitative demands and exhaustion items, consistently across genders, detailed job titles (ticketing vs. others), and age/education groups: “emotionally demanding”; “suppressing genuine emotion”; “have to act the way people think”. The Cronbach alpha of the three items (a new Emotional Labor scale) was 0.62. The associations of the new scale with psychological distress and exhaustion were significant ($p < 0.001$) after controlling for age, sex, education, and quantitative demands items (partial Pearson correlations were 0.19 for psychological distress and 0.18 for exhaustion, respectively).

Conclusions: This study supports that emotional demands items need to be incorporated into the JCQ 2.0. The best three items identified in this study need to be further tested in different countries and diverse occupations.

Theoretical Basis for Transition to JCQ2.0: Associationist Demand/Control Model

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A new version of the Demand/Control (D/C) model supplies conceptions to support new JCQ 2.0 questionnaire scales addressing globalization of production and work; boundary-less/flexible work structures, and complex social relations demands.

Two D/C Model extensions – the Conductivity Model extension of Active Work to political economy, and (b) the “Stress-Disequilibrium Theory extension of Job Strain to physiology and systems theory – are based on theories that both relate to the “Associations of Parts” – (a) new combinations of skills and people with skills, and (b) coordination of physiological sub-systems. A more generalized, systems theoretic form of the Demand/Control model, the Associationist D/C Model, is constructed from an integration of these extensions.

The “Associations of Parts” perspective differs from the standard Materialist perspective - which focuses more on the inherent qualities/value of the material object itself – and thus implies alternative political/economic implications.

The Associationist Demand/Control Model describes how systems can either organize themselves into higher levels of complexity (Active Hypothesis), or dissolve into systems with lower levels of complexity (Strain hypothesis), i.e., systems no longer able to sustain their original complexity and capability, or systems that grow and develop. The key issues are coordination, the association of parts (rather than the physical reality of the parts themselves) – and how dynamics of such interactions are determined by limits imposed by the Second Law of Thermodynamics.

The standard JCQ 1.0 scales can be understood as appropriate specifications of these new principles in the older context of work in 1970's industrialized economies, with large companies, national labor relations frameworks and social welfare states.

The scale development implications of the new JCQ 2.0 concept definitions are discussed for: JCQ2 Decision latitude (macro-level control and equilibrium maintenance); JCQ2 Demands (stressors) and multi-level demands; JCQ2 Strain (stress-disequilibrium “stress”) and JCQ2 Active behavior (conductive capability growth).

Multiscale Characteristics of Job Demands

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Publication not authorized.

Organisational Interventions for Work-related Health and Well-being: the Role of Process Issues

Chairs: Maria Karanika-Murray (1), Caroline Biron (2) & Raymond Randall (3)

(1) University of Nottingham (Nottingham, United Kingdom); (2) Lancaster University (Lancaster, United Kingdom); (3) University of Leicester (Leicester, United Kingdom)

Organisational-level interventions for the management of work-related stress, health and well-being are often less successful than expected (Cox et al., 2007). This is mainly due to a combination of paucity of studies that have examined their effectiveness and a lack of methodological rigour (Briner, 1996; Briner & Reynolds, 1999; Nytrø et al., 2000, Parkes & Sparkes, 1998; Reynolds, 1997). The lack of conclusive evidence on intervention effectiveness is worrying, given the large amounts of resources invested in designing and implementing organisational-level interventions. Intervention evaluation can be further complicated by the inherent difficulty in conducting research in applied organisational settings (Griffiths, 1999). It has been suggested that interventions often fail not due to their content or design, but because contextual and process factors that might determine the success or failure of their implementation are omitted in evaluation studies (Cox et al., 2007; Hunter & Schmidt, 1996; Nytrø et al., 2000; Briner & Reynolds, 1999; Reynolds & Shapiro, 1991). It is crucially important to incorporate process issues in intervention evaluation in order to optimise the fit of the intervention to the specific organisational context and thus improve implementation effectiveness and sustainability. Such a consideration can also improve current intervention evaluation research approaches, and help integrate the public health (prevention) and applied psychology (individual and organisational-focused) frameworks (Lamontaghe et al., 2007).

The present symposium aims to highlight the importance of process issues pertinent to the design, implementation and evaluation of organisational-level interventions. Key aspects of intervention process evaluation such as the importance of participation, a stepwise approach, management commitment, attention to contextual factors, among others, will be explored.

Interventions organisationnelles favorisant la santé et le bien-être au travail : le rôle des processus

Responsables : Maria Karanika-Murray (1), Caroline Biron (2) & Raymond Randall (3)

(1) University of Nottingham (Nottingham, United Kingdom); (2) Lancaster University (Lancaster, United Kingdom); (3) University of Leicester (Leicester, United Kingdom)

Les interventions de niveau organisationnel pour prévenir le stress et améliorer la santé et le bien-être au travail ne sont pas toujours aussi efficaces qu'escompté (Cox et al., 2007). Ceci est en partie lié au fait que les recherches évaluant l'efficacité d'interventions organisationnelles sont rares et ainsi manque souvent de rigueur au point de vue méthodologique (Briner, 1996; Briner & Reynolds, 1999; Nytrø et al., 2000, Parkes & Sparkes, 1998; Reynolds, 1997). Ce manque d'évidence concluante sur l'efficacité des interventions organisationnelles est inquiétant compte tenu des ressources importantes qui sont requises pour concevoir et mettre en application ce type d'interventions. Par ailleurs, l'évaluation de l'efficacité d'interventions organisationnelles est d'autant plus complexe en raison du fait qu'elles sont conduites dans des milieux de travail en changement et dans des conditions qui ne sont pas idéales pour ce type de recherches. Par conséquent, il importe de considérer non seulement l'efficacité des interventions, mais également le processus par lequel elles sont développées et implantées (Griffith, 1999). D'ailleurs, plusieurs ont suggéré que les interventions échouent non pas en raison de leur contenu ou conception, mais parce que les études évaluant leur efficacité omettent d'inclure des facteurs contextuels et de processus qui peuvent s'avérer déterminants dans le succès ou l'échec de l'implantation (Cox et al., 2007; Chasseur et Schmidt, 1996; Nytrø et al., 2000; Briner et Reynolds, 1999; Reynolds et Shapiro, 1991). Il est cruciallement important d'incorporer les questions de processus dans l'évaluation d'intervention afin d'optimiser l'ajustement de l'intervention au contexte spécifique de l'organisation et augmenter la probabilité que les interventions soient implantées et produisent les résultats escomptés. L'attention portée aux facteurs contextuels et de processus pourrait améliorer la qualité des recherches sur les interventions organisationnelles (Lamontaghe et al., 2007).

Ce symposium vise à accentuer l'importance des questions de processus concernant la conception, la mise en œuvre et l'évaluation des interventions de niveau organisationnel pour améliorer la santé et le bien-être au travail. Des éléments clés du processus d'intervention tels que l'importance de la participation, une approche par étapes, l'engagement de la direction, l'attention aux facteurs contextuels, entre d'autres, seront explorés.

The Development of a Quantitative Measure of Preventative Intervention Processes

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Implementation Process, Organisational Stress Interventions

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Evaluation studies attempt to answer the question as to whether prevention strategies “worked” in terms of reducing exposure to stressors and their consequences on individuals or organisations. However, they leave out an important element of the intervention process: the conditions necessary for interventions to be developed and implemented. The present study was conducted in a large UK private company and initially aimed to evaluate a UK private company’s initiative in preventing stress at work. The company’s stress plan consisted of training managers about psychosocial risks and their impact on employees’ well-being, and then training them to conduct a stress risk assessment (a team-based instrument which provided a diagnostic on psychosocial risks and strain issues). Initially, a quasi-experimental design was to be used. Questionnaires measuring psychosocial risks and health indicators were completed before (n=125) and nine months after (n=103) managers were trained. After six months, interviews conducted with managers showed that there was an implementation failure and none of the managers in the first experimental group had actually even gone as far as to develop an action plan. This implementation failure was partly due to organizational constraints (e.g. high turnover rate), but also to structural limits of the intervention program, characteristics of the assessment process and assumptions on which the whole program was based on. More specifically, the whole responsibility of stress prevention was placed on managers, who can be crucial in reducing but also in causing employees’ stress. Moreover, all efforts and resources were allocated to the risk assessment phase, leaving nothing for the development, implementation and evaluation of interventions’ impacts. The paper discusses the impact on employees’ expectations, exposure levels to psychosocial risks and well-being, as well as absenteeism and presenteeism rates. This study contains important lessons about the conception and implementation of organizational stress interventions.

Specifying Process in Risk Management and Interventions for Psychosocial Issues

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A risk management approach argues for the prevention of work-related stress through organisational-level interventions. However, such primary prevention interventions appear to be the least common type of intervention and are often beset with methodological problems (e.g. Briner & Reynolds, 1999; Parkes & Sparkes, 1998). To conclude, on the basis of a lack of acceptable evidence or on the basis of outcome data alone, that organisational-level interventions are of limited use would be unwise. There is now a growing opinion that argues that the lack of knowledge about why organisational interventions may appear to be ineffective is due to the focus on outcomes in evaluation research and the failure to address the processes by which interventions succeed and fail (e.g. Cox et al, 2007, 2000; Griffiths, 1999; Landsbergis & Vivona-Vaughan, 1995; Nytrø et al, 2000). Failure to consider context and process may drive the conclusion that an intervention was ineffective when, in fact, it was the delivery (fidelity) of that intervention that was faulty (Type III error; Lipsey & Corday, 2000).

This study presents an examination of the role of processes issues in interventions for the management of work-related health and well-being. Process issues are identified on the basis of (i) a series of case studies of intervention practices over the past 15 years and (ii) a review of the relevant literatures (including risk management, intervention research and change management). A multi-level model of intervention process issues is developed on the basis of this cumulative knowledge. This model can help take research, effective practice and risk management forward. It is suggested that consideration of process issues should be an inherent part of risk management and intervention design, implementation and evaluation.

Development and Implementation of an Intervention among Correctional Officers

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Following a request from union's representatives to find solutions to the increase in mobbing and absenteeism for mental health problems among correctional officers, a steering committee, lead by researchers, was created with the participation of representatives from the Ministry of Public Security, prisons' chief officers, union leaders and workers. We used a participative approach with an Intervention Team (IT), including correctional officers and managers, in three experimental prisons (500 workers), chosen on the basis of the number of employees (more than 200, between 75 and 200 and less than 75) and matched with a control group. The first step of the development phase was to get a real commitment of the organisation, defining involvement of management and union concerned for: appointment of a representative to the IT, liberation and replacement of workers to assist meetings and ensure the follow-up and to support the implementation of action plans proposed by the IT. During six to eight 3 hour meetings held over a four-month period, two researchers accompanied the IT work in identifying specific adverse psychosocial work factors and in proposing interventions to reduce them.

Two problems were identified in all three prisons: recruiting people insufficiently trained and lacking social rewards, for which the following solutions were implemented: new training program for recruits, pairing recruits with experience workers and awarding an official badge. In large prison, structuring communications to reduce role difficulties and perceived dangerousness were implemented. In medium size prison, increasing participation in decision-making was developed and, in small prisons, lack of social support from the management, was addressed by increasing supervisor presence on the job. Increasing workloads and lack of guidelines for social rehabilitation were problems for which no real solutions were implemented.

Effectiveness of a Work Psychosocial Intervention among Correctional Officers

Renée Bourbonnais* (1), Michel Vézina (1), Nathalie Jauvin (2), Julie Dussault (2)
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Statement of the problem: A research intervention was realized in all the correctional facilities in Quebec. The purpose was to reduce adverse psychosocial factors and the incidence of interpersonal violence among organization members and to improve the mental health of correctional officers (Cos).

Methods: A quasi-experimental design was used with three experimental and 15 control correctional facilities, and before-after intervention measurements. The research included all correctional officers. Self-administered questionnaires on the psychosocial work environment and correctional officers' state of health were filled out before intervention (T0), and three years (T1) after the intervention. Most scales had good psychometric qualities. Using Karasek's Demand-Control-Support model and Siegrist's Effort-Reward Imbalance model, an intervention group composed of various workplace representatives (correctional officers, management and local unions) identified changes needed in the work organization in order to reduce the observed negative health effects.

Results: Correctional officers at baseline (T0) had a higher prevalence of adverse psychosocial factors in their work and of mental health problems than an appropriate reference population, a representative sample of workers in the province of Quebec in contact with the public. Results show that only psychological demands have deteriorated in the experimental group but a few other constraints have changed favorably, specifically those related to supervisor support. However, most of the constraints have deteriorated significantly in the control centers. Also, one health indicator has improved significantly in the experimental group while 5/6 of these indicators have deteriorated in the control group.

Conclusion: Intervention on psychosocial work environment creates winning conditions for workers' health and well-being. The study relied on sound theoretical background insuring a choice of targets and solutions based on psychosocial work factors known to have an impact on workers' health. Methodological strengths of this research (sound theoretical models, quasi-experimental design including a control group, validated instruments) favours its generalization outside of the correctional sector.

Organisational Stress Interventions : Lessons Learned from Multiple Case-Studies

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Many authors have pointed out the difficulties related to studying the impacts of primary-level stress interventions in organizational settings. In order to answer questions such as "how well, why and when and for whom do stress prevention programs work", alternative approaches are needed. In this paper, we present an analysis of the development, implementation and evaluation of organisational stress interventions. This examination is based on six-case studies in which there were interventions to reduce exposure to psychosocial risk factors in the workplace and to improve well-being. The research aimed at 1) evaluating the effectiveness of organizational stress interventions and 2) documenting how interventions were developed and identify factors contributing to their successful implementation. The cases presented include participants from different departments of a Canadian university, one department of a Canadian hospital, a business unit from a United-Kingdom private company and a number of public sector forestry facilities. A web-based questionnaire was administrated within a 9 to 20 months time period. The questionnaire measured a wide range of psychosocial risk factors and well-being indicators. To document the implementation process issues, individual and group interviews were conducted regularly during the project. A number of process issues influenced the effectiveness of interventions: managers' workload, the impact of interventions on work organization, high turnover and retirement rates, project leaders' skills for managing change and people, negative opinions of staff towards the project, the simultaneous introduction of several measures and too-long timeframes for introducing significant measures. Even though the results demonstrate that organisational interventions do have positive impacts in reducing exposure to work stressors and in improving employees' well-being, this research shows that considering process issues can help further our understanding about their effectiveness. By comparing organizational stress interventions conducted in different settings, these case-studies highlight how process issues influence the trajectory of stress intervention programs.

Development of a European Psychosocial Risk Management Framework (PRIMA-EF)

Chair: Stavroula Leka
University of Nottingham (Nottingham, United Kingdom)

This symposium will describe recent policy research at the European level that focuses on the development of a European framework for psychosocial risk management (PRIMA-EF). This research has been funded by the EC 6th Framework Programme and particularly addresses work-related stress, and workplace violence (including harassment, bullying and mobbing). The objectives of the research programme are: a. to develop existing knowledge in reviewing available methodologies to evaluate the prevalence and impact of psychosocial risks at work and work-related stress, including physical and psychological workplace violence, harassment, bullying and mobbing; b. to identify appropriate means of collecting sensitive data in relation to these issues; c. to develop international standards and indicators on stress and violence at work; d. to develop detailed recommendations and evidence-based best-practice guidance on the management of these issues at the workplace; and e. to disseminate the results of the project to stakeholders and social partners including small and medium-sized enterprises (SMEs). In line with European policy on corporate social responsibility and social dialogue, the project involves social partners throughout its implementation and is supported by the World Health Organization (WHO) and the International Labour Office (ILO). In addition, the consortium supporting the programme works in synergy with partners internationally to ensure a wide impact of the project outcomes and the initiation of the development of an international network of centres of excellence in psychosocial risk management.

The symposium will consist of six presentations that will describe the work that has been completed so far through this research programme. The first presentation will describe the key principles of the framework for psychosocial risk management that underpins this policy research. The second presentation will focus on regulations and social dialogue and their link with psychosocial risk management. In addition, the preliminary findings of a stakeholder workshop including focus groups with participants will be presented. The third presentation will discuss the findings from a survey of policy makers across Europe on the perception of psychosocial risks and work-related stress. The fourth presentation will discuss key indicators in the area of psychosocial risk management and will present an indicator model focussing on macro and micro levels (e.g. policy, enterprise). The fifth and sixth presentations will focus on best practice as concerns psychosocial risk management interventions. Key best practice principles and the results from a series of interviews with experts across the EU will be presented and discussed.

Élaboration d'un cadre européen de gestion du risque psychosocial (PRIMA-EF)

Responsable : Stavroula Leka
University of Nottingham (Nottingham, United Kingdom)

Ce symposium présentera une politique récente de recherche au niveau européen qui se concentre sur le développement d'un cadre européen de travail pour la gestion du risque psychologique. Cette recherche a été financée par le 6e programme cadre de la commission européenne et s'intéresse particulièrement au stress lié au travail et à la violence sur le lieu de travail (dont le harcèlement moral et les tentatives d'intimidation). Les objectifs du programme de recherche sont: a. de développer les connaissances actuelles en faisant l'inventaire des méthodologies existantes pour évaluer la prévalence et l'impact des risques psychologiques au travail et du stress lié au travail, y compris la violence physique et psychologique sur le lieu de travail, le harcèlement moral, et l'intimidation; b. d'identifier des moyens appropriés pour collecter des données sensibles en relation avec ces problématiques; c. de développer des normes internationales et des indicateurs sur le stress et la violence au travail; d. de développer des recommandations détaillées et de répertorier les meilleures pratiques basées sur les preuves concernant la gestion de ces problématiques sur le lieu de travail; et e. de diffuser les résultats du projet aux parties prenantes et aux partenaires sociaux ainsi qu'aux petites et moyennes entreprises. (PME). En phase avec la politique européenne sur la responsabilité sociale de l'entreprise et le dialogue social, le projet implique les partenaires sociaux au travers de sa mise en œuvre et est soutenu par l'Organisation mondiale de la Santé (OMS) et le Bureau International du Travail (BIT). En outre, le consortium qui soutient le programme travaille en synergie avec les partenaires internationaux de manière à assurer un large retentissement aux avancées du projet et à démarrer la mise sur pied d'un réseau international de centres d'excellence pour la gestion du risque psychologique.

Durant le symposium, six présentations décriront le travail effectué jusqu'à présent dans le cadre de ce programme. La première présentation présentera les principes clés du cadre de travail de gestion du risque psychologique qui sous-tendent cette politique de recherche. La deuxième présentation s'attachera aux règlements et au dialogue social ainsi qu'à leurs liens avec la gestion du risque psychologique. Les résultats d'un groupe de travail incluant des focus groups avec les participants seront également présentés. La troisième présentation discutera les résultats d'une enquête réalisée par des décideurs politiques de toute l'Europe sur la perception du risque psychologique et du stress lié au travail. La quatrième présentera les indicateurs clé dans le domaine de la gestion du risque psychologique ainsi qu'un modèle d'indicateur aux niveaux macro et micro (les contextes politiques, celui de l'entreprise). Les deux dernières présentations feront le point sur les bonnes pratiques de la gestion du risque psychologique. Les meilleures pratiques et les résultats d'une série d'interviews avec des experts européens seront présentés et donneront lieu à des débats.

Introduction to the European Framework for Psychosocial Risk Management

Stavroula Leka* (1), Tom Cox (1), Aditya Jain (1), Evelyn Kortum (2)
 (1) University of Nottingham (Nottingham, United Kingdom); (2) World Health Organization (Geneva, Switzerland)

The PRIMA-EF symposium will describe recent policy research at the European level that focuses on the development of a European framework for psychosocial risk management. This research has been funded by the EC 6th Framework Programme and particularly addresses work-related stress, and workplace violence (including harassment, bullying and mobbing). The framework can be built from a theoretical analysis of the risk management process, identifying its key elements in logic and philosophy, strategy and procedures, areas of measurement and types of measure, and from a subsequent analysis of typical risk management approaches as used within the European Union. This European psychosocial risk management framework should inform decisions on the development of new and existing approaches to the management of work-related stress and workplace violence. This presentation will present the PRIMA framework's philosophy and logic and key principles.

EU Policies and Social Dialogue on Psychosocial Risk Management

Michael Ertel* (1), Jadranka Cvitkovic (1), Christa Sedlatschek (1), Sergio Iavicoli (2), Elena Natali (2), Carlo Petyx (2), Patrizia Deitinger (2)
 (1) Federal Institute for Occupational Safety and Health (BAuA) (Berlin, Germany); (2) National Institute for Occupational Safety and Prevention (ISPESL) (Rome, Italy)

In terms of recognizing the relevance of work-related stress and of psychosocial risks in general, considerable progress has been made in the EU over the last years. However, many barriers still exist in terms of addressing psychosocial risks. There are growing concerns as to whether the existing legal and regulatory framework in the EU is appropriate and effective for the prevention of work-related stress. This is mainly due to the process of EU enlargement which is increasing the European Union's heterogeneity in view of its economic level of development, social partner capacities and the political will to address stress-related problems. There are also relevant differences between trade unions and employers associations in terms of assessing the relevance of enforceable regulations versus "soft law".

Against this background, the presentation, as part of the PRIMA-EF symposium, will focus on these questions:

- How appropriate and effective are the existing regulations for the assessment and management of psychosocial risks?
- What are the driving forces and what are the barriers in this context?
- How can psychosocial risks be successfully addressed in the new EU states which have undergone massive economic, social and political restructuring since 1990?
- What are the benefits and limits of "soft law" (in particular European Social Dialogue) in relation to psychosocial risk management?

**Exploration of Perception of Psychosocial Risks,
Work-Related Stress by Stakeholders**

Sergio Iavicoli (1), Elena Natali (1), Carlo Petyx (1), Patrizia Deitinger (1), Michael Ertel (2), Jadranka Cvitkovic (2), Christa Sedlatschek (2), Stavroula Leka*(3)

(1) ISPESL (Rome, Italy); (2) BAuA (Berlin, Germany); (3) University of Nottingham (Nottingham, United Kingdom)

The scientific literature provides a broad view of research on stress, its consequences on workers' health, the workplace, and its main causes. However, little attention has been focused on "stress perception". As stress perception and recognition is highly subjective and as people's ideas so widely differ, two studies that have explored stress perceptions both illustrate the perception gap between workers and stakeholders. The first study, carried out in 2000 by the European Foundation for the Improvement of Living and Working Conditions reported that the second most common occupational health problem perceived and recognized by workers was stress (Third Survey on European working conditions). The second study conducted in 2003 by the Italian National Institute for Occupational Safety and Prevention (ISPESL) illustrated the poor perception and recognition of stress by stakeholders in the 12 candidate EU countries.

"Stress perception" among stakeholders is an important intermediate step because it attains convergence among social partners on the perception of stress in order to overcome the often-quoted science-policy gap and the one between policy and implementation.

In the PRIMA-EF project, a survey involving stakeholders on a tripartite basis (government institutions, trade union organizations, employers' organizations) representing European Union was conducted. The main topics of the questionnaire were: the effectiveness and the needs related to regulations governing health and safety at work, the perception of work related stress and related outcomes and the role and the effectiveness of dialogue and cooperation between social partners. As part of the project activities, a Stakeholder Workshop was organized with the central goal of exploring the opinions and the perspectives of stakeholders and experts, using focus groups, in relation to psychosocial risks at work and work-related stress, including physical and psychological workplace violence. The findings of the survey and focus groups will be presented at the symposium.

**Monitoring and Indicators on Psychosocial Risk
Management**

Irene Houtman*, Maartje Bakhuijs Roozeboom
TNO Work & Employment (Hoofddorp, Netherlands)

Publication not authorized.

Best Practice Interventions for Management of Bullying at Work

Maarit Vartia* (1), Krista Pahkin (1), Sanna Sutela (1), Kari Lindström (1), Stavroula Leka (2), Juliet Hassard (2), Aditya Jain (2)

(1) Finnish Institute of Occupational Health (Helsinki, Finland); (2) University of Nottingham (Nottingham, United Kingdom)

Many institutions at the national and international level have expressed their concern about bullying or psychological harassment as one of the emerging psychosocial risks in the work life. Evidence-based best-practice methods to prevent and handle hazardous behaviours, particularly bullying, mobbing and harassment at work, are required.

One of the aims of the PRIMA-EF (Psychosocial Risk Management - European Framework) research program was to carry out a review and analysis of case studies of evidence-based, best practice interventions on work-related violence, including bullying and harassment at work in different European countries, occupational sectors, worker groups and enterprise sizes. Effective primary-, secondary-, tertiary- and policy level best-practice interventions to be used in organizational and individual level were looked for.

A literature review of existing management approaches in relation to bullying and harassment was carried out. The different approaches and best practice interventions were reviewed in terms of special criteria set in the project to evaluate the strengths and weaknesses of those different approaches. The search showed that so far only a few evaluated interventions regarding management of bullying have been carried out but some are in hand. Complementary data was collected through 30 telephone interviews with experts (researchers, consultants, authorities, union representatives) who have developed, examined or used different approaches to prevent and manage bullying in organizations as well as to help and to rehabilitate the victims of bullying. Findings from the literature review and the interviews will be presented at the symposium.

Evaluation of Best Practice Interventions for Work-Related Stress

Juliet Hassard*

Institute of Work, Health and Organisations, University of Nottingham (Nottingham, United Kingdom)

A recent report by the European Agency for Safety & Health at Work ('Priorities for occupational safety and health research in the EU-25', 2005) underlines that 'research is needed to develop and test organizational interventions to improve the psychosocial work environment with a special emphasis on the prevention of work-related stress (WRS) and physical and psychological violence'. Psychosocial risk management approaches differ from each other in many ways. A common distinction has been between organizational and individual orientations, or between primary, secondary and tertiary prevention. The approaches and interventions diverge also in several other essential aspects: in theoretical foundation, aim and type of problem addressed, data collection, indicators and analytical techniques, reliance on expert and employee participation, involvement of social partners, adaptability to special problems and emergent risks, groups and organizational characteristics, and length of the evaluation period.

To review and evaluate the different approaches in the management and prevention of WRS systematically, a unifying framework, based on scientific and practical criteria, was defined. Following this, a review of the risk management approaches, in relation to work-related stress, in terms of the unifying framework and criteria was carried out to evaluate the strengths and weaknesses of the different approaches. Examples on the implementation of best management practices were gathered across Europe from different occupational sectors and enterprise sizes with a special emphasis on SMEs.

Based on the review and evaluation of the different approaches, an inventory of existing psychosocial risk management approaches and their characteristics was developed, focusing on interventions for work-related stress. A series of semi-structured interviews (n=32) were then conducted with professionals and experts who have developed, examined or utilized the approaches across Europe. The findings of the interviews and the results of the evaluation will be presented during the symposium, and conclusions discussed.

S10

Mental Health Aspects of Injured Workers

Chair: Ute Bültmann

University Medical Center Groningen, Department of Health Sciences (Groningen, Netherlands)

While economic and work-related aspects of occupational injuries have been studied extensively, their mental health aspects have received little attention 3. This is surprising in light of the fact that recent data suggests that poor mental health is often part of the aftermath of work-related injuries 2 . Studies have demonstrated that the presence of depressive symptoms following a workplace injury is associated with a longer duration before first return-to-work (RTW)¹, an increase in time receiving wage replacement benefits 4, 6, and recurrences of work absence 5. In addition to the human cost of poor mental health for workers and their family, for those workers who return to work, enduring depressive symptoms may have adverse effects on work productivity and performance.

In this symposium, the first paper will provide an introduction to the topic by presenting incidence/prevalence and course of depressive symptoms in injured workers over a 12 month period following injury. There is also growing evidence that workers' experience with the compensation system may negatively impact their mental health. The second paper will present results of a qualitative study of this phenomenon in injured workers. The third paper will introduce a model of justice of the compensation process as perceived by workers, and present a recently developed scale to assess the perceived justice of the compensation process and its psychometric properties, including its relationship with mental health. The fourth paper will examine how RTW policy about early return to work interfaces with workers' experience of pain, medication use, and mental health. The last paper will examine the relationship between prescription drug coverage, out-of-pocket drug expenditures and antidepressant use in workers receiving short-term depression-related disability benefits.

Injured workers face multiple losses: loss of income, functional ability, health, and quality of life. The symposium will bring to the forefront the critical issue of the mental health of injured workers and create the opportunity for participants to discuss its magnitude, determinants, and possible solutions.

S10

La santé mentale des travailleurs accidentés

Responsable: Ute Bültmann

University Medical Center Groningen, Department of Health Sciences (Groningen, Netherlands)

Bien que les aspects économiques et occupationnels des accidents du travail aient été beaucoup étudiés, les aspects ayant trait à la santé mentale des travailleurs accidentés ne l'ont été que très peu. Cela est étonnant puisque des données récentes suggèrent que les accidents du travail entraînent souvent des retombées sur la santé mentale. Certaines études démontrent que la présence de symptômes dépressifs après un accident du travail est associée à une plus longue durée de la période de retrait précédant le premier retour au travail, à une plus longue durée de la période d'indemnisation et à des absences au travail à répétition. Les symptômes dépressifs faisant suite à un accident du travail sont donc associés à des coûts humains importants pour les travailleurs et leurs familles. De plus, pour les travailleurs qui retournent au travail, les symptômes dépressifs persistants peuvent avoir des effets négatifs sur la productivité et la performance au travail.

La première présentation de ce symposium exposera, en guise d'introduction au sujet, l'incidence, la prévalence, et l'évolution des symptômes dépressifs chez les travailleurs accidentés sur une période de 12 mois. Les données probantes démontrent que l'expérience qu'ont les travailleurs accidentés du système de compensation peut avoir un impact néfaste sur leur santé mentale. La deuxième présentation illustrera ce phénomène en faisant état des résultats provenant d'une étude qualitative. La troisième présentation examinera comment les politiques concernant le retour au travail peuvent affecter l'expérience de la douleur des travailleurs accidentés, leur utilisation des médicaments et leur santé mentale. La dernière présentation traitera de la relation entre la couverture des frais des médicaments prescrits, les dépenses pour médicaments payés par les travailleurs et l'utilisation des anti-dépresseurs chez les travailleurs qui souffrent de dépression et reçoivent des bénéfices de congé de maladie à court-terme.

Les travailleurs accidentés vivent plusieurs pertes: perte de revenu, de capacité fonctionnelle, de santé et de qualité de vie. Ce symposium placera à l'avant-scène la santé mentale des travailleurs accidentés et offrira aux participants et à l'auditoire l'opportunité d'échanger sur cette problématique cruciale, son étendue, ses déterminants et les solutions qui pourraient être explorées.

Depressive Symptomatology Following a Workplace Injury: A Prospective Cohort Study

Nancy Carnide (1), Renée-Louise Franche (1), Sheilah Hogg-Johnson (1), Pierre Côté (2), F. Curtis Breslin (1), Ute Bültmann* (3), Colette Severin (1), Niklas Krause (4)

(1) Institute for Work & Health (Toronto, Canada); (2) University Health Network Rehabilitation Solutions, Musculoskeletal Health & Arthritis Program, Toronto Western Hospital (Toronto, Canada); (3) University Medical Center Groningen, Department of Health Sciences (Groningen, Netherlands); (4) Division of Occupational & Environmental Medicine, Department of Medicine, University of California (San Francisco, USA)

Objectives: To present estimates of prevalence, incidence and course of depressive symptoms, and prevalence of mental health treatment use over 12 months following a workplace injury.

Methods: In a prospective cohort study, 332 workers filing a lost-time compensation claim for a work-related musculoskeletal disorder of the back or upper extremity completed interviews at one (baseline), six, and 12 months post-injury. Presence of a high level of depressive symptoms was defined as ≥ 16 on the CES-D. We report on the following estimates: 1) Prevalence of high depressive symptom levels; 2) Course of depressive symptom levels between one and 12 months post-injury; 3) Prevalence of depression diagnosis between one and 12 months post-injury; 4) Prevalence of mental health treatment use at 6 and 12 months post-injury.

Results: Half of all workers reported high depressive symptom levels in at least one of the three interviews over 12 months post-injury. Most workers who began with low levels of depressive symptoms at baseline maintained low levels through 12 months (82.9%, 95% CI 77.7%-88.1%). Workers with high levels at baseline were equally likely to experience persistence or resolution of symptoms at six months and these six-month levels were generally maintained through 12 months post-injury. Persistent high levels of depressive symptoms at all three interviews were demonstrated by 36.1% (95% CI 27.9%-44.3%) of participants. At 12 months post-injury, only 18.8% (95% CI 7.7%-29.8%) of workers with persistent high depressive symptom levels reported having received a depression diagnosis since injury and 29.2% (95% CI 16.3%-42.0%) reported currently receiving depression treatment.

Conclusions: Depressive symptoms can be persistent for some injured workers, but transient for others. Depressive symptoms are seldom diagnosed as depression or treated. By 6 months post-injury, the level of depressive symptoms stabilizes, suggesting an important window of opportunity for physicians to address symptoms prior to 6 months.

Impact of the Compensation Process on Injured Workers' Health

Katherine Lippel*

University of Ottawa (Ottawa, Canada)

Objectives: Many studies look at the duration of disability of injured workers as compared to that of those who are injured off the job, but few studies examine the effect of the compensation process itself on the health of injured workers. This presentation reports on a Québec study of injured workers who had filed claims with the Commission de la santé et de la sécurité du travail, after a work accident or an occupational disease.

Methodology: This paper will present an analysis of data obtained in the course of a qualitative study conducted in Québec between 2003-2005. 85 injured workers were interviewed about their experience as workers' compensation claimants, and the interviews focused on the positive and negative effects of the process on their health. All interviews were transcribed and coded using N'Vivo software, using a method derived from Grounded theory.

Results: Injured workers identified both positive and negative impacts on their health that were associated with the workers' compensation process. Positive impacts were attributable to better access to health care, access to economic support and social support most frequently derived from injured workers' associations, treating physicians and unions. Negative impacts were attributable to stigmatization of injured workers, imbalance of power between the worker and the other actors in the system and lack of social support for those who were isolated. Negative impacts were prevalent, and included mental health problems leading to consumption of medication and additional health care services, suicidal ideations and negative representations of self and others.

Conclusions: While some compensation practices protect workers' health, many do not, and can have long term negative consequences for workers' mental health. Policy makers and disability prevention researchers need to take into consideration the negative health effects of management practices that contribute to stigmatization of injured workers.

Pain, Medication Use, and Early Return to Work Problems**Ellen MacEachen****Institute for Work & Health (Toronto, Canada)*

Return to work is often depicted as a straightforward process. However, these situations can be far from ideal and studies are beginning to document associations between return to work and mental health problems. This paper focuses on problems encountered by workers who have had difficulties with return to work. In particular, we examine how policies and practices of early return to work can produce situations of worker pain, medication overuse, and mental health problems.

This analysis is based on findings from a larger study of injured workers with long-term and complex workers' compensation claims. In-depth interviews were conducted in Ontario with 48 injured workers and 21 service providers, about return to work processes and problems. A modified grounded theory analysis process yielded consistent themes and concepts.

We find a relationship between medication consumption and workers' ability to engage in return to work. As employers are financially motivated (through insurance premiums) to return workers to work before recovery from injury, some focus on strategic management of the compensation claim rather than on health needs and limitations of returning workers. In these circumstances, workers fearful of jeopardizing relationships with employers and compensation providers managed inappropriate work requirements by consuming excessive medication so they could control their pain and continue working. Such over-medication leads to a diminished ability to concentrate, impaired communication, challenging workplace social relations, and mental health problems.

Current policy and literature on injured worker medication overuse generally cast it as a problem of individual frailty, or as a criminal offense. In contrast, we find that medication overuse can be linked to early return to work policy. We found that workers' fear of job loss or cessation of compensation benefits led to pain coping strategies involving excessive medication which, in turn, created a downward spiral to mental health problems.

Prescription Drug Benefits and Antidepressant Use**Carolyn Dewa****Centre for Addiction and Mental Health (Toronto, Canada)*

Over the past decade, there has been tremendous growth in workplace disability claims; mental illness accounts for 30% of these claims. Employers also face rising costs associated with prescription drug coverage. Benefit structures are often seen as cost control mechanisms. However, little is known about how the out-of-pocket prescription drug costs experienced by a working population on disability will affect their use of prescription drugs.

This study examines the effects of out-of-pocket expenditures on antidepressant use, among workers receiving depression-related short-term disability benefits. We examine the association between out-of-pocket costs of workers prior to their disability episode and (1) use and (2) delay in use of antidepressants during the episode.

This study uses administrative data from three major financial/insurance employers, representing 12% of their sector. The sample consists of 706 employees who received short-term depression-related disability benefits and had prescription drug coverage.

Logistic regression results indicated that higher out-of-pocket expenditures for antidepressants prior to the disability episode were associated with higher odds of using an antidepressant during the episode. However, results also suggested that higher out-of-pocket expenditures for other prescriptions were associated with significantly lower odds of an antidepressant claim during the episode.

Our results suggest that greater prior out-of-pocket expenditures for other prescription drugs may serve as a barrier to accessing antidepressant treatment. Workers receiving short-term disability benefits who have previously purchased prescriptions for other conditions may be more sensitive to out-of-pocket expenditures for antidepressant prescriptions.

Hardship Experienced by Workers with Work-Related Injuries and Illnesses

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Background: In Taiwan, there was an average of 52,587 compensated injuries and illnesses per year between the years 2001 and 2006, which included 838 fatalities per year. The actual work-related morbidity and mortality could be even higher, considering the barriers and difficulties in gaining workers' compensation (WC). Work-related injuries and illnesses often result in various forms of hardship, including psychological distress. However, little investigation has been conducted so far into the real-life experiences of these workers.

Methods: We conducted in-depth interviews during the period from July, 2006 to June, 2007, with 17 workers who were injured or afflicted with work-related illnesses and had sought for WC. Of them, 10 workers were recruited through a major occupational health center, and 7 were recruited through non-governmental advocacy organizations. Five aspects of experiences were inquired: work conditions before and during the event (or disease diagnosis), experiences with medical care, experiences during the process for WC, benefits received from the WC or other social welfare systems, and current physical and psychological health status.

Findings: Findings indicated that many injured workers were exposed to hazardous work conditions and had experienced undue difficulties during the treatment, compensation, rehabilitation and return-to-work process. Depression was common; some injured workers even suffered from post-traumatic stress disorder. The multidimensional hardships they experienced were due to problematic social systems, insufficient knowledge and information regarding labor's rights, unbalanced employer-employee relationship, lack of involvement from professional communities, and lack of awareness in the society as a whole.

Conclusion: This study highlights the problems in current health and compensation systems affecting injured workers. Specific recommendations for policy reform are proposed based on findings from this study.

Psychosocial Factors Associated with Outcomes in Patients with Chronic Whiplash

Petko Baltov* (1), Julie Côté (2), Manon Truchon (3), Debbie Feldman (4)
 (1) (Sofia, Bulgaria); (2) McGill University (Montreal, Canada); (3) Laval University (Quebec, Canada); (4) University of Montreal (Montreal, Canada)

Multidisciplinary rehabilitation appears to be beneficial for persons with chronic whiplash-associated disorders (WAD). Despite this, little is known regarding psychosocial factors associated with improved outcomes in those who undergo multimodal treatment. Our objectives were: 1) to explore whether psychosocial factors, disability, and socio-demographic factors measured pre-treatment, predicted post-treatment return to work, disability and psychological distress, and 2) to assess whether patients improved following treatment with respect to disability, and psychological distress. We conducted face to face interviews with 28 patients with chronic WAD at entry and completion of the multimodal rehabilitation program, and a telephone interview three months later. The effect of each of the independent variables on the outcomes was first evaluated by simple linear or logistic regressions, and then subsequently by multivariable analyses. Paired t-tests were used to evaluate whether patients improved after rehabilitation, in terms of disability and psychological distress. These analyses were performed for both follow-ups. Greater social support at work was prognostic of return to work at program completion ($p=0.04$). Higher initial disability predicted higher disability at both follow-ups ($p<0.001$) and higher psychological distress at program completion ($p=0.003$). Younger age ($p=0.028$) and higher initial psychological distress ($p=0.002$) were associated with higher psychological distress three months post-rehabilitation. Compared to pre-rehabilitation, patients improved in terms of pain and disability at both follow-ups ($p<0.001$), and in terms of psychological distress at the second follow-up ($p=0.03$). Our results indicate that psychosocial factors play a role in the prognosis of return to work and psychological distress. Baseline disability is the only factor affecting disability post-rehabilitation. Subjects who report low social support at work and those with psychological distress may benefit from additional psychological intervention. Patients with very high initial disability may not be good candidates for multidisciplinary rehabilitation programs and may be more suitable for other types of interventions.

S11

Mental Health in the Workplace: Methods and Practices to Be Constructed

Chairs: Louise St-Arnaud (1) & Marc Corbière (2)
(1) Université Laval (Québec, Canada); (2) Université de Sherbrooke (Montréal, Canada)

Work-related mental health problems and their consequences are a highly topical issue and represent a burden in both human and financial terms since approximately one-quarter of the world's population will be directly affected by this problem at some stage in their lives. In most industrialized countries, employers and their employees increasingly have to deal with this phenomenon and the high level of absenteeism that it causes. This symposium will focus on the research methods and practices to be constructed relating to return to work and job retention. An interdisciplinary approach will also be favoured to grasp the issues related to mental health problems in the workplace. First, the different terminologies relating to the notions of mental health problems and diagnosed mental disorders will be presented. The components of job re-integration and return-to-work programs for workers suffering from serious mental disorders (e.g. schizophrenia) and transitory mental disorders (e.g. burnout) will also be presented in order to highlight the evidence inherent to these programs. Second, the key elements of a rehabilitation program for workers with a musculoskeletal disorder (e.g. back pain) adapted to workers with a mental disorder will be described. We will also set out the results of a participatory approach to the development of a model that operates a return to work for workers with mental health problems and a diagnostic tool for the return to work of those with a mental disorder. Third, we will examine, in the Quebec context, the legal factors associated with the return to work and job retention of workers with a work-related mental health problem. Lastly, we will outline the key elements which emerge from these presentations in order to identify and define the components that are essential to the job re-integration of workers who are affected by a mental disorder.

S11

Santé mentale en milieu de travail : méthodes et pratiques à mettre en place

Responsables : Louise St-Arnaud (1) & Marc Corbière (2)
(1) Université Laval (Québec, Canada); (2) Université de Sherbrooke (Montréal, Canada)

Les problèmes de santé mentale et leurs conséquences en milieu de travail sont d'actualité et représentent un fardeau tant au niveau humain que financier, car environ un quart de la population mondiale sera à un moment donné de sa vie touchée directement par ce problème. Dans la plupart des pays industrialisés, les employeurs et leurs employés doivent de plus en plus faire face à ce phénomène et au niveau d'absentéisme élevé qu'il suscite. Ce symposium portera à la fois sur les méthodes de recherche et les pratiques à construire en matière de retour au travail et de maintien en emploi. Nous proposons également d'adopter une approche transdisciplinaire pour appréhender la thématique relative aux problèmes de santé mentale en milieu travail. En premier lieu, les différentes terminologies concernant les notions de problèmes de santé mentale et de troubles mentaux diagnostiqués seront présentées. Les composantes programmatiques de réinsertion et retour au travail de personnes qui souffrent de troubles mentaux graves (ex. schizophrénie) et transitoires (ex. épuisement professionnel) seront également présentés afin de dégager les évidences inhérentes à ces programmes. Par la suite, les éléments clés d'un programme de réadaptation pour les travailleurs avec un trouble musculosquelettique (ex. maux de dos) adapté aux personnes avec un trouble mental seront présentés. Nous présenterons aussi les résultats d'une démarche participative pour l'élaboration d'un modèle opérationnel de retour au travail en santé psychologique ainsi que le développement d'un outil diagnostique pour le retour au travail de personnes avec un trouble mental. Enfin, nous traiterons des éléments juridiques du contexte québécois associés au retour et au maintien au travail de personnes avec un trouble mental relié au travail. En fin de symposium, nous tracerons les éléments clés qui émergeront de ces communications pour cerner les composantes essentielles à la réintégration au travail de personnes qui vivent un trouble mental.

S11-1

Managing the Return to Work in Work-Related Mental Health

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Work-related mental health problems are currently one of the leading causes of absence from work. Few return-to-work programs have been formalized and designed in collaboration with the various partners concerned. The goal of this study is to design an integrated return-to-work program in collaboration with a workplace and its various partners. This involves developmental research based on program theory which seeks to construct and enhance the practices of managing absences and return to work. The workplace under study employs approximately 3600 workers and was selected due to its high rate of absence for mental health reasons. First, a series of 31 individual interviews were conducted with key actors (senior management and middle managers, immediate supervisors, unions, clinicians, human resources, the health department, etc.) in order to identify the current practices and the paradigms that underlie the management of absences and the return-to-work practices in the workplace in question. To assess the coherence between the various actors involved in the management of absences and return to work, each group of actors was examined in terms of roles and responsibilities, mechanisms for action and decision making, the resources available to them as well as their underlying principles and values. Second, a mapping of current practices was drawn up and compared with that of a theoretical model based on best practice evidence related to return to work. The research results led to the formalization of a program theory on best return-to-work practices in collaboration with the various partners involved. A more integrated and concerted vision of the best practices to be favoured, based on the identification of the roles and responsibilities of each partner, led to the development of an integrated program which takes account of the practices of the various actors in the workplace.

S11-2

Programmatic Components for Helping People with Mental Disorders to RTW

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A number of studies shows that individuals who develop so-called transitory mental disorders (e.g. adjustment disorder) in their workplace account for over 30% of all work absences. The studies also reveal alarming statistics for individuals with serious mental disorders (e.g. schizophrenia). Among them, 70% to 90% are unemployed, despite the fact that the situation appears to have improved slightly in the last few years, with the implementation of Supported Employment Programs (SEPs). Judging from two recent literature reviews of reintegration-into-work/return-to-work programs designed specifically for individuals with either transitory or serious mental disorders, it would appear timely to take stock of the evidence-based programmatic components. Among the components of return-to-work programs designed for people with transitory mental disorders, two in particular stand out: (1) a cognitive-behavioral approach is adopted, and (2) communication among the key stakeholders is facilitated by placing priority on a participatory approach. The components of SEPs include the following: (1) enrolment in such programs is voluntary on the part of the client, (2) the SEP team is part of the treating team, (3) the goal sought is that of obtaining regular employment, and (4) the job search is carried out quickly after enrolment in the program. Other programmatic components also appear promising, such as the working alliance and the adoption of a systematic strategy for implementing suitable and feasible work accommodations. The inclusion and combination of these programmatic components in a future return-to-work program would appear to offer promise for people with transitory mental disorders.

Law and Return to Work of Injured Workers in Quebec

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Workers suffering from mental health problems are confronted by many obstacles when they attempt to reintegrate the workplace, after an employment-related injury/illness. The initial injury may directly affect workers' mental health, or the consequences of the initial physical injury and the compensation/return to work process may be a source of mental health problems. In either situation, return to work (RTW) is particularly challenging for these workers.

Objectives: In this presentation, we will examine RTW practices governed by Quebec workers' compensation legislation, in order to identify facilitators for and obstacles to a successful RTW experience. We will first examine the general legal framework designed to encourage an early return to work. This includes provisions permitting temporary assignment of a worker to duties the physician deems suitable despite the injury, as well as economic incentives designed to encourage the employer to take the worker back as soon as possible. We will also examine the law relating to vocational rehabilitation and the 'right to return to work', as defined in the Act Respecting Industrial Accidents and Occupational Diseases.

Methodology: The paper will draw on classic legal methodology, including an analysis of legislation and caselaw of the Commission des lésions professionnelles rendered since 1998. These elements will be contextualized in light of the literature on best practices for a safe and sustainable RTW.

Results: While injured workers have stronger protections than those who suffer from mental health problems not attributable to employment, the application of the legislation can contribute to negative outcomes in the RTW process.

Conclusion: Although the legal framework exists to promote injured workers' RTW, the case law and the management practices that have been developed in this regard are ill-adapted to workers suffering from mental health problems, particularly if the mental health problem was initially caused by work.

L'entretien diagnostique et l'incapacité au travail : un nouvel outil

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Introduction: Peu d'études se sont intéressées de façon spécifique aux facteurs prédictifs du retour au travail chez les personnes présentant des troubles de santé mentale. Les récentes évidences suggèrent que la résolution des symptômes de santé mentale n'entraîne pas automatiquement la reprise des activités professionnelles. Dans la pratique clinique actuelle, il n'existe pas d'outil systématique pour évaluer l'ensemble de ces éléments dans un contexte de réintégration progressive au travail.

Objectif: Élaboration d'un instrument d'évaluation des obstacles au retour au travail appelé le Diagnostic de la Situation de Handicap au Travail (DSHT) pour les personnes en arrêt de travail pour un trouble de santé mentale.

Méthodologie: La première étape consistait à identifier les facteurs contribuant à la situation de handicap au travail chez les personnes ayant un trouble de santé mentale. Il s'agit de réaliser : a) une recension des écrits; b) des entrevues avec des cliniciens experts ; et c) des entrevues avec des travailleurs ayant vécu une absence prolongée reliée à un problème de santé mentale. Une analyse de contenu a été réalisée. La deuxième étape permettra d'identifier des outils de mesure valides des dimensions de la situation de handicap au travail, répertoriées à l'étape précédente. La troisième étape consistera à élaborer une première version de l'outil DSHT avec un comité d'experts. La quatrième étape consistera en une étude pilote réalisée auprès de cliniciens afin d'identifier les barrières et les éléments facilitateurs à l'utilisation de l'outil DSHT.

Résultats: À l'heure actuelle, la première étape du projet est complétée et les résultats seront très convergents. Les facteurs se retrouvent en différentes catégories proposées par le modèle de St-Arnaud: Santé mentale et capacité de travail, Environnement psychosociale du travail, Caractéristiques individuelles et Événements de vie hors travail. Les entrevues ont permis d'identifier plusieurs facteurs de nature occupationnelle qui n'avaient pas émergé de la littérature scientifique. Les prochaines étapes seront poursuivies en 2007-2008.

The Key Elements of a Work Rehabilitation Program

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Several authors have described interventions carried out in the workplace (awareness programs, stress management approaches). However, few of these studies have described work rehabilitation interventions that are designed for workers who have been absent from work and that consider work disability from a multicausal perspective. Work disability is not only the consequence of an illness, but also the result of the interaction between several dimensions: 1-the dimensions specific to the worker (mental health status, capacity for managing stress); 2-the dimensions related to the work task and environment (physical, psychological and organizational job demands, work relations); and, 3-the dimensions linked to the involvement of different stakeholders. In fact, the work rehabilitation programs (WRP) that are best documented and that consider the complex and multicausal nature of work disability are those that have been designed for workers with musculoskeletal disorders (MSDs).

Based on an existing program designed for workers with MSDs, our goal is to identify the key elements of a WRP for workers with mental health problems. Thus, the clinical paths of eight workers followed by the team of the Therapeutic Return to Work (TRW) program (PREVICAP, PREvention of work handIcAP) will be used as the starting point of our analysis. Then, several conceptual and practical frameworks deriving from the rehabilitation field will be used to create the desired link and identify the clinical interventions and the principles that can be generalized.

Regardless of the nature of the disorder involved, rehabilitation from work disability seems to be based on common principles: 1-an evaluation of the work handicap situation which considers the interaction between the various dimensions involved, 2-concerted action between the stakeholders to ensure a coherent discourse, and, 3-the integration of the work and working conditions into the rehabilitation process in order to maintain the worker's mobilization and job retention.

Protocoles et programmes de retour au travail en santé psychologique en entreprise et fondements théoriques

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Les problèmes de santé psychologique au travail représentent actuellement l'une des plus importantes causes d'absence au travail. La réduction de l'incapacité de travail qui leur est associée requiert une intervention tant au niveau de l'individu qui présente le problème qu'au regard de l'environnement psychosocial de travail. D'ailleurs, les entreprises commencent à ressentir le besoin de se doter d'approches plus complètes et plus intégrées tant au chapitre de la gestion des absences et du retour au travail que de la santé et de la productivité des employés. Au cours des dernières années, des entreprises ont développé des programmes de soutien au retour au travail. Toutefois, la majorité d'entre eux ont été construits pour les employés qui reviennent à la suite d'un problème de santé physique. Toutefois, peu d'études rendent compte des orientations de ceux-ci en matière de santé psychologique. L'objectif de cette étude est d'analyser leurs composantes à la lumière des avancées théoriques sur les bonnes pratiques de gestion des invalidités et de retour au travail à la suite d'un problème de santé mentale. Cette étude est basée sur une méthodologie qualitative réalisée auprès de 12 entreprises des secteurs publics et privés de la région de Québec et de Montréal qui ont développé et implanté un protocole ou un programme de retour au travail en santé psychologique. Les données ont été colligées à l'aide d'entrevues réalisées auprès d'acteurs clés responsables des protocoles de retour au travail en santé psychologique. Dans un premier temps, une analyse de contenu a été effectuée par catégorisation thématique et un modèle opérationnel a été reconstruit pour chaque entreprise. Par la suite, une analyse transversale des résultats a permis de repérer les convergences et les divergences ainsi que les variations et les particularités au sein des différents programmes et ce, à la lumière des fondements théoriques récents qui ont été publiés sur le sujet. L'analyse des pratiques répertoriées rend compte de certaines lacunes. Par exemple, l'utilisation de l'expertise médicale est souvent présente. Selon la littérature, cette pratique est à revoir puisqu'elle génère des effets secondaires nuisibles au processus de rétablissement et peut mettre en péril la relation de confiance entre l'employé et l'employeur. Aussi, on remarque que les gestionnaires manquent de formation au sujet de la démarche de réintégration et que peu d'interventions sont faites dans l'environnement psychosocial de travail de l'employé. Or, les études ont montré la nécessité d'agir sur les conditions de travail lors du retour afin de favoriser le maintien en emploi (St-Arnaud et al., 2007). Cependant, la plupart des milieux tentent de maintenir le contact avec leur employé lors de son absence et de favoriser son contact avec le gestionnaire. On remarque aussi certains ajustements lors du retour au travail, comme le retour progressif et la diminution de la charge de travail. De plus, le suivi du retour de l'employé se fait souvent de façon à s'assurer qu'il se passe bien et il permet de corriger certains obstacles à la réintégration. Le fait d'examiner les pratiques de ces entreprises quant à la réintégration permet de les comparer avec les différentes recommandations théoriques.

S12

Psychosocial risk factors and precarious employment

Chairs: Michael Quinlan (1) & Katherine Lippel (2)

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There is now an extensive and growing international research literature on the association between precarious employment with adverse occupational health and safety (OHS) outcomes (Quinlan et al 2001; Virtanen et al 2005). This workshop will focus on psychosocial factors, both in terms of OHS outcomes (such as harassment/bullying, work/family balance and psychological wellbeing) and in terms of better understanding why precarious employment has adverse effects on health. With regard to the latter, papers apply both longstanding psychosocial models of health impacts, notably Karasek's job strain and Siegrist's effort reward model (LaMontagne on sexual harassment) as well as new models, notably employment strain (Lewchuk) and a three risk factor model based on economic/reward pressures, disorganization and regulatory failure (Bohle and Quinlan, McNamara). Several new models give explicit recognition to the effect of institutional and regulatory factors. It is expected this will stimulate debate on how best to explain the health effects and the development of particular measures (and testing this as was undertaken by McNamara).

The workshop will draw on research presentations from Europe (Denmark), Canada, South America (Brazil and Chile) and Australasia covering a range of industries and occupations (domestic workers, hotel workers, call centre workers, boat builders) as well as general populations (Diaz and Mauro, LaMontagne and Lewchuk). At the same time, there is a particular focus on the under-researched parts of the service sector (in contrast to areas where there a relatively large number of studies such as healthcare) and female dominated occupations. The inclusion of papers from developing countries (Brazil and Chile) is important given the recognition of the effects of precarious employment in both developed and developing countries and the growth of the informal sector, especially in the latter (see EMCONET, 2007). Santana's review builds on her pioneering research into the mental health effects on women of working in the informal sector. The link to globalization is picked up in another paper (Hasle on Denmark).

Workshop paper findings include some important new observations such as a study indicating a clear association between precarious employment and a higher reported incidence of sexual harassment (LaMontagne). The papers cover a number of different types of precarious employment (temporary workers, temporary agency workers and the self-employed). A number include comparisons of multiple employment categories overcoming a limitation identified in earlier research that often only consider two or three types of employment arrangement (see Louie et al 2006).

S12

Facteurs de risque psychosociaux et emplois précaires

Responsables: Michael Quinlan (1) & Katherine Lippel (2)

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On assiste actuellement, au niveau international, à un développement sans cesse croissant de la littérature scientifique portant sur l'association entre les emplois précaires et leur effets néfastes sur la santé et la sécurité au travail (Quinlan et al 2001; Virtanen et al 2005). Cet atelier portera sur les facteurs psychosociaux associés à ce phénomène, examinant tant les effets sur la SST (harcèlement/intimidation, conciliation travail/famille, et bien-être psychologique) que les raisons pour lesquelles la précarité entraîne des conséquences néfastes sur la santé. En ce qui concerne ces effets, les recherches présentées appliquent des modèles psychosociaux d'impacts sur la santé reconnus, entre autres le questionnaire sur les mesures de stress professionnel de Karasek et le modèle Déséquilibre Efforts/Récompenses de Siegrist (LaMontagne, harcèlement sexuel) ainsi que plusieurs nouveaux modèles tels que celui de Lewchuk sur le stress associé au statut d'emploi et un modèle à trois facteurs de risques basé sur les pressions de récompenses économiques, la désorganisation et l'échec des protections légales (Bohle and Quinlan, McNamara). Plusieurs nouveaux modèles reconnaissent explicitement les effets des facteurs juridiques et institutionnels. Il est à espérer qu'il en résultera un débat permettant de mieux comprendre les effets sur la santé et le développement de certaines mesures particulières (en plus des possibilités de les tester, travail déjà entrepris par McNamara).

Les ateliers seront basés sur des présentations de recherches menées en Europe (Danemark), au Canada, en Amérique du Sud (au Brésil et au Chili), ainsi qu'en Océanie qui portent sur une panoplie d'industries et d'occupations (travailleuses et travailleurs effectuant le travail domestique, ou engagés dans les industries de l'hébergement, de centres d'appels, ou dans la construction de bateaux) ainsi que sur des populations générales (Diaz and Mauro, LaMontagne and Lewchuk). Il faut aussi noter l'intérêt particulier qui sera porté aux aspects sous-étudiés du secteur des services (contrairement aux domaines qui ont déjà fait l'objet de plusieurs études comme le secteur des soins de la santé) ainsi qu'aux emplois occupés principalement par des femmes. L'inclusion de recherches et présentations émanant de pays en voie de développement (Brésil et Chili) est importante, vu la reconnaissance des effets de la précarité tant dans les pays développés que dans les pays en voie de développement, ainsi que la croissance continue du secteur informel de ces derniers (voir EMCONET, 2007). Le survol présenté par Santana poursuit son travail pionnier sur les effets sur la santé mentale des femmes de travailler dans le secteur informel. Le lien avec la mondialisation est également souligné dans l'étude de Hasle, menée au Danemark.

Certaines recherches mènent à des conclusions importantes, telle l'étude de LaMontagne démontrant une association entre la précarité et une plus haute incidence des déclarations de harcèlement sexuel. Les études présentées couvrent un grand nombre d'emplois précaires (travail temporaire, travail temporaire pour agences et travail autonomes). Bon nombre de celles-ci incluent des comparaisons de catégories multiples d'emplois, surmontant certaines limites identifiées préalablement au sein d'études qui ne considéraient que deux ou trois types d'emplois (voir Louie et al 2006).

S12A-1

Challenges from Global Competition, Employer Strategies Responses and Psychosocial Factors

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The problem: Manufacturing industry in the industrialized countries is subject to challenges from strong global competition causing organizational changes with a risk of down-sizing. Such challenges present a threat to the psychosocial work environment.

Objective: To investigate whether different management strategies and employee responses can reduce the likelihood of adverse consequences of the insecurity caused by global competition.

Methodology: Four manufacturing companies were studied in a three-year prospective project. The psychosocial factors were measured using the COPSQ questionnaire. The management strategies and the employees' responses were studied using qualitative interviews with management and employees and observing key events.

Results: Three companies experienced large staff reductions while the last one increased staff. The management strategies and the collaboration with employees were different in the companies. The consequences for the psychosocial work environment also differed. One of the downsizing companies had a long tradition for employee participation and self-managing groups. The lay-offs were carried out in a way which the employees considered fair. The measurement of the psychosocial factors showed improvements on some dimensions and there was no indication of deterioration. In another company with staff reductions, the psychosocial factors seemed to improve despite extensive lay-offs. It can probably be explained by simultaneous change in the management strategy towards increased employee involvement. The two remaining companies experienced mixed changes in psychosocial factors. The management strategies were more ambiguous, and the employees lacked trust in the management's motives.

Conclusions: The consequences of insecurity and lay-offs due to strong competition seem to vary depending on the management strategy. The concept of organizational social capital appears to be important. The following dimensions are important: involvement of the employees, employees' trust in the top management, and experience of fairness in the daily management practices and in the case of lay-offs.

S12A-2

Informal Employment and Mental Distress - A Literature Review

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Publication not authorized.

Precarity, Isolation and Lack of Control in Domestic Work

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In Canada, the government's Live-in-Caregiver Program (LCP) allows employers to sponsor workers from other countries, principally from the Philippines, to do domestic and caregiving work in private households on a temporary basis. Provisions of the LCP give the employer a determining influence over the ability of the worker to stay in Canada and contribute to the isolation and vulnerability of the worker. While studies have examined conditions in domestic work, including for those on the LCP, few have focused on health and safety issues. We report the findings of a community-based study seeking to document the work-related risks and health problems that LCP workers face. The study is an initiative of PINAY, the Filipino Women's Organization of Quebec, and was conducted in collaboration with researchers from two Quebec universities. Surveys examining physical and psychosocial working conditions and health outcomes were completed by women from the Filipino community, employed through the LCP in the Montreal area. Survey participants were recruited through snowball sampling. Preliminary results demonstrate that the vast majority of domestic workers reported incidents such as work-related cuts, burns, falls, and injuries resulting from violence; however, only a quarter identified them as work accidents. The majority also reported work-related illnesses such as allergies, reactions to chemicals and various stress-related outcomes (e.g. anxiety, panic attacks, insomnia, depression). A larger proportion of illnesses than accidents were identified as work-related illnesses. Workers' strategies, including filing a claim for workers' compensation or a complaint to the Labour Standards Commission, will be discussed. In Quebec, domestic workers in general are excluded from legislation governing the prevention and compensation of work-related accidents and illnesses. The results will be used by PINAY to press for appropriate legislation, and to build solidarity and combat isolation in the domestic worker population.

S12A-4

La flexibilité de la production et la reproduction de la main d'œuvre : une étude sur les risques pour la santé mentale des travailleuses et travailleurs chiliens

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Centro de Estudios de la Mujer (Santiago, Chili)

Objectifs et méthodes: Cette présentation propose d'aborder le lien étroit qui existe entre la production et la reproduction et ses effets sur la santé mentale des travailleuses et travailleurs chiliens. Elle passe en revue les résultats de recherche sur le genre et la qualité de l'emploi au Chili provenant des études du CEM (Centre d'Études des Femmes). Seront également présentés des résultats tirés d'entrevues avec des informateurs clefs et observations de lieux de travail effectuées dans le cadre d'une étude qualitative entreprise en 2007 dans le cadre du projet « Perspectives sexospécifique sur les recherches, les politiques et les pratiques concernant les problèmes de santé mentale reliés au travail au Chili » (www.proyectoarauca.cl).

Résultats: Les problèmes de santé mentale sont un facteur majeur de morbidité de plus en plus important chez la population Chilienne. Alors que les troubles de santé mentale et de comportement étaient, en ordre d'importance, la troisième cause de congés de maladie en 1995-2005 ils occupaient le deuxième rang en 2006. De plus, des données fiables suggèrent une augmentation de la demande pour des soins de santé mentale, qui passe pendant les dernières années, de 20 à 30 pour cent de toutes les demandes de soins médicaux soumises par les travailleurs assurés.

Les résultats préliminaires permettent de voir comment les modalités de production flexible et de l'organisation du travail présentement en place au Chili entraînent de nouveaux risques pour la santé mentale des travailleurs et travailleuses. Il nous appert que (1) de nouvelles exigences et conditions de travail imposent des contraintes excessives sur la main-d'œuvre ; et (2) la flexibilité empiète sur la vie personnelle, nuisant aux possibilités de loisirs, de relaxation, de formation et de participation à la vie sociale.

Plus souvent responsables du travail domestique non-rémunéré, comprenant le travail domestique et de soins, les femmes qui travaillent sont sujettes à des charges physiques et mentales additionnelles et profitent de moins de temps de repos et de récupération. Une étude quantitative menée par le CEM en 2006 rapporte qu'une travailleuse sur trois ne dispose pas de temps de repos ou de récupération.

Conclusion: L'augmentation des tensions imposées sur la main d'œuvre contribuent à une détérioration des conditions de reproduction, contribuant à compromettre la santé des travailleuses.

S12A-5

Adverse Psychosocial Outcomes for Precarious Hotel Workers?

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The OHS effects of Precarious Employment is a topic that has attracted substantial research interest in recent years. There is now a large body of research indicating that temporary or insecure working arrangements are associated with a range of adverse outcomes, such as decreased work/life balance for some, more fatigue and stress, and increased exposure to violence in the workplace. The rise in precarious employment is most marked in the expanding services industry. High exposure to psychosocial risk factors and the stresses and strains of dealing with the public in the service industries can significantly add to the risk of errors, potentially leading to accidents and injuries. Very few studies, however, have looked at the hotel industry. This study addresses this gap by examining the effect of employment status on a number of health outcomes for hotel workers. This paper describes the results of a cross-sectional field study, presenting survey data obtained from a sample of almost 400 hotel workers in Ireland and Australia. Participants were surveyed using a structured questionnaire, containing items/scales addressing a number of psychosocial factors, such as work/life balance, mental health outcomes, harassment, and exposure to violence amongst others. The study also presents a model (Disorganisation – Reward Pressures – Regulatory Failure), to assess how Precarious Employment affects health. A number of measures of these three concepts were validated in the study.

Psychosocial Risk Factors and Precarious Employment in Call Centers

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It is now well established that call-center workers encounter significant psychosocial pressures, such as high work intensity, abuse and harassment, intrusive performance assessment and limited task control. Little is known, however, about whether these pressures vary with employment status (full-time or part-time, permanent or casual) and if they have differential effects on occupational safety and health.

A questionnaire survey was distributed to 187 call-center workers (98 full-time permanent, 40 part-time permanent, 49 casual/temporary) in Sydney, Australia. Data were collected on demographic characteristics, employment status, work characteristics, working hours, work-life balance, psychosocial pressures, injuries and health. Relationships between employment status, psychosocial risk factors and other OHS outcomes were examined. All employment groups reported high mean levels of psychological symptoms (e.g. GHQ-12) and there were limited differences between the groups in self-reports of harassment and violence, injury and health. However, casuals had been employed in call centres for significantly shorter periods and their weekly hours of work in call centres were significantly lower than those of both full-time and part-time permanent employees. Casual work was also associated with less effective regulatory compliance and poorer OHS knowledge.

This study indicated that outcomes for casual workers on psychosocial, health and injury variables were no better, and in some cases worse, than permanent employees even though casuals reported significantly shorter exposure to hazards in terms of both tenure in the industry and weekly working hours.

Working Without Commitments: the Health Implications of Precarious Employment

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The steady rise of precarious employment relationships over the last few decades has given rise to new social and health issues. A range of uncertainties associated with precarious employment creates a new set of stresses for workers and their families. A growing body of research suggests that this stress, rather than traditional workplace health risks related to the physical or organizational context of the workplace, may be the new and primary cause of health risks for those in precarious employment. This paper engages with this new literature on the health implications of precarious employment. However, rather than focusing more narrowly on comparing working conditions and health outcomes of permanent versus non-permanent employees, this paper will examine how a range of issues related to precarious employment – work and pay uncertainty, conflicting demands of multiple employers, effort required to find and keep employment – affect workers' health. In doing so, the paper will report on a new conceptual approach, referred to as the Employment Relationship Security Model, to measure the characteristics of precarious employment and their effect on health.

This new conceptual approach will be tested using data collected from a 2005/2006 survey of approximately 3200 workers, and semi-structured interviews with approximately 100 workers in various types of precarious employment relationships in Canada. Our data points to a complex association between less permanent employment and health, where it is the characteristics of the employment relationship as much as having or not having permanent employment that shapes health outcomes.

Unwanted Sexual Advances in Australian Workplaces: Variations by Employment Arrangement

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Problem: Precarious employment has been associated with a variety of adverse psychosocial working conditions and with poorer mental and physical health.

Objectives: To examine variation in the odds of unwanted sexual advances (UWSA) at work by employment arrangement. We hypothesised that the risk of experiencing UWSA is greater for workers in more precarious employment arrangements compared to those in more secure permanent full-time employment.

Methodology: A cross-sectional population-based telephone survey was conducted in the Australian state of Victoria (66 % response rate, N= 1,101). Employment arrangement was classified into eight mutually exclusive categories: Permanent Full-Time (46.4%), Permanent Part-time (18.3%), Casual Full-Time (2.7%), Casual Part-Time (9.3%), Fixed-Term Contract (2.1%), Labour Hire (3.6%), Own Account Self-Employed (7.4%), and Self-Employed Employing Others (9.5%). Participants rated the statement: “My job exposes me to unwanted sexual advances” on a 4-point scale that was dichotomised for multivariate analysis (strongly disagree or disagree = no; agree or strongly agree = yes). Multiple logistic regression was used to model the probability of UWSA in relation to employment arrangement, adjusting for gender, age, and educational level.

Results: Forty seven respondents reported UWSA in our sample (4.3%), mainly among women (37 of 47). Risk of UWSA was higher for younger respondents, but did not vary significantly by occupational skill level or education. In comparison to Permanent Full-Time, three employment arrangements (Causal Full-Time OR 4.8, 95% CI 1.2—18.8; Contract OR 10.1, 95% CI 3.1—33.3; Own-Account Self-Employed OR 4.0, 95% CI 1.3—12.2) were strongly associated with UWSA after adjustment for age, gender, and educational level.

Conclusions: Precarious employment arrangements were associated with elevated odds of UWSA at work, even after adjustment for respondent’s age and gender. Our findings suggest that greater protections are needed from UWSA for workers in precarious employment arrangements.

Psychosocial Factors Affecting Safety Behaviours in the Fibreglass Boat-Building Industry

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Psychosocial factors and safety behaviours

Fibreglass boat-building (FBB) businesses in Newfoundland and Labrador (NL) are embedded within a precarious industry associated with competitive tendering, long working hours, and a high degree of employment uncertainty. The process of FBB requires the use of the chemical styrene, a known neurotoxin which contributes to physiological and psychological problems. There have been concerns over the lack of safety behaviours among FBB workers. The objective of the study was to assess the psycho-social factors associated with safety behaviours in this industry using the Theory of Planned Behaviour (TPB) as a foundation. Qualitative and quantitative data collection methods were used in this study. Phase 1 involved interviews with community members, managers, employees, and key informants. Qualitative data analysis revealed numerous themes associated with employee safety behaviours: (1) health and safety attitudes; (2) perceptions of risk; (3) community life; (4) knowledge concerning styrene exposure; (5) importance of the industry and (6) social and organizational factors affecting employee safety behaviours, risk tolerance and willingness to raise safety issues. Phase 2 involved the development and distribution of an employee survey. Data from the employee surveys (n = 43, 80% response rate) were used to (1) modify the survey instrument, (2) determine the social and cognitive factors (e.g., attitudes, norms, behavioural control, perceptions of risk, and affective reaction) that affect employee safety compliance, and (3) determine the psychosocial factors (e.g., knowledge, safety climate, job security, etc.) affecting the proposed social-cognitive determinants of employee safety behaviour. Results suggest that employee safety behaviours are associated with perceived behavioural expectations of family and physicians. Further, results suggest that employee knowledge of the health effects of styrene, safety climate, image risk, and community attachment are associated with the social-cognitive factors affecting behaviour. These findings underscore the importance of understanding behaviour by incorporating broader social factors into the TPB.

The Relationship between Temporary Employment, Wellbeing, Health and Sickness Absence

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Companies increasingly make use of temporary workers in order to stay competitive in the market. The aim of our study is to better understand the relationship between temporary employment and employee wellbeing, health and sickness absence, by taking into account job insecurity and the importance of job security for employees. We investigate the mediating role of job insecurity in the relation between temporary jobs and employee well-being, health and sickness absence. In addition we test the moderating role of the importance of job security according to employees and social support between job insecurity and employee wellbeing, health and sickness absence. Data are retrieved from the TNO Work Situation Survey 2004, among 4.834 Dutch employees. Analyses are adjusted for background factors. Results based on multiple regression analysis show that employees with a temporary contract experience less satisfaction with the job and the organization and more (general and mental) health complaints compared to employees with a permanent contract. We do not find a significant relationship between temporary contracts and sickness absence. Job insecurity partly explains the negative effects of temporary contracts. The effect of job insecurity on mental health is particularly greater for employees who attach high importance to job security (moderation effect). However, for the other outcome variables we do not find this moderation effect. Employees who experience more social support from colleagues and supervisor report fewer negative consequences of job insecurity (moderation effect). Our study suggests that policy makers and companies should pay attention to make employees more “employable” in order to reduce the negative effects of job insecurity. The more “employable” employees become and the more “socially supported” temporary employees are, the less negative these effects will be.

RÉSUMÉS / ABSTRACTS
SESSIONS ORALES / ORAL SESSIONS

Session orale 1

Risques psychosociaux et problèmes de santé mentale chez différents groupes de travailleurs

Modératrice: **Dominique Chouanière**

INRS (Institut national de recherche et de sécurité) France

01-1

Invalidité pour problème de santé mentale et pratiques de réinsertion

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La recherche visait à analyser, dans une entreprise financière canadienne, les pratiques de gestion en matière de réinsertion professionnelle suite à une invalidité en raison d'un problème de santé mentale lié au travail (épuiement professionnel, dépression, troubles de l'anxiété et de l'adaptation).

28 entrevues ont été menées, en français, auprès de 21 employés ayant vécu une période d'invalidité, 5 gestionnaires, un représentant des ressources humaines et un représentant de l'administrateur du régime d'invalidité afin de décrire les pratiques, ainsi que leur pertinence et leur efficacité, telles que perçues par les différents acteurs. Les entrevues ont été codées grâce au logiciel N'Vivo et analysées à partir du modèle de la théorie ancrée développé par Glaser et Strauss.

L'analyse des résultats a permis d'identifier et de décrire les pratiques organisationnelles suivantes: le retour progressif en temps et en charge de travail, la référence au Programme d'aide aux employés, les contacts et les suivis réguliers entre gestionnaires et employés, et la gestion administrative du dossier de l'employé par le gestionnaire, les ressources humaines, l'administrateur du régime d'invalidité et les professionnels de la santé. Les principales stratégies individuelles des employés comprennent la prise en charge de leur santé psychologique et physique par des professionnels de la santé, un réajustement de l'équilibre entre le travail et la vie personnelle, et dans certains cas, la rétrogradation ou le changement d'emploi.

La perception des acteurs relativement à la pertinence et à l'efficacité des pratiques a permis de dénoter une sous-utilisation du Programme d'aide aux employés, un financement de l'aide psychologique jugé insuffisant, une perception négative du rôle de l'assureur, des difficultés relationnelles entre le gestionnaires et l'employé, et une méconnaissance des rôles et des responsabilités de chacun. En conclusion, l'étude souligne l'importance de clarifier les rôles et d'améliorer la communication des pratiques et des ressources d'aide disponibles.

01-2

Le travail professoral : hypersollicitation, autonomie piégée et détresse psychologique

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Les troubles psychologiques liés au travail se sont accrus de manière alarmante au cours des dernières décennies. Les professeur(e)s d'université, même s'ils bénéficient de certaines conditions de travail pouvant avoir un effet protecteur pour leur santé, ne sont pas à l'abri. Dans une optique de prévention, l'objectif de la communication est de discuter des facteurs spécifiques de risque associés au travail professoral. Les résultats sont issus d'une recherche collaborative procédant par entretiens en groupes focalisés; huit entretiens réunissant de 6 à 10 professeur(e)s ont été tenus. Certaines zones importantes d'inconfort se dégagent: discontinuité du travail suscitant un éparpillement incompatible avec les exigences du travail intellectuel; réduction des espaces pour lire, réfléchir, échanger avec ses collègues immédiats, si cela ne contribue pas à une production comptabilisable; érosion des pouvoirs réels d'influence; rigidité administrative et manque de soutien; manque de reconnaissance de certaines formes d'engagement dans la recherche; conflits entre collègues qui enveniment les relations et paralysent les départements; organisation du travail qui favorise l'individualisme et une rivalité contreproductive; messages contradictoires ou ambigus de l'institution; perceptions d'iniquités et d'abus de pouvoir; mode d'évaluation de l'enseignement qui ne rend pas justice au travail professoral; clientélisme; hypersollicitation et « dépendance/aversion » aux TIC qui rythment le travail. Sur le plan théorique, nos travaux se fondent sur: a/ les études décrivant comment le travail professoral s'est transformé dans les dernières décennies; b/ les recherches permettant de comprendre les sources de stress spécifiques à ce travail; c/ les recherches ayant mis au jour les nouvelles formes de domination du travail (autonomie piégée, impasse faite sur les contraintes du travail réel, surcharge consentie, hypertravail, effritement des collectifs de travail couplée à la mise en rivalité des individus, d'appel à l'excellence et à l'investissement passionnel...).

L'environnement physique : un facteur psychosocial du travail enseignant

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Les enseignants du secondaire au Québec ont vu leur tâche de travail s'alourdir depuis quelques années. Plusieurs supposent que cette situation serait liée à l'augmentation considérable du nombre de cas d'épuisement professionnel et de départ à la retraite prématurée. Afin de mieux comprendre la situation, la Centrale des syndicats du Québec (CSQ) a demandé une analyse de l'activité de travail des enseignants du secondaire. Ainsi, des entretiens ont été réalisés avec dix enseignantes et cinq enseignants provenant de différentes écoles de la région de Montréal et de Longueuil. Un peu plus de 87 heures d'observations ont aussi été effectuées dans six écoles de la région de Longueuil avec six enseignants et cinq enseignantes. Nous avons également pris des mesures d'ambiance telles que la température, le bruit et les niveaux d'éclairage. Les entretiens et observations réalisés ont permis de noter que ce travail est exigeant, tant mentalement que physiquement, et que l'environnement physique y contribue considérablement. Nous avons mesuré des températures allant jusqu'à 26°C, ce qui a des effets sur la gestion de classe. Le niveau sonore moyen pendant un cours variait entre 57dBA et 70dBA et nous avons noté certains maximums à 97dBA, ce qui affecte aussi la concentration. Les niveaux d'éclairage variaient beaucoup d'un local à l'autre, nous avons mesuré des niveaux variant de 383 lux à 1210 lux. De plus, les espaces restreints et souvent mal aménagés causaient plusieurs désagréments, et ce, particulièrement lors de l'utilisation de matériel ou support pédagogique. Afin de pallier ces conditions, nous avons observé que les enseignants utilisaient plusieurs stratégies pour parvenir à maintenir la stimulation des élèves à un niveau optimal et que celles-ci étaient plus nombreuses dans les locaux les moins fonctionnels. Ainsi, nous constatons que l'environnement influence grandement l'activité de travail, le niveau d'épuisement et l'impression d'être respecté ou non par l'employeur.

Autonomie au travail et précarité

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L'autonomie au travail a, depuis la révolution industrielle, fait l'objet de revendications autant individuelles que collectives. Nous nous sommes inspirés du cadre théorique de Périelleux pour proposer une analyse de l'expérience contemporaine de jeunes travailleurs dans un contexte où l'autonomie est associée à la fois à la responsabilité de chacun de participer activement au procès de travail et d'autre part à l'insécurité générée par un système de reconnaissance basé sur la capacité à faire preuve d'adaptation et de débrouillardise dans l'action immédiate. La communication portera sur les résultats d'une recherche qualitative menée auprès de 34 jeunes et de 22 employeurs dans sept secteurs d'activités différents.

Les jeunes qui cherchent à s'insérer en emploi ne peuvent pas, dès leur entrée, s'appuyer sur un savoir-faire d'expérience, sur des règles de métier ou sur un collectif de travail. Paradoxalement, l'autonomie qu'on exige d'eux devient un instrument au service de la gestion pour évaluer leurs compétences, leur efficacité et leur motivation au travail. Selon Périelleux, il s'agit d'une exigence prescrite sans que l'employé ait les moyens de répondre à cette demande paradoxale dans un contexte de travail précaire et d'apprentissage du métier. Le paradoxe tient aussi du fait que dans les milieux étudiés persiste une gestion autocratique relayée par les superviseurs de premier niveau qui laisse peu de marge de manœuvre. L'usage instrumental de l'autonomie dans un contexte de flexibilisation de la gestion de la main-d'œuvre a des effets pervers sur l'intégration et le développement des habiletés au travail. Loin de favoriser la créativité, le partage et l'échange dans la construction d'une activité valorisée et valorisante, l'autonomie prescrite crée de l'insécurité et concourt à la construction d'une expérience de travail négative pour les jeunes. Ces résultats permettent d'ajouter de nouvelles dimensions aux modèles dominants Demande/contrôle/reconnaissance (Karasek et Siegrist) pour l'évaluation de l'environnement psychosocial du travail.

Prise de décision éthique et sens au travail

Benoît Cherré*

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Facteurs psychosociaux et éthique

Les recherches démontrent que le sens du travail et ses composantes peuvent favoriser le bien-être psychologique (Morin, 2003). Le sens du travail est pensé et démontré comme un effet de cohérence entre les aspirations de la personne et le travail qu'elle exécute réellement (Yalom, 1980, Isaksen, 2000 et Morin, 2007).

D'un point de vue existentiel, le processus d'une décision éthique face à un dilemme implique l'idée que l'individu est également un être de liberté et responsable de ses propres choix (Sartre, 1996). Par conséquent, il est possible qu'une décision soit perçue de manière éthique dans la mesure où elle permet l'authenticité (Sartre, 1996 et Jackson, 2005). Ainsi, une décision qui a du sens serait une décision cohérente pour le gestionnaire.

Le but de cette étude exploratoire est de savoir si les notions d'authenticité et de cohérence, issues de l'éthique existentialiste sartrienne, influencent une décision éthique. La méthodologie de cette enquête s'appuie sur le modèle d'analyse qualitative sur un ensemble d'une quinzaine d'entrevues de gestionnaires. Les résultats démontrent que le paradigme de l'éthique existentialiste est la première perspective dans l'esprit des gestionnaires lors de la résolution de dilemmes éthiques, et ce, dans une large proportion.

Ainsi, cette recherche offre une démonstration empirique de la présence des notions d'authenticité de l'éthique existentialiste et de la cohérence dans le processus de prise de décision éthique. Donc, être authentique avec soi-même et privilégier la cohérence entre les obligations organisationnelles et les aspirations personnelles deviennent deux critères qui favorisent le sens, la santé mentale et le bien-être psychologique des gestionnaires lorsqu'ils ont à prendre une décision à caractère éthique.

Prévention du stress: perceptions d'employés en invalidité

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La communication porte sur l'analyse des perceptions des employés ayant vécu une invalidité, à cause de problèmes de santé mentale au travail, quant aux mécanismes de prévention primaire, secondaire et tertiaire à implanter dans l'organisation. Les problèmes de santé mentale constituent actuellement la principale cause d'invalidité dans les organisations canadiennes. Cependant, les études se sont concentrées sur certaines professions à risque et ont été réalisées auprès d'employés fonctionnels. La théorie ancrée a été utilisée pour l'analyse de 36 entrevues menées auprès de 26 employés ayant souffert de problèmes de santé mentale perçus comme étant attribuables à des facteurs organisationnels, 8 collègues de travail, 1 gestionnaire et 1 représentant des ressources humaines. Les résultats exposent les recommandations de prévention de type primaire : réorganiser le travail; clarifier les rôles; fixer des objectifs réalistes; offrir un soutien social; intégrer les nouvelles technologies; pratiquer la conciliation travail/famille, aménager le temps de travail; favoriser le développement de carrière; développer l'engagement à l'égard du travail; et prévenir la violence au travail notamment en ce qui a trait aux vols à main armée. Les recommandations de type secondaire sont : mettre en place un programme de gestion du stress et de promotion de la santé. Les recommandations de type tertiaire sont : bonifier le PAE, intervenir auprès des survivants, intervenir auprès des victimes d'agression et de violence et améliorer les services de l'assureur. Les résultats révèlent aussi un sentiment d'impuissance face aux contraintes du contexte social ainsi que la nécessité de faire des changements sur le plan personnel. En conclusion, la recherche souligne l'importance de mieux cerner l'efficacité des stratégies et pratiques organisationnelles utilisées pour la prévention primaire, secondaire et tertiaire des troubles de santé mentale au travail.

Session orale 2

Comprendre et agir sur la violence et le harcèlement psychologique au travail

Modérateur : **Michel Chevrier**

Service de santé au travail du BTP (Besançon, France)

02-1

Violences aux urgences : épidémiologie, sociologie pour prévenir et professionnaliser

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Notre étude «violences aux urgences» associe une double approche quantitative puis qualitative des violences au sein des services d'urgences hospitaliers et pré-hospitaliers français. La première partie de l'étude «violences aux urgences» réalisée en 2005, met en exergue la récurrence des phénomènes violents auprès des personnels des services d'urgences. La seconde, en 2007, apporte la nécessaire approche sociologique du phénomène. Les deux méthodes se complètent et s'enrichissent mutuellement afin de réaliser une démarche globale de prévention du risque, intégrée aux activités professionnelles des urgentistes.

L'approche initiale quantitative, épidémiologique et rétrospective est basée sur un questionnaire «violence» remis à chaque personne travaillant dans un service d'urgences hospitalier du département du Nord (17 services, 935 questionnaires recueillis): 70 % s'estiment avoir été victimes d'acte de violences sur une période rétrospective de 12 mois et 71 % pensent qu'une formation leur serait utile. L'approche sociologique analyse 12 entretiens semi-directifs, réalisés auprès des quatre principales catégories professionnelles : infirmier, ambulancier, aide-soignant et médecin de différents services d'urgences.

Si l'approche quantitative identifie statistiquement les besoins de formation, il s'avère par contre indispensable, avant de poser un cadre conceptuel de formation, de comprendre les implex de la violence au sein des urgences et de recontextualiser le phénomène au sein de l'hôpital et de la société. Explorer le ressenti de la violence par les urgentistes en fonction de leur parcours professionnel et personnel renvoie à leurs conceptions propres des urgences: activité professionnelle, motivations, contraintes, et «qualité de travail».

Les démarches pluridisciplinaires en Santé-Travail et en Formation d'Adultes sont ainsi amenées à être complémentaires au sein d'une démarche globale de prévention des risques psychosociaux et de professionnalisation. Prévention, Formation et Qualité doivent intervenir ensemble dans des démarches communes pour le bien-être au travail.

02-2

Apport de la communication non violente dans les conflits psychosociaux

Michel Chevrier*

Service de santé au travail du BTP (Besançon, France)

Pour sortir d'un conflit psychosocial sévère, le médecin du travail propose à une entreprise une enquête basée sur les outils de la CNV (communication non violente).

Objectifs: Évaluer la souffrance au travail, rétablir un dialogue et responsabiliser les acteurs.

Méthode: L'enquête par questionnaire individuel, intitulée « comment je vis mon travail aujourd'hui », est validée par le CHSCT, puis adressée à l'ensemble des 80 salariés. Elle aborde : - le degré d'épanouissement et les niveaux de souffrance (par échelles analogiques, et expression libre en dix lignes), - les sentiments ressentis et les besoins satisfaits ou non (par grilles de propositions), - les énergies mobilisables (par expression libre de propositions d'actions individuelles et collectives). Les questionnaires, nominatifs, sont traités par le médecin du travail qui en garantit la confidentialité, et restitue les résultats collectivement.

Résultats et analyse: Le taux de participation est de 81 %. 38 % des salariés ont un épanouissement faible (<3) et 40 % ont une souffrance forte (>7). La souffrance est ressentie dans les relations du salarié avec ses collègues (20 % de forte souffrance), dans sa hiérarchie (47 % de forte souffrance) et dans sa perception des relations entre les membres du personnel (32% de forte souffrance). Le vécu descriptif est polymorphe, souvent empreint de jugements (culpabilisation ou victimisation). Les sentiments ressentis ont trait à l'impuissance et au découragement (51 %), à la colère (42 %) et à la peur (37 %). Les besoins non satisfaits sont liés à la communication (73 %), l'organisation (71 %) et le respect (65 %). Les propositions des salariés sont nombreuses et constructives, tant sur le plan individuel que collectif, et sont analysées par le CHSCT pour élaborer un plan d'action.

Conclusion: Face à un déni et à une rupture du dialogue, l'enquête objective le mal être au travail par une photographie instantanée. Elle permet de remobiliser les acteurs autour de pistes d'action hiérarchisées en fonction des besoins non satisfaits.

Où en sommes-nous en matière de harcèlement psychologique ?

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Commission des normes du travail (Montréal, Canada)

Les dispositions de la Loi sur les normes du travail portant sur le harcèlement psychologique sont en vigueur depuis plus de quatre ans. En effet, salariés, syndiqués ou non, cadres et cadres supérieurs, ont droit à un milieu de travail exempt de harcèlement psychologique depuis le 1^{er} juin 2004. Au Québec, les employeurs ont l'obligation de prendre les moyens raisonnables pour prévenir et faire cesser le harcèlement psychologique.

La Commission des normes du travail, dont une des fonctions est de recevoir et traiter les plaintes pour harcèlement psychologique des salariés non syndiqués ainsi que des cadres et des cadres supérieurs, dresse un bilan sur la base des données préliminaires de son analyse des plaintes traitées entre le 1^{er} juin 2004 et 31 décembre 2007. Ces données renseignent sur les personnes ayant porté plainte (sexe, âge, région d'appartenance), sur l'emploi qu'elles occupent (type de contrat de travail, niveau hiérarchique de l'emploi, durée du service continu, heures travaillées hebdomadairement, salaire hebdomadaire, taille de l'entreprise), sur le type de harcèlement invoqué par le plaignant (harcèlement à caractère répétitif ou seule conduite grave, durée du harcèlement, statut de la ou des personnes mises en cause, sexe des personnes mises en cause) ainsi que sur la nature des autres recours exercés par le salarié au moment de porter plainte pour harcèlement psychologique à la Commission des normes du travail. Bien que la définition légale du harcèlement psychologique n'exige pas une atteinte à l'intégrité physique ou psychologique, des données ont été recueillies quant à la situation en emploi du salarié au moment de porter plainte à la Commission.

En complément, des données seront communiquées relativement aux moyens mis en œuvre par des employeurs, données obtenues à l'occasion des enquêtes menées par la Commission des normes du travail à la suite d'une plainte pour harcèlement psychologique.

Agir sur la violence interpersonnelle au travail : des pistes

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Le phénomène de violence interpersonnelle au travail a été assez largement étudié au cours de la dernière décennie, mais rares sont les chercheurs qui l'ont abordé dans une optique compréhensive, en prenant appui sur le témoignage des travailleurs. À ce jour, les recherches se sont surtout concentrées sur des approches plus explicatives des diverses formes de violence qui sévissent au travail. La présente communication émane d'une thèse doctorale réalisée auprès des agents correctionnels québécois (ASC), dans le cadre d'une vaste étude menée depuis 2000 par l'équipe de recherche RIPOST sur les effets du travail en détention sur l'absentéisme au travail, la santé et la sécurité du personnel. C'est, il importe de le souligner, à partir de la parole des agents correctionnels que cette recherche qualitative a été menée.

Le projet visait d'abord à comprendre cette violence et à cerner les ancrages d'un modèle compréhensif de cette violence. Ceci étant, il a aussi été possible de dégager de cette étude plusieurs éléments ayant une incidence sur d'éventuelles interventions en la matière. Ainsi, il ressort notamment que plutôt que de viser uniquement ceux qui posent les gestes violents en vue de prévenir la violence, et de centrer l'intervention sur le rapport dialectique entre l'agresseur et sa cible, les actions proposées devraient avant tout porter sur les dynamiques de pouvoir prenant place au sein des groupes et des institutions et toucher tout particulièrement les conditions organisationnelles qui favorisent l'émergence de la violence. Il s'agirait alors de tableer, par exemple, sur des modes de gestion plus participatifs et des processus davantage démocratiques se traduisant, notamment, par de meilleurs mécanismes d'échange d'informations, de communication et de décision pour prévenir l'apparition de relations teintées de diverses formes de violence. C'est plus spécifiquement sur ces pistes d'intervention que portera cette communication.

Harcèlement psychologique au travail : une méthodologie originale

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Cette recherche vise à mieux comprendre le phénomène de harcèlement psychologique lorsqu'il surgit entre membres du personnel d'une même organisation de travail. Le cas retenu est celui des agents des services correctionnels québécois. Dans le cadre de cette étude, nous envisageons le harcèlement psychologique au travail tel une interaction sociale. Plus précisément, nous tentons de comprendre pourquoi et comment émergent des situations de harcèlement psychologique entre des individus qui travaillent ensemble en considérant d'abord le rôle joué par la charge de travail et ensuite le contexte social en jeu. Pour ce faire, nous avons eu recours à une méthodologie de recherche basée sur l'analyse d'entrevue réalisées dans quatre établissements de détention et visant à documenter précisément les cas de harcèlement psychologique au travail.

Cette communication vise à présenter en détails le modèle d'analyse et la méthodologie que nous avons élaborés de même que les résultats envisagés. De plus, une réflexion sur la norme sociale sera présentée.

Oral Session 3

Organizational Interventions to Prevent Health Problems at Work

Chair: **Chantal Brisson**

Unité de recherche en santé des populations, Hôpital du St-Sacrement (Québec, Canada)

03-1

Evaluating the Efficacy of Organization-specific Interventions for Preventing Work Stress

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Research into the efficacy of organization-specific interventions for preventing work stress is still in its infancy. In practice, it is difficult to control organizational processes that develop while the study is ongoing. This obscures the effect of evaluation. In order to be able to interpret results in such a situation, a process evaluation is needed. The aim of this study was to investigate the effectiveness of an organizational intervention to decrease workload and increase control options of municipal workers, using different research methods.

Two pilot studies were performed. In both pilot studies (departments, with identical units on different locations), we selected an experiment group and a control group. We evaluated the effect of the intervention on workload and control options, and we evaluated the implementation process. Workload and control options were measured in the experiment group and the control group, before and after implementing the measure, with standardized, validated questionnaires. Interviews were held with the experiment group at $t=0$, $t=1$ (halfway through the 'test period') and $t=2$, to gather qualitative data on the effect of the intervention, and on the implementation process.

In one pilot study, the intervention proved to be effective, that is: workload was reduced and control options increased in the experiment group, while there was no change in the control group. In the other pilot study, the intervention reduced the workload in the experiment group. However, it appeared that other changes that took place in the pilot study's organization reduced the workload in the control group even more. The qualitative evaluation of the implementation process helped us understand the results of the second pilot. Based on these results we recommend using different research methods in evaluation studies, in order to be able to understand and appreciate the results of these studies.

03-2

Job Stress Prevention: the Power of Consultation and Action

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The human and financial cost of not effectively managing psychosocial factors at work has dramatically increased workers compensation costs. However, the cost of work disability; absenteeism, grievances, turnover, presenteeism, poor morale and low productivity; must also drive organisational commitment to act.

Through the power of consultation and action, the Cambridge Workplace Wellness Strategy aims to develop the capacity of organisations to customise, implement and continuously improve the systematic approach to stress prevention. The Strategy is customised in consultation with employer stakeholders to meet the specific needs of small, medium and large employers. The regulatory inspectorate identifies those employers experiencing psychosocial hazards. The author has trained the inspectors to link their identification of psychosocial hazards to meaningful strategies for future compliance enforcement.

The methodological approach comprises consultation, stress prevention action and ongoing review of continuous improvement. The Strategy educates organisations to utilise the skills, experience, knowledge and commitment of managers and workers in systematically:

- Identifying workplace psychosocial hazards
- Assessing the level of risks
- Developing practical action plans to implement risk controls
- Monitoring and reviewing intervention outcomes.

Since September 2006, over 200 participants have been engaged to implement this systematic approach in their workplace. Participants include: managers, health and safety representatives, regulatory inspectors, worker representatives and targeted teams. Upon completion of the initial intervention, participant feedback was utilised to continuously improve the Strategy. Twelve months' post-participation workplace data has been analysed to determine if the Strategy has been useful in assisting individuals/teams/organisations in identifying and controlling workplace psychosocial hazards. Data includes compensation claims, absenteeism, turnover and grievance reports.

It is the power of consultation and action that makes the difference. In the words of a participant «I now understand that a process needs to be put in place to deal with (psychosocial) hazards and (for all employees to) feel confident in using this process.»

Workplace Restructurings, a Challenge for Intervention Studies' Design and Analysis

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Publication not authorized.

Stress Management at the Workplace: a Randomized Controlled Trial

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Background and aims: Worksite programs that enhance a person's skills to recognize and manage work related psychosocial stress provide a promising strategy to reduce the burden of disease. The aim of this randomized controlled trial was to examine the effects of a multidimensional stress management program, based on the effort-reward imbalance (ERI) model of work stress, on perceived stress reactivity, work stress and psychological health.

Methods: The trial was conducted at the worksite in a large production plant. 174 employees in a middle management position completed the comprehensive baseline assessments and were randomly assigned to a stress prevention program (IG) and a waiting control group (CG). The program comprised 22 hours of training in 3 sessions focused on identifying, managing and improving individual work stress situations. The primary endpoint was the change of perceived stress reactivity (SRS, 29 items, 6 scales), changes of all other measurements (e.g. ERI, HADS, GBB) were secondary endpoints. One year later, assessment was repeated in an identical manner in 154 (88.5%) participants (IG 75, CG 79 persons). Analysis followed the intention-to-treat principle.

Results: The total score of the stress reactivity scale decreased in both groups. A two factor analysis of variance with repeated measures showed a significant time to group effect, $[F(5.932) = 0.624; p = 0.016]$ with a greater reduction of perceived stress reactivity in the intervention group. Significant effects of the intervention were also shown in three SRS-subcales. For ERI, depression, anxiety, and psychosomatic complaints the improvements in the intervention group were higher than in the waiting control group, yet did not reach statistical significance.

Conclusions: A multidimensional stress prevention program is effective in reducing perceived stress reactivity in employees in a middle management position. A third assessment two years after baseline (spring 2008) will provide further information about effect on work stress and psychological health.

Intervention Study on Psychosocial Factors and Health a 6-month post-intervention evaluation

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Introduction: There is accumulating evidence for the effect of adverse psychosocial work factors on health. However, little is known on the effect of preventive interventions aimed at reducing adverse psychosocial work factors and their health impact.

Objective: To evaluate the short-term effects (at 6 months) of intervention aimed at reducing 4 adverse psychosocial work factors (high psychological demands, low decision latitude, low social support, and low reward) and their impact on a comprehensive range of health indicators (ambulatory blood pressure, psychological distress, musculoskeletal symptoms).

Methods: A pre-test-post-test design with a control group was used. The study population was composed of 1,330 workers (82% response rate) from the intervention group and 1,016 (75% response rate) from the control group. The intervention was composed of all objective changes undertaken by the organization to reduce adverse psychosocial factors at work. Generalized Estimating Equations (GEE) analyses were conducted to compare the evolution of the intervention and control groups from before to after the intervention while taking into account baseline levels and potential confounders.

Results: The 6-month evaluation showed limited effect on psychosocial work factors taken globally but a modest but significant effect on systolic blood pressure (BP) (2 mm Hg reduction), a significant reduction in the prevalence of neck-shoulder symptoms (from 21.6% to 17.1%), and a tendency for a reduction in the prevalence of psychological distress (from 32.4% to 29.9%) whereas no reduction was observed in the control group. Subgroups analysis by department was consistent with a true intervention effect in that coherence was observed between improvements in psychosocial factors and improvements in health outcomes.

Conclusion: These short-term results show modest intervention effects. However, the 36-month post-intervention evaluation (currently underway) is required to provide a comprehensive measure of the intervention effects.

Combining Managerial and Public Health Perspectives for Stress at Work

Catherine Cothureau*
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Objective: To assess perceived stress in a population at work and identify risk factors to propose measures of prevention of stress at work.

Methods: A cross-sectional study was conducted of a representative sample of 9,342 railways employees, male (85%) and female (15%), surveyed between January and March 2006 in France. Jobs were classified in 15 categories. Self-reported measures of general distress were collected using the General Health Questionnaire (GHQ-12); and an occupational and individual questionnaire including 26 questions distributed in 5 axis: work characteristics, sick leave and occupational accidents, life conditions, alcohol and tobacco consumption and life events. Association measures were considered as relevant when point estimate of odds ratio [OR] was above 2.0 or below 0.5 and statistically significant ($p < 0.05$).

Results: Of the 9,342 participants, 34% expressed stress at work (GHQ-12 ≥ 3). In multivariate analyses, perceived stress was strongly associated with perceived poor overall health (OR for women, 7.4; 95% confidence interval [CI] 3.7-14.8; OR for men, 4.4; 95% CI, 3.4-5.6), family difficulties (OR for women, 2.9; 95% CI 1.9-4.6; OR for men, 3.1; 95% CI, 2.5-3.7), divorce or separation (OR for women, 2.7; 95% CI 1.5-4.7; OR for men, 2.3; 95% CI, 1.8-3.0), professional aggression at work or major changes in work or in its organization (OR for women, 2.9; 95% CI 2.0-4.2; OR for men, 2.7; 95% CI, 2.3-3.1), and conflict situations at work (OR for women, 2.2; 95% CI 1.6-3.1; OR for men, 2.1; 95% CI, 1.8-2.4). No specific job category was found to be associated with perceived stress in multivariate analyses.

Conclusion: Identified stress determinants at work could suggest two intervention measures for limiting their impact: medical approach for fighting against medical causes of stress by improvement of poor overall health; managerial approach for preventing aggressions, insults and conflicts at work.

Session orale 4

Intervenir pour réduire les facteurs de risque psychosociaux et les problèmes de santé mentale en entreprise

Modératrice: **Dominique Chouanière**

INRS (Institut national de recherche et de sécurité) France

04-1

Risques psychosociaux, nouvel objectif médical : accompagner entreprises et salariés

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Accompagner un centre hospitalier gériatrique en période de mutation nécessite un accompagnement individuel et collectif. Les objectifs de la démarche du médecin du travail sont de sensibiliser les salariés aux risques psychosociaux et de leur permettre de réinvestir le travail, en participant à l'élaboration d'un projet global de réduction du risque.

Pour souhaiter accompagner le salarié et l'entreprise, le médecin du travail se place dans une attitude active, patiente et empathique envers tous. Les différentes visites de médecine du travail sont l'occasion d'écouter attentivement l'état médico-psycho-social des individus. Les principales difficultés retrouvées sont des états de stress aigu, d'anxiété chronique, d'épuisement professionnel, de conflit, et des difficultés financières. Les salariés sont pour la plupart de sexe féminin et peu diplômés. Au cours du suivi individuel, un soutien psychologique est assuré et les méthodes de gestion du stress (relaxation, résolution de problème, cascade anxieuse...) sont enseignées. Quant au niveau collectif, c'est une fois le besoin d'intervention exprimé par tous les partenaires que l'accompagnement au projet est proposé aux différentes instances. Lors de la première intervention, c'est la réappropriation du risque par les salariés eux-mêmes qui est favorisée. En effet, le salarié participant à la réflexion ainsi proposée, retrouve un sentiment de contrôlabilité et d'efficacité. Les rencontres suivantes proposent une réflexion thématique sur le travail, l'établissement, les soins, la qualité, le bien-être. Le cadre de la réflexion est rappelé à chaque séance: empathie, respect, résolution non violente des conflits.

Au total, cette tentative de démarche d'accompagnement à la prévention des risques psychosociaux se base sur un soutien psychothérapeutique individuel et les méthodes de gestion du stress. Elle se base également sur un soutien et un suivi sociologique de l'établissement, permettant la réappropriation du risque et la responsabilisation éthique de chaque individu, afin de restaurer le travail commun en équipe au sein de la structure.

04-2

Réduire les tensions, favoriser les régulations pour prévenir le stress

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Agence Nationale pour l'Amélioration des Conditions de Travail (Lyon, France)

L'Agence Nationale pour l'Amélioration des Conditions de Travail (ANACT), en France, a développé, à partir de son expérience de dix ans d'interventions en entreprises, une approche originale et pratique des risques psychosociaux (cf. « Prévenir le stress et les risques psychosociaux au travail », éd. ANACT, mai 2007). Contrairement aux approches centrées sur l'individu, celle-ci propose de regarder les conditions de l'organisation du travail et des relations professionnelles comme sources essentielles des situations pathogènes et comme cibles prioritaires des actions de prévention. En effet, le travail peut être vu comme un lieu permanent de « tensions » entre les objectifs de l'entreprise et ceux des salariés mais des processus de « régulation » fonctionnent le plus souvent permettant de trouver les compromis sociaux acceptables. Les risques psychosociaux doivent donc être analysés comme le résultat de « tensions » non régulées ou insuffisamment régulées par l'organisation du travail et le système de relations sociales. Ces tensions sont regroupées en quatre grandes familles; celles issues des contraintes du travail, celles liées aux valeurs et exigences du salarié, celles liées aux situations de changements des contextes de travail et celles liées aux relations et comportements des individus. Elles font référence aux grands modèles du stress convoqués en fonction des contextes de travail. L'approche de l'ANACT se veut résolument opérationnelle pour les acteurs de l'entreprise qui sont invités à repérer des « situations-problèmes » dans leur quotidien professionnel, à analyser les « tensions » qui y sont présentes et les défauts de régulation : ils peuvent ensuite remonter aux causes dans l'organisation du travail, les politiques de ressources humaines... Les actions de prévention porteront sur la réduction des tensions mais tout autant sur l'augmentation des capacités de régulation individuelle et collective. La communication présentera cette approche et l'illustra à partir de cas d'interventions.

Agir sur la partie cachée de l'iceberg !

Lucie Legault*, Jocelyn Villeneuve
ASSTSAS (Montréal, Canada)

Énoncé du problème: Dans le réseau de la santé et des services sociaux comme ailleurs, plusieurs organisations sont aux prises avec des problèmes de climat malsain, de tensions et de conflits interpersonnels. Quand une demande d'intervention de ce genre nous est adressée, est-il suffisant d'agir au plan psychosocial?

Objectifs: À l'ASSTSAS, nous avons tenté, au cours des dernières années, de développer une approche qui propose une vision systémique du contexte de travail en avançant l'hypothèse que la détérioration du climat relationnel au sein des collectifs (équipes ou organisations) est davantage liée aux conditions d'exercice du travail qu'aux aspects purement psychologiques ou relationnels.

Résultats: À travers diverses expériences d'interventions alliant les méthodes de la psychologie organisationnelle et de l'ergonomie - approche de type psycho-socio-technique - nous avons pu constater qu'en agissant sur les conditions organisationnelles et techniques du travail, il est possible d'éliminer ou de réduire significativement les sources de tensions ou de conflits. La majorité des situations conflictuelles trouvent des solutions satisfaisantes. Les conflits de nature strictement personnelle, s'ils s'en trouvent encore, sont alors bien circonscrits et traités spécifiquement.

Conclusion: Quand des problèmes psychosociaux font surface et perdurent au travail, ce n'est souvent que la pointe de l'iceberg d'une organisation en difficulté où le leadership, les modèles de gestion et les conditions techniques et organisationnelles peuvent être défaillants. Il faut s'attarder à la partie cachée de l'iceberg, le système socio-technique, afin de renverser la vapeur et transformer positivement une situation dégradée.

Les facteurs de risque psychosociaux : des risques parmi d'autres

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Habituellement, la prévention des risques traditionnels, physiques, chimiques et biologiques, est réalisée par des hygiénistes du travail alors que la prévention des risques psychosociaux relèvent plus des ressources humaines. Pourtant, la méthodologie de l'hygiène industrielle peut, moyennant quelques ajustements, parfaitement s'accommoder de la gestion des risques psychosociaux. Le Centre d'expertise de la Direction Santé et Sécurité d'Hydro-Québec regroupe en son sein aussi bien des spécialistes des risques traditionnels tels que des hygiénistes, des ergonomes ou des épidémiologistes, que des médecins, des psychologues cliniciens ou des psychologues organisationnels. De cette collaboration interdisciplinaire émerge des outils et des méthodes de prévention et d'intervention qui intègrent l'ensemble des risques, qu'ils soient physiques, chimiques, biologiques ou psychosociaux. La communication proposée vise à présenter quelques exemples d'outils et d'interventions conduites grâce à cette approche intégrée des différents risques.

Participation des travailleurs à une recherche-intervention: une histoire de confiance

Claudine Simard*

(St-Augustin-De-Desmaures, Canada)

Les problèmes de santé mentale au travail constituent l'un des problèmes de santé les plus fréquents, invalidants et coûteux financièrement parmi la population en âge de travailler (Gabriel et coll., 2000, Vézina, 1998). Afin de les prévenir, des recherches ciblant l'amélioration des contraintes de l'environnement psychosocial de travail par l'intermédiaire d'interventions organisationnelles ont été conduites (Brisson et coll., 2005, Lavoie-Tremblay et coll., 2005). Dans ces recherches, la participation des travailleurs est une thématique récurrente. Elle susciterait l'intérêt des employés envers le projet (Kompier et coll., 2000), son appropriation et sa pérennité. Elle entraînerait des retombées positives sur les plans de la reconnaissance, de la solidarité et de la santé et sécurité au travail. Dans ces recherches, les facilitateurs et les obstacles rencontrés lors de l'implantation de la démarche de participation ne sont pas présentés. Le point de vue des salariés, des représentants syndicaux, des gestionnaires et des chercheurs sur l'utilité et l'opérationnalisation de cette forme de participation n'est pas étayé. Aucune recommandation pour conduire une démarche semblable n'est proposée. Afin d'enrichir les connaissances pratiques et scientifiques à cet effet, une étude doctorale inspirée de l'approche de la Grounded Theory (Glaser, 1978, 1992) a été réalisée dans la région de Québec. À partir des données empiriques recueillies grâce à une démarche de participation des travailleurs (nommée GSI) instituée dans une recherche-intervention évaluative (RIE) visant l'amélioration de l'environnement psychosocial de travail et la santé mentale, les objectifs du doctorat étaient: 1) identifier des facteurs favorables et des défis à une telle démarche, 2) définir ses dimensions et 3) concevoir un modèle théorique s'y rapportant. Six entrevues collectives avec les participants aux GSI et neuf entretiens individuels avec des informateurs-clés y étant associés ont été conduits. Les résultats montrent que la confiance entre les personnes et envers la démarche est un fondement essentiel à la réalisation optimale de ce type de participation.

Comment s'adapter à un événement traumatique en milieu de travail?

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Cette étude vise à mieux comprendre les facteurs de risque associés au développement de l'état de stress post-traumatique (ÉSPT) et les facteurs de protection permettant l'adaptation suite à un événement traumatique au travail. L'étude comprend 132 policiers canadiens qui ont été exposés à au moins un événement traumatique dans le cadre de leur travail. Des entrevues semi-structurées ainsi que des questionnaires ont été utilisés afin de déterminer la présence de l'ÉSPT et d'évaluer l'impact de divers facteurs prévisionnels dans la modulation de l'ÉSPT. Les résultats d'une régression logistique multiple indiquent que les facteurs de risque et de protection au niveau péri-traumatique (c.-à-d. dissociation et soutien social pendant l'événement) sont les prédicteurs les plus importants de l'ÉSPT. Les résultats des analyses descriptives démontrent que les policiers ont recours à divers moyens et stratégies d'adaptation pour faire face à un événement traumatique au travail. Cette étude a permis d'élaborer des stratégies susceptibles de favoriser, chez une population policière, à la fois le développement de mécanismes de protection face aux événements traumatiques à venir et la diminution des facteurs de risque présents. Nous présenterons des interventions spécifiques et adaptées qui permettent d'atténuer ou de prévenir les facteurs qui sont associés à l'ÉSPT dans notre étude (c.-à-d. la dissociation, les réactions émotionnelles et les réactions physiques). Puis, nous aborderons les stratégies préventives qui visent à développer ou améliorer la personnalité résistante au stress et le soutien social, deux facteurs associés à l'adaptation suite au trauma. L'ensemble de ces stratégies permettra ultérieurement de mieux prévenir le développement de l'ÉSPT et d'améliorer la santé mentale au travail. Cette étude pourrait avoir des retombées importantes pour d'autres groupes de travail qui sont également à haut risque d'être confrontés à des événements traumatiques (militaires, pompiers, ambulanciers, secouristes, etc.).

Oral Session 5

Factors Modifying the Relationship between Organizational Factors and Health Problems

Chair: **Maureen Dollard**

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05-1

Core Self-Evaluations as Moderator Between Role Overload and Ill-Health

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Employees in the Occupational Risk Division (ORD) of a large petrochemical company experience many difficult situations on a regular basis. This division of the company comprises the emergency services, the security and the occupational health divisions of the company. The possibility that their work climate may contribute to their mental health status is suggested. The objective of this research was to determine the relationship between core self-evaluations, role overload, and health indicators (general health, depression and use of medication) and to determine whether core self-evaluations act as a moderator. A cross-sectional design was used. Age, gender and level of education were included as control variables. The results showed that a negative relationship exists between role overload and core self-evaluations. A positive relationship exists between role overload and neuroticism, poor health and depression. Self-esteem, self-efficacy and locus of control are negatively related to neuroticism and health, and neuroticism is positively related to poor health. Depression was predicted by experiences of overload, levels of self-efficacy, locus of control and negative affect (Neuroticism). General health was predicted by experiences of overload, locus of control, neuroticism and the interaction between overload and self-esteem. None of the variables predicted use of medication to a significant degree. Results further indicated that only self-esteem acts as a moderator in the relationship between role overload and general health, but none of the variables of core self-evaluations act as a moderator between role overload and depression or between role overload and the use of medication.

05-2

Job Mobility as Predictor of Health and Burnout

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Background: Employees' job mobility is an important aspect of organizational performance. From the individual employee perspective, changing job is the principal method to improve position and achieve an increase in salary. However, few studies have examined employees' turnover intentions and job mobility effect on health and burnout.

Aim: The main purpose of the present study is to elucidate the long-term relationships between turnover intentions and job mobility (internal and external) on health and burnout.

Methods: A two-year longitudinal questionnaire study using GLM repeated measures within-subjects factorial design with health (SF-36) and burnout (CBI), as within subjects variables, and using turnover intentions and job mobility as between subjects factors. The study used data from 662 Swedish civil servants.

Results: 73% remained at the same workplace, 13% were internally mobile and 14% left the organization (externally mobile) during the 2-year follow-up period. The results showed that high turnover intentions were cross-sectionally associated with worse mental health and higher degree of burnout. The externally mobile group, after change of workplace, had less personal and work-related burnout compared to the non-mobile group. The effect of internal mobility on burnout and health was negligible compared to the effects of external mobility. The results also indicated that the relationship between turnover intentions and actual job mobility are additive rather than interactive.

Conclusions: External mobility, if in concordance with the individual intentions, can be a powerful health promoting factor.

Leadership as a Determinant for Health among Subordinates

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Publication not authorized.

Attributions of Managers and Employees Associated with Stress Management Behaviors

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We now know that managers play an important role in employee stress management: managers can cause stress (e.g. Tepper, 2000; Hogan, Curphy & Hogan, 1994) but they can also help to manage stress, for example by implementing solutions (e.g. Thomson, Rick & Neathey, 2004). While the manager plays a central role in employee stress management, it is not known whether the causes of stress can be attributed to different sources. For example, when reporting stressful incidences, do employees explain their managers' behaviour as attributable to an internal, controllable and specific cause? According to Munton, Silvester, Stratton & Hanks (1999), "attribution theory is concerned with the thoughts people have about events and what causes them. An attribution is an expression of the way a person thinks about the relationship between a cause and an outcome" (p. 6). The Attribution Theory is an interesting approach, which may allow for a greater understanding of how, and to whom, stress management behaviors are attributed. In understanding how employees attribute managers' behaviours, we will be better positioned to design effective interventions.

The present study aims to explore attributions made by employees and managers about stress management behaviors in organizational settings. Managers and employees took part in structured interviews that employed the critical incident technique (Flannagan, 1954). The sample is composed of 84 participants, 39 managers and 45 employees, from 5 different British financial companies. We analysed structured one-to-one interviews using the Leeds Attributional Coding System (LACS; Munton, Silvester, Stratton & Hanks, 1999). The results show differences in employees' attributions of their managers' behaviours regarding stress management. Moreover, the results show differences in managers' attributions for their own behaviors. These results are relevant to understand how employees and managers conceive stress management behaviors in terms of causes, outcomes, generalization, controllability, stability, and specificity.

Psychosocial Safety Climate: Longitudinal Impacts on Health, Engagement and Absence

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The authors argue that psychosocial safety climate is a fundamental feature of the organizational context, and is a precursor to worker health and important work outcomes such as engagement and sickness absence. Psychosocial safety climate (PSC) is defined as 'work perceptions regarding the organization's philosophy, values and practices towards protection of the psychological and physical health of employees'. We predicted that PSC as an upstream organizational level resource would presage the work context which would in turn predict health, engagement and sickness absence.

In a longitudinal study of 193 Australian public sector workers with data collected at 2 time points we showed that psychosocial safety climate predicts work resources, health problems, work outcomes (engagement) and objective sickness absence over an 8 month period. Using the frame of job demands –resources (JD-R) theory, and structural equation modeling we found that PSC predicted health problems and in turn sickness absence, indirectly through job resources. Consistent with the motivational hypothesis, we found that PSC predicts work engagement and in turn sickness absence partially mediated by job resources (i.e. job control). The results show that the PSC construct is a fundamentally important upstream component of work stress theory, and additionally there is a business case for building PSC as stress prevention.

Integrating Job Strain Measures into Indoor Climate Investigations

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Background: A short version of the Job Content Questionnaire (JCQ) was incorporated into the MM 030 Indoor Climate survey, to explore the impact of psychosocial factors on indoor climate perceptions and symptoms. The performance of the JCQ was evaluated in the context of indoor climate investigations conducted in 14 public sector workplaces.

Methods: Confirmatory factor analysis was conducted on the responses to self-administered questionnaires, to compare derived factors to the original constructs underlying the JCQ instrument. The combined data was analyzed to evaluate the between-workplace variance contribution. Hierarchical regression techniques identified variables associated with indoor climate symptoms, and global ratings of workplace air quality and stress. Path analysis techniques evaluated the role of psychosocial and indoor climate factors in predicting symptoms and the global rating measures.

Results: A total of 786 responses were received from 14 workplaces. Response rates varied between 60-100%, averaging 82% across the workplaces. The frequency of responses which met the JCQ high job strain criteria was an average of 21% across the workplaces (range 0-45%). Confirmatory factor analysis indicated similar constructs as described by the authors of the JCQ with slight variations. Hierarchical regression models predicting indoor climate symptom factors and global ratings of workplace air quality and perceived workplace stress explained up to 75% of the variance between workplaces and up to 35% within workplaces. The psychosocial factors explained 5-10% of the variance independent of the other indoor climate and demographic factors. Path analysis indicated that psychosocial factors modified indoor climate perceptions rather than being directly associated with the symptom outcomes.

Conclusion: The JCQ was successfully integrated into indoor climate investigations of public sector workplaces. Measured psychosocial factors appeared to modify indoor climate perceptions associated with symptoms rather than influencing the symptoms directly.

Session orale 6

Facteurs de risques psychosociaux et travail des femmes

Modératrice: **Romaine Malenfant**
Université du Québec en Outaouais (Gatineau, Canada)

06-1

Maintien des femmes en emplois non traditionnels dans les télécommunications

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(1) UQAM; CINBIOSE (Montréal, Canada); (2) FTQ (Montréal, Canada)

L'étude ergonomique présentée porte sur le maintien des femmes dans des emplois traditionnellement masculins d'une entreprise de télécommunications. Elle a été réalisée en collaboration avec le Service de la condition féminine de la Fédération des travailleurs et travailleuses du Québec (FTQ) et le Service aux collectivités de l'UQAM. L'objectif était d'identifier les obstacles physiques et psychosociaux à leur maintien et à leur progression en emploi. Dans cette entreprise, des techniciennes et câbleuses avaient été embauchées dans le cadre d'un programme gouvernemental sur l'accès à l'égalité. Cependant, la plupart quittaient avant la fin de l'année d'embauche. Dans cette entreprise, deux méthodes ont été utilisées : 1) des entretiens individuels portant sur les aspects physiques (4 hommes, 3 femmes) et d'autres portant sur le parcours d'emploi, l'activité de travail et l'expérience en emploi (8 femmes); 2) des observations de l'activité d'une durée de 123 heures auprès de 7 travailleuses. En complément, un questionnaire auto-administré (36 travailleuses) et un focus group (8 travailleuses) ont permis de valider et de compléter les données. Il ressort des résultats que : 1) les femmes vivent diverses situations problématiques avec leurs collègues et/ou leurs supérieurs qu'elles ont tendance à nier leur ampleur et leur impact, tout comme leurs interlocuteurs; 2) elles déploient diverses stratégies pour minimiser les impacts et pour réduire les risques d'exposition à des comportements agressants; 3) à long terme, aucune stratégie n'apparaît gagnante dans un contexte organisationnel qui n'intervient pas sur les conditions d'insertion et de maintien; 4) les obstacles physiques sont associés à la difficulté d'accéder à des équipements appropriés. Les résultats permettent de penser que les facteurs psychosociaux et organisationnels en cause sont inter-reliés.

06-2

Non reconnaissance des risques psychosociaux et conciliation travail-grossesse

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La recherche empirique menée auprès de différents groupes d'acteurs en milieu de travail (travailleuses, employeurs, médecins du travail) avait pour but de révéler les bases sur lesquelles s'échafaude la construction sociale du risque pour la santé à partir d'une part, d'expériences vécues par des travailleuses enceintes et leurs employeurs, et d'autre part, du processus d'évaluation mené par les instances responsables de définir les paramètres du risque associé aux activités de travail. Des entrevues semi-dirigées et des entrevues de groupe ont été réalisées auprès de chacun des groupes d'acteurs.

Les résultats révèlent que les facteurs psychosociaux ne sont pas pris en compte dans l'évaluation des activités de travail des femmes enceintes. Pourtant, les travailleuses enceintes considèrent que la qualité de l'expérience de la grossesse ne se traduit pas exclusivement en risque pour la santé défini à travers le prisme de la médecine du travail. Pour elles, des exigences élevées de productivité, la cadence de travail, des conditions stressantes, la fatigue accumulée et les problèmes de sommeil sont autant de «facteurs de risque» de nature psychosociale qui nécessiteraient des changements à l'organisation du travail dans le but d'assurer une conciliation travail-grossesse sans risque. La latitude décisionnelle et le soutien en sont des éléments clés. Cependant, selon l'évaluation médico-environnementale, la légitimation d'une demande de réaménagement des tâches visant à rendre possible la conciliation du travail et de la grossesse est dépendante de l'invocation d'un risque pour la santé sur la base d'indicateurs biomédicaux qui laissent présager une atteinte jugée sérieuse à l'évolution de la grossesse ou une issue de grossesse défavorable (Malenfant et Côté, 2006). Ces résultats laissent voir la persistance d'une représentation traditionnelle du risque professionnel et soulèvent des questions sur la dimension sexuée de l'évaluation du risque.

Latitude décisionnelle et santé mentale des femmes au travail

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L'objectif de l'étude est de documenter les liens entre des contraintes psychosociales au travail et certains problèmes de santé mentale au Québec, à partir des données de l'Enquête sur la santé dans les collectivités canadiennes, réalisée en 2002, auprès de 2877 travailleurs.

Les indicateurs de problèmes de santé mentale retenus sont: l'épisode dépressif majeur, l'indice global de dépression, la détresse psychologique et l'autoévaluation du stress au travail. Les contraintes psychosociales mesurées sont: la latitude décisionnelle, la demande psychologique, le soutien social et la sécurité d'emploi.

Les résultats montrent que tous ces indicateurs sont plus défavorables pour les femmes que pour les hommes.

Les analyses multivariées montrent que, chez les femmes, la dimension faible compétence de la latitude décisionnelle apparaît de façon surprenante comme un facteur de protection d'un épisode dépressif majeur et est associé à une probabilité plus faible d'évaluer son travail comme stressant. Chez les femmes, le fait de travailler de 35 à 40 heures par semaine ou moins de 27 semaines par année est associé à un niveau élevé de détresse psychologique. Enfin, le fait de travailler à son compte est associé, chez les femmes, à un indice global de dépression et à une probabilité plus grande d'évaluer son travail comme stressant.

Les indicateurs de santé mentale plus défavorables aux femmes peuvent s'expliquer par le cumul des responsabilités familiales et professionnelles ainsi que par le fait que les femmes occupent souvent des emplois moins qualifiés, sous-payés et que certains postes de travail peuvent différer selon le sexe, et ce, même au sein d'un même titre d'emploi.

Les explications du caractère protecteur de la faible latitude décisionnelle au regard des compétences chez les femmes, ne sont pas claires. Peut-être s'agit-il d'une conséquence de l'acceptation, par les femmes, d'un travail déqualifié pour être davantage en mesure de faire face aux obligations familiales?

Cancer du sein et retour au travail chez 500 patientes

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Le cancer du sein touche aujourd'hui une femme sur dix. Une bonne insertion ou réinsertion socioprofessionnelle fait partie intégrante de la prise en charge globale des femmes touchées par un cancer du sein.

L'objectif de notre étude est d'identifier et d'analyser les différents facteurs qui conditionnent le maintien dans l'emploi des femmes actives atteintes d'un cancer du sein, dans le but de prévenir la désinsertion socioprofessionnelle et ses conséquences, notamment en termes de baisse de la qualité de vie et de précarité.

Méthode: Un auto-questionnaire fut utilisé auprès de 1000 femmes atteintes d'un cancer du sein, tout type histologique confondu, ayant initié leur prise en charge thérapeutique au Centre Oscar Lambret, centre spécialisé de référence régional au Nord de la France, entre le 1er janvier 2004 et le 31 décembre 2005, âgées de 60 ans au plus et interrogées en décembre 2007.

Le volet médical du questionnaire précise la gravité initiale de la tumeur, le traitement reçu, les paramètres fonctionnels perçus (fatigue, anxiété...). Le volet socioprofessionnel s'intéresse d'abord au niveau de formation initiale, à la catégorie socioprofessionnelle, au type du contrat de travail, aux contraintes liées au poste de travail avant la maladie et ensuite, après la maladie, à la reprise éventuelle d'une activité professionnelle, de ses circonstances (reclassement, aménagement du poste...), du changement éventuel du statut socioprofessionnel et des conditions effective de reprise d'activité.

L'analyse utilisera les Tests du Log-rank pour tester les variables impactant le retour à l'emploi (informations personnelles, données médicales, informations professionnelles) et les analyses multivariées (modèle de Cox) pour les variables dont le degré de signification sera inférieur à 0.20 aux tests du Log-rank.

Résultats: Près de 500 réponses sont actuellement en cours d'analyse et permettront d'identifier l'impact du cancer du sein sur la qualité de vie des patientes, y compris sur la composante socioprofessionnelle.

Session orale 7

Dynamiques interculturelles, altérité et risques psychosociaux au travail

Modératrice: **Cécile Stola**
Psydic (Paris, France)

07-1

Mobilité internationale: les stratégies de coping des expatriés

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(1) *Psydic (Paris, France)*; (2) *Université de Caen/Basse-Normandie (Caen, France)*

Face à l'essor de la mondialisation, les sociétés sont aujourd'hui confrontées à une nouvelle impulsion internationale exigeant le développement de leurs services dans divers pays. Des études montrent que les cadres supérieurs interrompent fréquemment leurs missions à l'étranger plus tôt que prévu, en raison du choc culturel. Il en résulte une période de dépression pour le cadre et des pertes financières conséquentes, voire la perte de l'employé pour l'entreprise. D'autres études mettent au jour différents troubles, dus au «contre-choc» culturel lors du retour d'expatriés au pays d'origine.

La minimisation, voire la réduction des effets de la situation stressante, met en œuvre différents processus mentaux aptes à engendrer une bonne adaptation à cette situation. Si l'expatrié était doté de stratégies de coping (stratégies d'adaptation) pertinentes, il aurait à la fois les capacités nécessaires pour une bonne adaptation au pays d'accueil lors de son départ, et les capacités de réadaptation à son pays d'origine au moment de son retour.

L'étude présentée vise à éclairer les stratégies de coping développées par des cadres expatriés et leurs conjoints.

La recherche se fonde sur la Théorie Transactionnelle de Lazarus et Folkman et la Reversal Theory de M. Apter. Une enquête a été menée, par le biais d'entretiens et de questionnaires, auprès d'une population expatriée. Elle éclaire à la fois les types de situations génératrices de satisfaction/insatisfaction ainsi que la manière de les évaluer et de faire face dans plusieurs populations d'expatriés dans des conditions spécifiées.

Plus de 250 personnes ont participé à cette étude.

Les données élaborées à partir de cette recherche aboutissent à un corpus d'information extrêmement pertinent au regard de la théorie de la psychologie des dynamiques interculturelles et au regard des entreprises soucieuses d'optimiser les bénéfices de la mobilité internationale.

07-2

Prévenir le risque psychosocial lié au handicap

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Les personnes en situation de handicap ont longtemps été identifiées par leur incapacité à travailler, en raison de leur(s) limitation(s) fonctionnelle(s) physique(s) et/ou mentale(s). Bien que les progrès technologiques et sociaux aient permis le développement des adaptations nécessaires pour remédier à cette privation, de tels préjugés semblent persister au point d'influencer les relations et les attentes envers les personnes atteintes d'une forme de handicap.

La recherche qui sera présentée se donne pour objectif d'identifier les facteurs socio-émotionnels liés à la perception du handicap, afin d'intervenir de façon adaptée en milieu de travail, dans le but d'optimiser les conditions sociales d'accès et de retour à l'emploi des personnes en situation de handicap.

L'approche socio-fonctionnelle de Cottrell & Neuberg (2002, 2005, 2007) fonde la démarche d'étude, qui doit permettre de comprendre les contenus et conséquences des préjugés concernant le handicap au travail. Nous nous attendons à ce que les personnes en situation de handicap soient perçues comme inaptes à entretenir des relations réciproques ; donc inaptes à apporter une contribution égale à l'atteinte des objectifs d'un groupe de travail. L'approche socio-fonctionnelle permet de faire un lien entre cette hypothèse et l'émotion « pitié » qui serait ressentie par la majorité des Français à l'égard des personnes en situation de handicap.

Nous souhaitons mettre en lien ces perceptions avec les motivations relationnelles, éclairées sous le jour d'une enquête fondée sur la Reversal Theory d'Apter (1982) : un questionnaire permet d'identifier les motivations et émotions influençant les comportements des collègues de personnes en situation de handicap.

Nous mettrons au jour les bénéfices transactionnels perçus au cours de ces interactions. Nous nous attendons à ce que les facteurs psychosociaux méritent d'être analysés en termes de préjugés, de sorte à mieux comprendre et mieux agir en faveur de l'intégration et du retour à l'emploi.

**Prévention des risques psychosociaux liés
à la dynamique interculturelle**

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Publication non autorisée.

Oral Session 8

Psychosocial Factors, Musculo-skeletal Problems and Occupational Accidents

Chair: **Reiner Rugulies**

National Research Centre for the Working Environment (Copenhagen, Denmark)

08-1

Psychosocial and Biomechanical Factors for Musculoskeletal Disorders among Locomotive Engineers

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Psychosocial factors may influence the development of work related disorders. US railroads claim that their industry is safer than other transportation industries (1). A study among whole-body vibration exposed locomotive engineers showed a significantly higher prevalence of spinal disorders compared to a control (2).

To examine the impact of workplace psychosocial stress, independent of biomechanical risk factors, on the development of musculoskeletal disorders.

A self-administered 200-item standardized health survey was used to assess musculoskeletal disorders among a randomly selected subset of North American railroad (RR) engineers (n=2546) and a control group (n=798), response rates were 47% and 41% respectively. The responses were analyzed for the association between musculoskeletal disorders, biomechanical exposures and workplace psychosocial stressors.

Railroad engineers reported higher "psychological job demands" (mean 30.6 vs. 29.6; $p = 0.01$), much lower "job decision latitude" (mean 60.9 vs. 71.9 ($p < 0.001$)) (2), a greater requirement to work long hours ($p < .001$), mandatory overtime ($p < .001$) and less ability to take "relief from my job duties" ($p < .001$) than the control group. Railroad engineers also reported significantly worse seat comfort and ergonomics, and greater time sitting and time being bothered by vibration. Railroad engineers also reported significantly greater stress symptoms and significantly more low back pain (75% vs. 41%, $p < .001$). In a logistic regression analysis, both biomechanical factors (time sitting at work, time at work being bothered by vibration, no back support and unfavorable seat comfort rating) and psychosocial factors (mandatory overtime, psychological job demands, can't take relief from job duties when need to) were independent predictors of low back pain, controlling for age, gender, race, smoking and spare time or second job vibration exposure.

Both biomechanical and psychosocial factors were independent predictors of low back disorders. Railroad engineers reported a much poorer psychosocial and physical work environment.

08-2

The Psychosocial Model of Work Accidents: a Safety Response Approach

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The Psychosocial Model of Work-related Accidents (PMA) provides a theoretical basis for a multilevel assessment of safety climate (Meliá, 1998, 2007). This model offers a structured view of the relationships among work conditions, safety responses and work injuries. The model shows how basal risk –the set of hazards that characterize a task, job, or sector - is transformed into a certain real risk – the probability of accidents - through the action of the safety response of the organization, the managers and supervisors, the workgroup and the worker. Finally, real risk is probabilistically related to accidents. The model proposes a psychosocial chain of effects linking the organization's safety response with the worker's safety response through the co-workers' and supervisors' safety response. The aim of this paper is to test the PMA, measured by the Valencia-Prevacc Battery in a Spanish sample.

513 Spanish employees participated voluntarily. 52.3% were women. Age ranged from 18 to 63 years, and most were between 20 and 49 (85.2%). They worked in different organisations from a broad array of sectors: service (56.2%), industry (35.9%), construction (6.1%) and agriculture and fishing (1.8%). 75% were workers, 8% supervisors, 9% middle managers, and 8% managers. The PMA was tested using Structural Equation Modeling.

The model clearly fitted the data: chi-square was not significant (Chi-square=11.46; d.f.=8; $p=.177$) and all the main indexes of fit were satisfactory (NFI = .990; NNFI = .992; CFI = .997; AASR = .01).

The results provide support for the PMA and suggest that the safety response approach is a useful framework for the assessment of psychosocial and behavioural risks in organizations. The model allows to identify the different safety responses, usually mixed inside the general concept of safety climate, and to assess the relative importance of each of them in the safety chain of influence.

Psychosocial Factors Affecting Safety Behaviour in the Newfoundland Fibreglass Boat-Building Industry

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Memorial University (St. John's, Canada)

The process of fibreglass boat-building (FBB) requires the use of chemical styrene, a known neurotoxin which contributes to a number of physiological and psychological problems. There have been concerns over the lack of safety behaviours among FBB workers. The objective of the study was to assess the psychosocial factors associated with safety behaviours of workers in this industry, using the Theory of Planned Behaviour (TPB) as a foundation. Qualitative and quantitative data collection methods were used in this study. Phase 1 involved interviews with community members, managers, employees, and key informants. Qualitative data analysis revealed numerous themes associated with employee safety behaviours: (1) workplace health and safety attitudes; (2) perceptions of risk; (3) community life; (4) employee knowledge concerning styrene exposure; (5) the importance and future of the industry; and, (6) social and organizational factors affecting employee safety behaviours, risk tolerance and willingness to raise safety issues. Phase 2 involved the development and distribution of an employee survey. Data from the employee surveys ($n = 43$, 80% response rate) were used to (1) modify the survey instrument, (2) determine the social-cognitive factors (e.g. attitudes, norms, behavioural control, perceptions of risk, and affective reaction) that affect employee safety compliance, and (3) determine the psychosocial factors (e.g. knowledge, safety climate, community attachment, job security, etc.) affecting the proposed social-cognitive determinants of employee safety behaviour. Results suggest that employee safety behaviours are associated with perceived behavioural expectations of family members and physicians. Further, results suggest that employee knowledge of the health effects of styrene, safety climate, image risk, experience, and community attachment are associated with the social-cognitive factors affecting behaviour. These findings underscore the importance of understanding safety behaviour by incorporating broader social factors into the TPB. The implications of these findings will be discussed.

Effort-Reward Imbalance and Risk of Musculoskeletal Injury among Transit Operators

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Problem: A mismatch between high efforts and low rewards at work (effort-reward imbalance, ERI) has been associated with potentially disabling musculoskeletal disorders in cross-sectional and case-control studies, but no longitudinal study has been published yet.

Objective: To analyze the effect of ERI on low back or neck injury in a 7.5-year prospective cohort study among 1179 San Francisco transit operators.

Methods: Data from medical examination and a survey on working conditions and health were linked to administrative workers' compensation databases. Only injuries from accepted workers' compensation claims were included. Hazard ratios (HR) for first low back and first neck injury were calculated with multivariate Cox regression models. Additional analyses accounted for severity of injury based on medical diagnosis. Because the original ERI-questionnaire was not included in the study, we used proxy measures to build scales of effort and reward. ERI was calculated as the ratio between the two scales.

Results: A 1 standard deviation increase of ERI was associated with compensated low back (HR=1.13, 95% CI: 1.02-1.26) and neck injuries (HR=1.14, 95% CI: 1.02-1.27) after adjustment for gender, age, height, weight, years of professional driving, weekly driving hours, vehicle type, ergonomic problems, pain at baseline, and job strain. Participants in the highest ERI-quartile showed an HR of 1.32 (95% CI: 0.94-1.86) for low back injuries and an HR of 1.66 (95% CI: 1.16-2.38) for neck injuries. These participants were at increased risk for severe injuries that are often responsible of chronic disability, with HRs of 2.17 (95% CI: 1.10-4.28) for more severe low back injuries and 3.31 (95% CI: 1.28-8.58) for more severe neck injuries.

Conclusion: ERI predicts low back and neck injuries in transit operators, independently of individual worker characteristics, physical workload, ergonomic problems and job strain. Effect sizes differ by injury severity.

Session orale 9

Facteurs de risques organisationnels et incapacité de travail liée à des problèmes musculosquelettiques

Modératrice: **Monique Lortie**

(1) UQAM (Montréal, Canada)

09-1

Développement et validation d'un outil de dépistage de l'incapacité chronique

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But: L'identification précoce des individus à risque de demeurer en incapacité prolongée à la suite d'un trouble musculo-squelettique représente une stratégie de prévention secondaire prometteuse. Peu d'outils de dépistage sont toutefois disponibles et ceux publiés comportent différentes limites. Un nouvel outil est ici proposé. Il est constitué de facteurs de risques psychosociaux et organisationnels modifiables. Deux objectifs étaient poursuivis : 1) Décrire la fidélité et la validité prédictive de l'outil; 2) Créer des profils de risques à partir de l'outil.

Méthode: Une étude longitudinale a été menée sur 12 mois. Des travailleurs québécois (N=536), en arrêt de travail pour cause de lombalgie non-spécifique, ont été interrogés à trois reprises (à moins de 12 semaines de l'arrêt de travail, puis six et douze mois plus tard). La fidélité test-retest à deux semaines d'intervalle a été mesurée au sein d'un sous-échantillon de 100 travailleurs. Des analyses de régression logistiques permettront de déterminer la capacité de l'outil à prédire le retour au travail. Des analyses de groupement ("cluster analysis") permettront d'identifier des profils de risques particuliers.

Résultats: Les données du suivi à six mois sont disponibles et les analyses sont en cours. Les profils de risque attendus sont : 1) peurs-évitement, 2) détresse émotionnelle, 3) peurs-évitement et détresse, 4) limites fonctionnelles et 5) inquiétudes face au retour en milieu de travail. Les résultats complets seront présentés lors de la conférence.

Conclusions: Le nouvel outil présenté, et développé sur la base d'un modèle explicatif validé (Truchon et coll., Pain, 2008), devrait permettre de quantifier la probabilité de retour au travail. De plus, il devrait permettre de soutenir les intervenants et de guider le choix des interventions psychosociales ou organisationnelles requises afin de freiner le développement de l'incapacité de longue durée.

Ce projet a été subventionné par l'IRSST (099-440).

09-2

Étude ergonomique des facteurs psychosociaux dans les centres d'urgence 9-1-1

Georges Toulouse* (1), Louise St-Arnaud (2), Alain Delisle (1), Julie Lévesque (1), Denis Duhalde (3), Alain-Steve Comtois (3)
(1) IRSST (Montréal, Canada); (2) Université Laval (Québec, Canada); (3) UQAM (Montréal, Canada)

Une première étude réalisée dans les centres d'urgence 9-1-1 révèle des taux de prévalence élevés des troubles musculo-squelettiques et de santé psychologique associés à des facteurs de risques psychosociaux. Ces risques concernent particulièrement la charge de travail, le soutien social et la reconnaissance. En effet, les préposés aux télécommunications de centres d'urgence 9-1-1 doivent réaliser une grande variété de tâches. Outre la prise d'appel au 9-1-1, ils effectuent la répartition police, l'information téléphonique ou l'accueil au poste de police, la réponse aux alarmes, etc. Ces tâches se caractérisent par leur imprévisibilité relativement à la quantité des demandes à traiter, leur complexité et leur contenu émotionnel.

Afin d'aider les centres à prévenir ces risques, une étude a été entreprise pour préciser leurs déterminants ainsi que pour proposer et implanter des solutions. Le modèle d'analyse retenu est celui de la régulation de la charge de travail et ses empêchements. L'étude comporte trois volets : 1- une étude ergonomique basée sur le relevé de mesures physiologiques et subjectives de la charge de travail et l'analyse de l'activité ; 2- l'analyse des appels au 9-1-1 ; 3- la réalisation d'entrevues de psychodynamique du travail.

La présentation portera sur le développement du modèle d'analyse et les premiers résultats de l'étude ergonomique des facteurs psychosociaux en lien avec les troubles musculo-squelettiques.

Troubles musculosquelettiques et risque d'exclusion : situation en France

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Le but de la présentation est de décrire les caractéristiques de la situation en France des travailleurs atteints de troubles musculosquelettiques à partir des données sanitaires et sociales disponibles, en soulignant les risques d'exclusion de ces travailleurs.

Dans un premier temps, la trajectoire habituelle des travailleurs atteints de TMS est décrite dans une triple perspective d'analyse : médicale (recours au système et professionnels de santé), sociale (droits sociaux selon les régimes d'assurance maladie, possibilités de recours contentieux) et professionnelle (situation vis-à-vis de l'employeur et du droit du travail). Cette partie est l'occasion de mettre en évidence la dispersion des acteurs contribuant aux difficultés d'une prise en charge cohérente pour les travailleurs atteints de TMS.

Dans un second temps, les données sanitaires et sociales disponibles en France sont mentionnées dans une perspective de santé populationnelle pour documenter les différentes étapes de la trajectoire décrite précédemment. Cette partie est l'occasion de mettre en évidence la dispersion et le caractère parcellaire des indicateurs disponibles contribuant aux difficultés d'une analyse globale de la situation et des besoins des travailleurs atteints de TMS.

Dans un troisième temps, la discussion évoque les actions de prévention secondaire et tertiaire des TMS qu'il est possible de mettre en œuvre à partir des indicateurs disponibles dans le but de prévenir l'exclusion professionnelle et sociale des travailleurs atteints de TMS. Les indicateurs non disponibles font également l'objet d'une discussion à part en soulignant la nécessité de les développer pour l'élaboration d'une politique publique de maintien dans l'emploi, des travailleurs atteints de TMS, fondée sur des évidences documentées.

Diagnostic des risques de TMS : Intégration de questionnaires psychosociaux dans un cadre d'intervention ergonomique

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Problématique : Bien qu'on reconnaisse l'importance des facteurs psychosociaux sur les TMS - sans s'entendre cependant sur les mécanismes d'action, directs (ex. augmente tension musculaire) ou indirects (ex. aller plus vite vs stress), les outils d'évaluation demeurent centrés sur les facteurs biomécaniques. De plus, les outils proposés ont généralement été développés dans un contexte de recherche, à des fins de mesure alors que les intervenants ont aussi besoin d'outils permettant de comprendre la situation pour pouvoir la transformer. **Objectifs :** Comparer les informations recueillies par différents outils et explorer l'utilisation du questionnaire Karasek sur le terrain. **Étude :** Douze postes répétitifs, ciblés par l'entreprise, ont été caractérisés et 32 opérateurs y travaillant, ont été questionnés avec les outils suivants: santé musculosquelettiques (NIOSH), Quick Exposure Check (CSST), questionnaires sur les difficultés au travail et sur les pistes de transformation, Karasek. (durée : ± 90 min.). **Résultats :** 1. Au plan méthodologique. Le passage au format oui/non s'est imposé, les opérateurs éprouvant de la difficulté à préciser leur niveau d'accord, mais pas leur position. Ils ont régulièrement spontanément expliqué leurs réponses, ce que n'aurait pas permis un questionnaire auto administré. Les questionnaires précédents ont joué un rôle déterminant, les opérateurs pouvant fournir des exemples en sachant que l'interviewer comprenait. Le Karasek a permis d'aborder des aspects peu explorés sur le terrain : le soutien et la reconnaissance. 2. Facteurs psychosociaux. Les réponses font ressortir l'importance accordée aux sources de variabilité et aux choix dans les façons de faire (ex. façon de prendre, de manipuler). Le développement d'habiletés est vu comme une qualification professionnelle importante. La contrainte de temps est le facteur déterminant de la demande psychologique. Bien que conçu comme outil de mesure, le Karasek s'est avéré un outil intéressant pour comprendre comment des facteurs psychosociaux se traduisent en événements concrets.

Oral Session 10

Identification of Mental Health Problems Attributable to Work

Chair: **Alain Marchand**

University of Montreal (Montreal, Canada)

010-1

A Comparison of Two Job Stress Models in Predicting Depressive Symptom

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Aims: A cross-sectional survey has been developed to assess job stress and its health effect. This paper aims to explore the association between job demand control (JDC) and the effort–reward imbalance (ERI) model in predicting depressive symptoms, in a working population of Shanghai.

Methods: The cross-sectional study was based on 1205 participants' answers of a self-administered questionnaire. Psychosocial factors at work have been evaluated by JDC and ERI. A Chinese core scale edited from JCQ with 22 items ($\alpha=0.86$) and the ERI questionnaire with 22 items ($\alpha=0.92$) were used in this survey. A Chinese version of the Center for Epidemiologic Studies rating scale for Depression (CES-D) was used to measure depressive symptoms. Logistic regression was used to determine the association between depressive symptoms and various factors of job stress. All dimensions of job stress were divided into three groups, based on the tertile position as cut-off point of the total distribution. The depressive symptoms were identified as $CES-D \geq 16$.

Results: The prevalence of depressive symptoms reached 45.5% in this survey. High demand, effort and over-commitment were risk factors (OR ranged from 1.74 to 4.48, 95% CI ranged from 1.31 to 6.56) and high control, social support and reward were protecting factors (OR ranged from 0.18 to 0.66, 95% CI ranged from 0.13 to 0.92) for depressive symptoms. The combination analysis showed that high job strain and low reward have the strongest association with depressive symptoms (OR=9.78, 95% CI=5.57-17.2). Job strain is an important factor in predicting depressive symptoms in low or medium reward groups. At a medium level of over-commitment, high job strain has a significant association with depressive symptoms (OR=3.11, 95% CI=1.73-5.60).

Conclusions: This study provides further evidence of the deleterious effects of job stress on depressive symptoms, and the usefulness of the combined two job stress models to evaluate job strain.

010-2

“UK Medically Reported Incidence of Work-Related Mental Ill-Health”

Jacques Tamin*, Melanie Garder, Raymond Agius, Susan Turner, Louise Hussey, Annmarie Money

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Background: The Health and Occupation Reporting network (THOR) surveillance schemes collect UK data on work-related ill-health, through voluntary medically certified anonymous reports from psychiatrists, occupational physicians (OPs) and general practitioners (GPs) <<http://www.medicine.manchester.ac.uk/coeh/thor/>>.

Objectives: To investigate case reports of work-related mental ill-health reported to THOR during 2006: cases and incidence rates by industrial sector and by professional groups, and as a proportion of all reported work related ill-health by occupational category.

Results: Approximately half (49%) of the cases reported by OPs in 2006 and 29% of the cases reported by GPs were of mental ill-health, with anxiety, depression and ‘other work stress’ being the most frequently reported diagnostic categories. A higher incidence of work-related mental ill-health was observed in the health and social sector and the education sector compared to other sectors (for example, hair and beauty). The analysis of cases of work-related mental ill-health by precipitating event reveals that most of the cases were attributed to ‘factors intrinsic to the job’ (primarily ‘workload’), and ‘interpersonal difficulties’ (primarily ‘difficulties with managers/co-workers’). The proportion of mental ill-health cases showed little variation when analysed by precipitating factors for three major public sectors (health and social care, education, and public administration and defence). These data are also being used as a basis for comparison of the incidence of work-related mental ill-health between industry sectors, and also within specific industries, provided the quality and quantity of the data generated by them is adequate.

Conclusions: The THOR scheme provides essential data for the formulation of UK national policy on work-related mental ill-health, but can also help provide comparative information at a regional or industry-based level.

Job Stressors and Depressive Disorders among Japanese Men

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Aims: The present study aimed to investigate the effect of job stressors on sick leave due to depressive disorders among Japanese men, using the Japan Work Stress and Health Cohort Study (JSTRESS) database.

Subjects and methods: A baseline survey was conducted with all full-time employees of six factories/companies of Japan, in 1997-1999 (average response rate, 85%). A total of 15,593 men and 2,749 women completed the questionnaire. They were followed for 5.2 years on average and their sick leave of 30 days or longer was recorded. The present study focused on men. Data from 15,310 men were subject to analysis, after excluding 149 respondents who reported a past history of mental disorders. The baseline questionnaire included the Job Content Questionnaire (JCQ) and the US NIOSH Generic Job Stress Questionnaire (GJSQ), to assess the following job stressors: job demands, job control, role ambiguity and conflict, supervisor support, coworker support (all assessed by GJSQ), and job insecurity (JCQ). The respondents were classified into quartiles based on each job stressor variable. The association between the job stressors and occurrence of sick leave was analyzed by the Cox proportional hazard model, adjusting for baseline covariates (age, occupation, marital status, education, depressive symptoms, and neuroticism).

Results: A total of 46 new cases had a sick leave of 30 days or longer due to depressive disorders during the follow-up. Lack of job control and role ambiguity were associated with sick leave due to depressive disorders ($p < 0.05$). When both job control and role ambiguity were simultaneously entered into the model, these job stressors were still marginally significantly associated with sick leave due to depressive disorders ($p = 0.06$ and 0.08 , respectively).

Conclusion: It is suggested that lack of job control and role ambiguity are risk factors for depressive disorders among Japanese employed men, independent of baseline depression and neurotic personality trait.

Work and Onset of Chronic Psychological Distress in Canada

Alain Marchand*, Marie-Eve Blanc, Elyse Picard
University of Montreal (Montreal, Canada)

This study analysed the relationship between occupation and work organisation conditions and the onset of chronic psychological distress in the Canadian workforce. It used an analytical model encompassing the stress promoted by constraints-resources embedded in macrosocial structures (occupational structure), structures of daily life (workplace, family, social networks outside the workplace, local community) and agent personality (demography, physical health, psychological traits, life habits, stressful childhood events). Longitudinal data were derived from five cycles of Statistics Canada's National Population Health Survey (Cycle 1=1994-1995, Cycle 5=2002-2003). The analysed panel was composed of 7,842 workers nested in 1595 local communities and interviewed five times on a two year basis. Data were analysed using discrete time multilevel logistic regressions models. Results show that 47.7% of workers reported at least one occurrence of psychological distress during the time interval, 24.6% two and 11.3% more than three. Overall, occupation is not significantly related to the outcome. As for work organisation conditions, decision authority, psychological demands and job insecurity increase the odds of repeated occurrence of psychological distress, while decreasing odds were associated with social support in the workplace (colleagues and supervisor). Local community, family structure, social network outside the workplace, and agent personality also contribute to the outcome. The results of this study suggest an important contribution of pathogenic work organisation conditions on the onset of chronic psychological distress even after taking into account the diversity of a worker life, experiences and personality. The results also suggest limits to the use of increasing decision authority as an intervention strategy in workplaces, because it may not always improve or protect mental health.

Psychosocial Factors at Work and Incident Depression in Denmark

Else Nygaard, Karsten Thielen, Finn Diderichsen*
University of Copenhagen (Copenhagen K, Denmark)

Problem: Depressions and depressive symptoms play a major explanatory role in sickness absence and early retirement at the Danish labour market. They represent a major public health issue.

Objectives: The aim of this project was to study the effect of psychosocial factors at work on the incidence of depression.

Methodology: In 2000, baseline data were collected from a sample of 7588 Danish men and women aged 40 and 50 years. By October 2006, a follow-up survey had been sent to all respondents. After exclusion of people out of labour market at baseline, with current or prior depression or with missing values among all variables, 3158 were included in the prospective analyses. Psychosocial factors at work were measured in 2000 by scales of quantitative demands, work pace, emotional demands, opportunity to develop skills, variation of work, meaningfulness, social support from colleagues, social support from manager and sense of workplace in the community. Depressive symptoms in 2000 and 2006 were measured with the 'Major Depression Inventory' (MDI), a scale which provides information on depressive episodes during the 2 preceding weeks. People with MDI scores of 19/20 or lower were considered depressive (cases). Using logistic regression, we calculated odds ratio (OR) and confidence intervals (CI) for depression, controlling for age, sex, occupational social position, family status, alcohol consumption, seniority and MDI-score at baseline.

Results: After full adjustment, high work pace (OR=1.72, CI: 1.28-2.32), high emotional demands (OR=1.66, CI: 1.17-2.34) and lack of a sense of community (OR=1.61, CI: 1.12-2.31) significantly increased the odds of incident depression. Significant factors for men were work pace and emotional demands, and for women work pace and lack of a sense of community.

Conclusion: The findings indicate that psychosocial factors at work influence the development of depression. Specific factors may affect men and women differently.

Psychosocial Factors at Work and Incident Use of Antidepressant Medication

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Problem: The use of antidepressive medication has increased dramatically during the past decade in Denmark and worldwide, indicating an increase of mental health problems.

Objectives: The aim of this project was to study the effects of psychosocial factors at work on the incident use of antidepressive medication in the Danish workforce.

Methodology: Baseline data (2000) were collected from a sample of 7583 Danish men and women aged 40 to 50 years. Psychosocial work factors (2000) were measured by scales of quantitative demands, work pace, emotional demands, opportunity to develop skills, variation of work, meaningfulness, social support from colleagues, social support from manager, sense of community in the workplace. Registrations for all types of generic antidepressive medication from the Danish Register of Medicinal Product Statistics were available. Incident use of antidepressive medication was defined by an entry in the database during follow up, until 2003, but no entry in the period from 1995 until baseline. After exclusion of persons out of the labour at baseline, with changed employment status in 2000, with current episode of major depression, with current or past use of antidepressive medication or with missing values among all variables, 4509 were included in the prospective analyses. Using logistic regression, we calculate odds ratio (OR) and confidence intervals (CI) for incident use of antidepressive medication, controlling for age, sex, occupational social position, family status, alcohol consumption and MDI-score at baseline.

Results: After full adjustment, lack of variation at work (OR=1.51, CI: 1.06-2.14) significantly increased the odds of incident use of antidepressive medication for the whole study group. For men, lack of social support from colleagues (OR=1.92, CI: 1.17-3.15), and for women, lack of meaningfulness, (OR=2.65, CI: 1.11-6.33) also increased the odds significantly.

Conclusion: The findings indicate that psychosocial factors at work influence incident use of antidepressive medication. Some factors may affect men and women differently.

Oral Session 11

Intercultural and Organizational Challenges Facing Health in the Workplace

Chair: **Peter G.W. Smulders**

TNO Quality of Life (Hoofddorp, Netherlands)

011-1

Descriptive Study on Immigrant Workers in the Elderly Care Sector

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The labour integration of immigrants is seen as a way of facing labour market problems generated by the population aging process in Europe. This study explored differences in psychosocial work characteristics and health and well-being indicators between Danes, Western and Non-western immigrants, working in the elderly care sector. It also looked into the differences in association patterns between these psychosocial work characteristics and health and well-being across these three groups. Data stemmed from a survey from 2005, sent to 12,744 elderly care workers in Denmark. A total of 9,949 people completed and returned the questionnaire (78% response rate). For this study, we only looked at those employees working with clients/patients, such as nurses, health care assistants, health-care helpers and physiotherapists. The final study population consisted of 7,409 workers, 7,101 Danes (91%), 184 Western immigrants (2.3%) and 124 Non-western immigrants (1.5%). Results show that immigrants working in the Danish elderly care sector reported lower possibilities for development and perceived their jobs as less meaningful than their Danish colleagues. Non-western immigrants reported more depression symptoms, poorer quality of sleep and more client-related burnout than their Danish and Western colleagues. Interestingly, it was the group of Western immigrants that perceived more negatively their work environment. Results also indicate that Non-western immigrants had higher mean scores on influence at work and predictability. However, in the group of Non-western immigrants, no significant associations between influence at work and any of the health and well-being indicators were found. Predictability was only significantly associated with decreased client-related burnout. There is a clearer association pattern between influence at work and predictability with health and well-being indicators among Danes. The results of this study suggest that there are other factors that might mediate or moderate the associations between psychosocial work environment and health and well-being among immigrant workers.

011-2

Demographic and Job Characteristics of Temporary Workers

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TNO Quality of Life (Hoofddorp, Netherlands)

Problem statement: Attempts to reduce personnel costs have led to an increase in the use of temporary workers. The effects of alternative employment arrangements on job security, wages and benefits have been extensively studied. However, there is a lack of information on the question: who are the temporary workers and what are their job characteristics?

Objectives: This study describes demographic characteristics (age, gender, education, marital status and ethnic origin) as well as job characteristics, such as work pressure, job control, emotional and physical work strain, of temporary and non-temporary workers.

Methods: In 2005 as well as in 2006, national representative samples of about 24.000 Dutch workers were surveyed within the framework of the National Working Conditions Survey. Both samples were merged for this study. The samples included workers employed on a permanent contract (84 percent), workers with a temporary contract which could be changed into a permanent contract after a probationary period (7 percent), workers with a temporary contract without probationary period (5 percent), workers with a temporary agency contract (2 percent), and stand-by or on-call workers (2 percent). The data were analyzed with ANOVA and regression analysis.

Results: In general, temporary workers are younger, more often female, single, lower educated and of non-western origin than workers with a permanent contract. In addition, temporary workers have significantly lower levels of job control. They also are more exposed to violence and aggression from the public and to physical work strain. However, work pressure and emotional strain is lowest among temporary workers.

Conclusion: Since temporary workers and non-temporary workers differ significantly in terms of demographic and job characteristics, it is important to include these variables in studies on the relation between employment status and job outcomes such as job security, job satisfaction and absence behavior.

Factors Associated with Movement Out of Overqualification. A Longitudinal Analysis

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Problem: Overqualification, a situation where ones education is greater than that required for their occupation, has been associated with poorer health and ischeamic heart disease in longitudinal studies. With an increasing number of labour force participants in Canada having higher levels of education, and being overqualified, it is important to examine the factors associated with increased likelihood of movement out of overqualification in longitudinal cohorts.

Objectives: To examine the factors associated with movement out of overqualification over a six-year period in a representative Canadian cohort.

Methodology: Data was taken from three longitudinal panels from Statistic Canada's Survey of Labour and Income Dynamics (SLID). The SLID follows respondents annually for six years. We restricted our sample to those respondents who had post-secondary degrees, were overqualified at baseline and who had responded to at least two consecutive follow-up periods (N = 5,435). Respondents were classified as moving out of overqualification if they had two consecutive years of not being overqualified. Logistic models included age, gender, length of time in Canada, mother tongue, visible minority status, if the respondent was working full-time, level of education and a panel identifier.

Results: Across the three panels, 23% of respondents moved out of overqualification. We found a graded relationship between older age, and shorter length of time in Canada since immigration, with a decreased likelihood of moving out of overqualification.

Conclusion: In this study older workers and more recent immigrants were less likely to move out of overqualification over a six-year period. Based on these results, we suggest that more resources are required to examine challenges older workers and recent immigrants to Canada face when moving out of jobs for which they are overqualified.

Health and Sick-Leave among Immigrants in Denmark

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National Research Centre for the Working Environment (Copenhagen, Denmark)

Aging of the Danish population and labor force impose increasing demands and need for changes in the elderly care sector. Immigrants have been pointed out as a potential solution for the present lack of work force given their lower participation in labor force at the moment. Aging of the population, along with increasing work demands, has heightened political interest in regards to sick-leave in Denmark. Several studies mention that work environment conditions are among the risk factors for sick-leave. The elderly care sector in Denmark shows a high number of sick-leave days per year (14 days in 2005). A qualitative study has shown that immigrants have less sick-leave in one year than Danes. This finding goes against previous international studies that find that immigrants have higher sick-leave patterns than their local counterparts. Studies have also shown that immigrants have worse health than Danes. Considering the frequently found positive relation between health patterns and sick-leave, the two findings seem to point in different directions.

Therefore, this study aims at investigating immigrants patterns of sick-leave and health status, as well as the relationship between health status, sick-leave and ethnicity. The sample consisted of 3,121 assistant-nurses and home care helpers working in elderly health care institutions in 2005, who took part in a survey investigating their psychosocial work environment. Cross-sectional analyses were performed using Multinomial logistic regression in order to investigate the relationship between self-reported health, sleeping problems and back pain with sick-leave and ethnicity. Results show that immigrants report having a significantly lower number of sick-leave days than Danes, despite reporting worse health. We found a significant effect of these health factors on sick-leave. The effect becomes more important when ethnicity and its interaction with health factors are controlled for. Results indicate that the associations between health and sick-leave is strong for Danes but not for immigrants.

The Health of Ageing Workers in Europe

**Krista Pahkin* (1), Simo Virtanen (1), Marthe Verjans (2),
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(1) Finnish Institute of Occupational Health (Helsinki, Finland); (2) Prevent (Brussels, Belgium); (3) European Agency for Safety and Health at Work (Bilbao, Spain)

Nearly one in five workers in the industrialised world is aged over 50. The population and labour force are ageing all over the European Union (EU). The challenge is how to develop the skills and employability of older workers, while maintaining the health, motivation and capacities of workers as they age.

In 2006, the European Agency for Safety and Health at Work launched a project with the aim of describing the situation of Occupational Safety and Health (OSH) of aging workers. In order to fulfil this task, the Topic Centre Risk Observatory members, together with subcontractors, gathered information (e.g. Eurostat, national data, from registers such as accidents and diseases registers, and literature) to analyze recent data and to highlight trends. The goal was also to identify information gaps and to give input for setting priorities on future measures for the occupational safety and health of ageing workers. It should furthermore allow to shorten the time between identification of an issue and design of preventive measures.

The results showed that stress was the second most frequently reported work-related health problem across Europe, with 28% of respondents reporting that stress from work was affecting their health. It seems that those aged 40-54 years are the most affected, whereas younger workers and those 55 and over report less stress at work. Regarding health outcomes, the results showed e.g. that aging workers had higher incidence rates of non-fatal accidents and occupational diseases compared with the average working population. The top 5 occupational diseases among older (55 years and over) workers are: Hearing disorders, pulmonary disorders, cancer, musculoskeletal disorders and allergic reactions. However, there are differences between the EU countries in the exposure to risks at work and in the level of age-specific information available. Information gaps could also be identified for older women and workers above 65.

Oral Session 12

Return to Work after a Mental Health Problem

Chair: **Suzanne Lagerveld**
TNO Quality of Life (Hoofddorp, Netherlands)

012-1

Work Focused Treatment of Mental Disorders & Effects on RTW

Suzanne Lagerveld*, **Roland Blonk**
TNO Quality of Life (Hoofddorp, Netherlands)

Problem description: Common mental disorders (depression, anxiety & adjustment disorder) have negative consequences on work participation (e.g. sick leave, disability benefits). Regarding the associated individual suffering and societal costs, it is important that successful return to work (RTW) interventions are available. However, few studies have evaluated interventions with respect to RTW among workers on sick leave because of mental health problems. These few studies show that activating work-focused interventions based on cognitive behavioral therapy (CBT) principles are promising. Although many workers with mental health problems are treated by psychologists, no work-focused treatment for psychologists was developed or evaluated in the Netherlands yet.

Objectives: The aim of this study is to evaluate the effectiveness of work-focused CBT (A-CBT) performed by psychologists compared to regular CBT (TAU) among employees on sick leave with common mental health disorders.

Methods: In a quasi-experimental design, 12 month follow-up data of 168 employees (79 in TAU and 89 in A-CBT) were collected. Outcome measures were: duration until RTW and mental health problems. Data were analyzed with Cox regression and SEM.

Results: We found significant effects on duration until return to work in favor of the A-CBT group: full return occurred 55 days earlier and the first increase in working hours (mostly partial) occurred 11 days earlier. A significant decrease in mental health problems was equally present in both conditions.

Conclusion: These results show that by means of focusing more and earlier on work-related aspects, psychologists can substantially speed up functional recovery in work within a regular therapy setting. This result can be achieved with relatively little extra effort and without negative side effects on the recovery of psychological complaints. Directing CBT more towards work aspects can be a fruitful approach with benefits for employees, employers as well as care-providers.

012-2

Relationship Guideline Adherence and RTW by Workers with Mental Disorders

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Publication not authorized.

Cost-Effectiveness of Guideline-Based Care for Workers with Common Mental Disorders

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Description of the problem: Common mental health problems often lead to long-term sick leave, causing substantial societal costs. Primary care usually focuses on recovery of symptoms instead of return to work. In early 2000, the Dutch Association of Occupational Medicine (NVAB) has published a practice-based guideline on the management of workers with mental health problems. The guideline promotes an active role of the occupational physician (OP), in counseling workers with the specific aim to speed up return to work.

Objective: To evaluate the cost-effectiveness of guideline-based care compared to usual care for police workers who are absent from work due to common mental health problems.

Methods: An economic evaluation from a societal and a company perspective was conducted, alongside a pragmatic randomized controlled trial. Workers in the intervention group were treated according to the NVAB-guideline. Workers in the control group received usual care with minimal involvement of the OP and easy access to a psychologist. Duration of sick leave in the first year of follow-up was the main outcome measure. Analyses were based on intention to treat principles. Bootstrap techniques were used to estimate the 95%-confidence interval around the difference in mean costs and effects between the two groups. Cost-effectiveness planes and acceptability curves were calculated.

Results: 240 police workers on sick leave due to common mental health problems were included. Health care utilization costs (574.532 in total) were significantly lower in the intervention group (mean difference = -520 (95%-CI: -980;-59)), while there were no significant differences in days of sick leave and productivity loss costs. Results of sensitivity analyses showed that these findings were robust.

Conclusions: These results suggest that from society or employers perspective, guideline-based care could be cost-effective, as lower direct costs lead to equal treatment outcomes of workers with common mental disorders.

Return to Work from Mental Health and/or Addiction-Related Leave

Jennifer Glasgow*

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Having effective return-to-work strategies that focus specifically on mental health and addictions represents a key opportunity to reduce the financial costs of absenteeism and disability leave and to increase staff retention. This project aimed to align individual experiences with academic viewpoints to contextualize workplace mental health and addictions and return-to-work for Vancouver Community Mental Health Services (VCMHS, an agency of Vancouver Coastal Health). Four employees who had been on disability leave for mental health and/or addiction-related reasons, two coworkers, eight supervisors, and one claims management staff were included in a qualitative action research study to answer the question: "What factors influence return-to-work for employees of VCMHS who have been on disability leave for mental health and/or addiction-related reasons?" Broadcast emails were used to invite participants. Individuals engaged in one to one interviews, except for five supervisors who attended one learning circle that followed principles of speaking with intention, listening with attention, and awareness of the impact of contributions. Data collection took place over three months. Verbal transcripts were analyzed through a framework approach to coding. Codes and quotes were provided to each participant for verification. Data analysis yielded six findings that informed the research question: the mental health environment, understanding of mental illness and addictions, the nature of mental health and addictions, trust and support, the return-to-work process, and early intervention. Conclusions from these findings included: mental health and addiction-related understanding and stigma vary; there is a lack of understanding of mental health and addictions amongst stakeholders and in policies and principles; supervisor training, early intervention, tangible health programs, and ongoing dialogue about mental health and addictions will positively affect return-to-work; trusting and supportive relationships are an important factor for return-to-work, especially with supervisors; and effective staffing in claims management and collaboration between stakeholders positively influence return-to-work.

Return to Work Interventions for Adjustment Disorders: A Systematic Review

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Absenteeism among workers is often caused by emotional and psychological stress related to significant life events. Stress often leads to symptoms and impaired functioning and can result in an adjustment disorder. Adjustment disorders in workers are very common. More than 10% of total claims for occupational diseases are adjustment disorders attributed to stress at work.

Many interventions are available for workers with adjustment disorders. Interventions can be aimed at the individual worker or at groups of workers. The outcome of these interventions is often the reduction of emotional and behavioral symptoms, and adequate coping behavior of the worker, resulting in return to work.

Currently, no systematic review exists on return to work interventions for adjustment disorders. With the help of the Cochrane Occupational Health Field, the Cochrane Depression, Anxiety and Neurosis Review Group and the Dutch Cochrane Centre, we have conducted a systematic review on this topic. The objectives of the review are to evaluate the efficacy of interventions aimed at return to work (RTW) for workers with adjustment disorders, and to investigate the impact of different types of interventions.

The systematic review identified 6 randomized controlled trials on RTW interventions for adjustment disorders. These studies were published from 2003 to 2006. Four of the studies used an intervention based on cognitive behavioral therapy (CBT). The pooling of data of these studies proved to be difficult due to heterogeneity between the studies. Discriminating between studies in a primary healthcare setting, a psychological healthcare setting, and an occupational healthcare setting seemed to decrease heterogeneity.

This systematic review suggests that RTW interventions in a public and occupational healthcare setting are effective for RTW, but do not lessen the mental health problems. Also, earlier RTW is not associated with a decrease in symptoms of mental health problems, such as stress, depression and anxiety.

Illness Perceptions, Common Mental Disorders and Wishes of Return-to-Work

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(1) The National Research Center for the Working Environment, Denmark (Copenhagen, Denmark); (2) University Medical Center Groningen (Groningen, Netherlands)

Background: In Denmark, people on sickness absence due to common mental disorders (CMD) are substantially less likely to return to their former workplaces than people with sickness absence due to other causes. Illness perceptions affect how people cope with their disease and might also affect return-to-work (RTW). In this study, we analyzed how illness perceptions, i.e. the attributed cause for the current sickness absence, affect wishes of RTW among employees on long-term sickness absence due to CMD.

Methods: We identified all employees who are on long-term sickness absence (4-12 weeks) due to self-reported CMD in the Greater Copenhagen Area. To date, 264 participants filled out a questionnaire, measuring, among other things, wishes for RTW and illness perceptions. Participants will be followed-up for six months. Further, in depth interviews with 20 participants will be conducted.

Results: One hundred respondents (44%) stated, that they did not wish to return to their former workplace. No gender difference was found. Respondents who did not wish to return to their former workplace were more likely to report that mobbing (28% vs.4%, $p<0.001$), violence/threats at work (20% vs.5%, $p<0.001$), conflicts (46% vs.13%, $p<0.001$) and lack of supervisor support (64% vs.31%, $p<0.001$), had contributed to their sickness absence compared to all other respondents.

Conclusion: Attributing current sickness absence to psychosocial work environment aspects related to interpersonal relationships is associated with the wish not to return to the former workplace. Data on actual RTW and additional analyses from qualitative interviews will be available at the conference.

Oral Session 13

Reconciling Work and Personal Life

Chair: **Patricia McGovern**

University of Minnesota (Minneapolis, USA)

013-1

Working Time Arrangements, Work-Life Balance and Well-Being – A Review

Karen Albertsen ^{*}(1), Asbjörn Grimsmo (2), Gudbjörg Rafnsdóttir (3), Björg Sørensen, Kaisa Kauppinen, Kristinn Tómasson (4)

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Purpose: New forms of working life organization have made a pressure toward more flexible and more variable working time arrangements. The purpose of the present review was to summarize the scientific literature concerning the consequences of long and non-standard working hours and employees' influence over working hours on work-life balance and well-being. It also aimed to describe the Nordic labor market and give examples of ongoing Nordic studies.

Methods: Literature focusing on the social consequences of the organization of working hours on work-life balance was searched in large databases, such as PSYC-info and Pub Med, which was supplemented with other relevant literature. 85 studies were included in the review.

Results: The results strongly supported the fact that a greater number of working hours were associated with a lower level of work-life balance and with decreased psychological well-being among women. In male samples, the results were less conclusive, while in gender-mixed samples it was strongly supported that overtime work was associated with lower levels of work-life balance. There was strong evidence that non-standard working hours had a negative influence on work-life balance, and some evidence that it had a negative influence on children's well-being and on marital satisfaction. Employees' influence over work schedule was associated with better work-life balance and with improved psychological well-being in a range of studies. However, clear conclusions are difficult to draw due to methodological problems in the studies. Interventions that included reduced hours with wage compensation, rapidly rotating shifts and increased influence on work schedules all showed positive effects on social life indicators.

Conclusion: Social consequences of working time arrangements are relatively well documented in the scientific literature. There is a need for intervention studies, longitudinal studies, and studies focusing on influence on schedule, consequences regarding children's development and well-being as well as marital satisfaction.

013-2

Balancing Working and Private Hours as Resident in Academic Hospitals

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Problem description: The balance between work and private life is distinguished into family-to-work interference and work-to-family interference. Residents work longer hours per week than most other professionals in the same age-cohort. Private life context may influence decisions on working over-time but working over-time may in turn be responsible for more work-to-family interference.

Objective: To study the effect of working overtime on work-home interference in medical residents and to determine if home-work interference may be seen as a determinant of working over-time.

Methodology: A cross-sectional questionnaire study was conducted. A random sample of 154 residents from one academic medical center were asked to fill in valid scales on home-work-home interference (SWING (scale scores between 0 and 3)), need for recovery after working time (scale scores between 0 and 100) and working hours through questionnaires. Self-reported top-3 determinants and effects of working over-time were sampled as well. Residents were categorized in two groups: working over-time and not working over-time. Logistic Regression Analysis and t-tests were used to analyse differences in determinants and effects of working over-time between the two groups.

Results: Residents from a total of 22 different medical specialties responded; 53% were females, 66% were married or living together and 22% had children. Working over-time resulted in significantly more work-home interference (1.7 vs 1.5; $p=0.003$) and significantly higher need for recovery scores (56.8 vs 41.4; $p=0.01$) compared to not working over-time, and were the most frequently mentioned in the top-3 effects of working over-time. More home-work interference is associated with higher chances of working over-time (OR=10.3; 95% CI: 0.97-109.9; $p=0.05$) but private context was not mentioned in the self-reported top 3 of determinants.

Conclusion: Home-work interference may be seen as a determinant of working over-time in residents working in an academic medical center environment, although it is less recognized by residents. In addition, working over-time results in more work-home interference.

Work-Family Balance in Malaysia: Does Work-Family Policy Make a Difference?

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In Western literature, work-family policy is seen as an important agenda to address work-family balance issues. However, there is a lack of evidence on the relationship between work-family policy and work-family balance in Eastern cultures. The aim of this study was to advance the understanding of work-family policy and its relationship to work-family balance (i.e. conflict and enrichment) in Sarawak, East Malaysia. A sample of 506 employees from three public and three private sector organizations was surveyed twice in three months. By way of questionnaires, participants completed measures of work-family policy by Haar and Spell (2003), work-family conflict by Carlson et al (2000) and work-family enrichment by Carlson et al (2006).

The results showed that all six organizations offered some policies related to pregnancy, leave and financial assistance. More policies were offered in the public than the private sector. In contrast to western developed countries, no organization offered a flexible work practices policy. At Time 1, knowledge of work-family policies was negatively related to work-family conflict (WFC) only, while utilization of policies was positively related to work-family enrichment (WFE) and family-work enrichment (FWE), and negatively related to work-family conflict (WFC) and family-work conflict (FWC). At Time 2, both knowledge and utilization of policies were not related to WFC and WFE. In sum, work-family policies are in place in the Malaysian organizations investigated and they do make a difference in employees' work-family balance. However, these findings suggest that work-family policies only have a short-term impact on minimizing conflict and enhancing enrichment. As such, aspects of Eastern culture in relation to the knowledge and utilization of work-family policies are discussed.

Antecedents and Consequences of Work-Life Conflict in Switzerland

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Background: Scientific research on work-life balance has begun only about a decade ago. Studies in this field traditionally focus on work-family conflict and are mostly restricted to employees with children living at home. Studies have also been largely limited to English-speaking countries, in particular to North America. In German-speaking countries, especially in Switzerland, there is a lack of data and research concerning this topic and specifically relating to work-life conflict and its antecedents or work- and health-related consequences.

Data: To overcome this data and research gap, we collected data by conducting a survey in four large and well-known companies of different industrial sectors (health-care system, financial sector, transportation sector) in Switzerland, with a total sample of 6'091 employees. We developed a fully standardized and comprehensive questionnaire, which allowed to replicate the results from international studies.

Results: Much evidence has been found for an association between work-related factors such as autonomy at work or time-based workload and work-life conflict. Furthermore, indicators of health and well-being are strongly associated with work-life conflict. In particular, findings show a clear dose-response relationship between the degree of work-life conflict or imbalance and different musculoskeletal and psychological disorders (back pain, negative affectivity, burnout, stress etc.) as well as psychosomatic troubles (chronic fatigue, insomnia etc.). Finally, we found the expected association between work-life conflict and work-related outcomes such as intention to turnover, commitment or job satisfaction.

Conclusion: By providing data and empirical evidence from a large, even though non-representative sample of the Swiss working population, the study partly fills the above mentioned research gap in Switzerland. Our results support findings from international studies, i.e. cognitions apply not only to North American countries and working people with children, but can apparently be transferred to Switzerland and generalized to employees overall.

Work-Environment, Performance-Based Self-Esteem and Work-Family Balance Among Danish Knowledge-Workers

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Background: The global working life has increased demands to productivity, effectiveness and competitiveness. To meet the demands, companies ask for professional, highly educated employees with strong personal competences and ambitions. One possible downside is that this development challenges the work-family balance and may result in discontent and conflicts.

Aims: For this reason, we examined the associations between work-environmental factors and work-family conflicts among 396 Danish knowledge-workers. In addition, we investigated whether performance-based self-esteem mediated or moderated the associations. **Methods:** Participants were occupationally active respondents to the second National Danish Psychosocial Work Environment Study. Data were analyzed with a multiple GLM procedure in three steps. In the first step, gender, family-status and several work-environmental factors were entered into the model. In the second step, performance-based self-esteem was added, and in the third step, interaction effects between performance-based self-esteem and the work-environmental factors were added.

Results: The results showed positive associations between reports of work-family conflicts at the one side, and reports of quantitative demands and higher number of working hours on the other side. Furthermore, work-family conflicts were significantly higher for employees who, in order to meet a deadline, worked in evenings or weekends, skipped vacations or skipped lunch-breaks. A family-friendly work place culture protected against work-family conflicts, while influence and flex-time was unassociated with work-family conflicts. Performance-based self-esteem was positively associated with work-family conflicts, but did neither mediate nor moderate the associations between work-environment and work-family conflicts.

Conclusion: The results suggest that the job demands faced by many knowledge-workers are closely associated with work-family conflicts. A family-friendly work place culture may reduce the conflict level. Performance-based self-esteem may increase the likelihood of conflicts but does not change the effects of job demands, long hours or deadlines on work-family conflicts.

Job Demands, Burnout and Work-Family Conflict: Spillover among Australian Police

Garry Hall*, Maureen Dollard
 University of South Australia (Adelaide, Australia)

Police men and women work in boundary spanning positions that require them to engage directly with the public contributing to psychosocial strain reflected in the traditional stressor/strain paradigm. In the stressor/strain literature there is evidence for a mediated pathway from job demands and work-family conflict (WFC) to emotional exhaustion, and alternatively, some limited evidence for the reverse causal process - job demands and emotional exhaustion to WFC. Working from the psychosocial health impairment aspect of the Job-Demands Resource Theory of burnout this study investigated spillover relationships of job demands, emotional exhaustion, and WFC among 395 Australian Frontline Police Officers in a 3 wave longitudinal study. Specifically, we hypothesized that the two pathways could coexist, and thus, we proposed a more comprehensive model including reciprocal-mediated, and cross-domain pathways. Using structural equation modelling (SEM), it was found that a comprehensive model including simultaneous reciprocal mediated, and cross-domain relationships over a 3 wave time span fit the data more convincingly than models testing separate mediated pathways. This study highlights the importance of addressing spillover relationships in the traditional stressor --> strain paradigm but extending the model to a stressors --> strain--> stressor paradigm. Implications are that interventions should aim to firstly reduce high stress job demands within frontline police work in order to reduce emotional exhaustion and WFC that can each influence the other in reciprocal-mediated, and cross-domain directions.

Total Workload and the Postpartum Mental Health of Employed Women

Patricia McGovern* (1), Rada Dagher (2), Heidi Roeber Rice (3), Bryan Dowd (1)

(1) University of Minnesota (Minneapolis, USA); (2) University of Florida (Gainesville, USA); (3) Regions Hospital (St. Paul, USA)

Problem: Many mothers in the United States are returning to work soon after childbirth. Yet little is known about the impact of employment and family commitments on maternal well-being.

Objective: To investigate the effects of total workload (paid and unpaid work) and psychosocial factors on women's health during the year after childbirth.

Methods: This study employs a prospective cohort design to examine the effects of total workload, job satisfaction and stress, social support, breastfeeding, health care utilization, and infant behavior on health. Eligible women were enrolled while hospitalized for childbirth at selected hospitals in the Twin Cities, Minnesota in 2001. Sample selection criteria included: being 18 years or older, speaking English, and being employed. Telephone interviews were conducted at 5 weeks (N=716), 11 weeks (N=661), 6 months (N=625), and 12 months (N=575), after delivery. Mental and physical health were measured at each time period using the SF-12. Childbirth-related symptoms were measured with a previously validated instrument. Panel data analyses employing econometric methods were used to estimate the research model.

Results: The women averaged 30 years of age, 86% were Caucasian, and 73% were married. On average, women's total workload ranged from 14.4 to 15.1 per day over 12 months postpartum; paid work ranged from 0.61 hours to 7.6 hours per day. Fixed effects regression analyses revealed higher total workload and infant sleep problems were significantly associated with poorer mental health and increased symptoms. Infant colic was associated with poorer mental health. Increased perceived control and social support were significantly associated with better mental health and fewer symptoms. Health care expenditures were positively associated with symptoms.

Conclusions: Policies such as job-protected leave from work or flexible work arrangements may provide the resources needed by mothers for recovery from childbirth, mental health protection and successful integration of family and work commitments.

Oral Session 14

Psychosocial Factors, Cardiovascular Problems and Mental Health Problems

Chair: **Paul Landsbergis**

Mount Sinai School of Medicine (New York, USA)

014-1

Work Organization and Mental Health in the Chilean Mining

Maria Elisa Ansoleaga Moreno*, **Juan Pablo Toro Cifuentes**
Universidad Diego Portales (Santiago, Chile)

This research postulates a significant relationship between the variables of high psychological demands and low autonomy and the risk of develop physical and mental health problems at work. The new way of work organization and the psychosocial conditions at work (environmental conditions, organizational atmosphere, violence at the work, conciliation with personal life, etc) are the principal variables that are associated to a detriment of physical and mental health.

The variables were assessed troughs an adaptation of ECQUOTEST questionnaire (SST, Quebec) that was applied to a sample of 355 workers who belong to the permanent staff of a miner company. This instrument is based in the theoretical models of «demand-control-support» (Karasek) and «balance effort-reward»(Siegrist). The instrument evaluates the psychosocial conditions at work and the physical and mental symptoms. The preliminary results tend to confirm the hypothesis formulated.

014-2

Work-Related Determinants of Sickness Absence among Danish Human Service Workers

Reiner Rugulies* (1), **Karl Bang Christensen (1)**, **Marianne Borritz**, **Ebbe Villadsen (1)**, **Ute Bültmann (2)**, **Tage S. Kristensen (1)**
(1) National Research Centre for the Working Environment (Copenhagen, Denmark); (2) University of Groningen (Groningen, Netherlands)

Problem: Identifying the determinants of sickness absence and developing effective prevention strategies has become a major topic of interest in the political and public health discussion in many countries over the last few years.

Objective: To analyze the effect of psychosocial working conditions among Danish human service work professionals, an occupational group known for high rates of sickness absence.

Methods: A prospective cohort study was conducted. At baseline, we measured 16 different psychosocial work characteristics, of which we combined 8 into a «Psychosocial work environment index» (PSW-index). Rate ratios (RR) for the association between work characteristics at baseline and sickness absence at 3-year follow-up were calculated with multivariate Poisson regression.

Results: Statistically significant predictors for the number of sickness absence days were high emotional demands (RR=1.11 for a 1 standard deviation increment on the scale), high demands for hiding emotions (RR=1.19), high role conflicts (RR=1.17), low influence at work (RR=1.19), low meaning of work (RR=1.15), and low quality of management (RR=1.16), after adjustment for numerous covariates. When we used the PSW-index, we found that participants who scored in the lowest (i.e. most adverse) quartile of the index had a 1.71-fold increased risk of sickness absence (95% CI: 1.32-2.21). A high number of participants (19.5%) reported exposure to violence and threats from clients during the last 12 months, and these participants were particularly at high risk for sickness absence (RR=1.60, 95% CI: 1.31-1.95). Calculations of the etiologic fraction showed that improving the PSW-index from the lowest to the highest quartile and eliminating exposure to violence and threats would have prevented 32% of all sickness absence days in the sample.

Conclusion: This study shows that a wide range of psychosocial work characteristics contribute to sickness absence in human service workers, pointing to an important potential for prevention of both human suffering and economic loss.

Effort Reward Imbalance: is 1/2 as Bad as 2/4?

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(1) University of Wuppertal (Wuppertal, Germany); (2) University of Ulm (Ulm, Germany)

Introduction: the effort reward imbalance (eri) model is based on the assumption that an on-going imbalance between efforts made and rewards received at work may lead to adverse health. many studies have confirmed this. in this secondary data analysis, we investigate the question whether it is the imbalance per se which is associated with health (ratio, e.g. "1/2") or whether the degree of exposure to effort and reward also matters (1/2=2/4=3/6?). the next-study (www.next-study.net) investigating nurses' work and health in 11 european countries allows to analyse this.

Methods: self-report data derived from 10970 nurses (8 countries) having participated both in the 1st (2002/3) and the 2nd (2003/4) next questionnaire assessments. the short eri-scale was used (effort 6, reward 11 items). eri ratio was categorised (0.2 (best=reference) to 1.5+(most adverse)). logistic regression analysis was adjusted for age, gender and country. outcome was "disability" ("von-korff-disability-score" = daily disability due to low-back and/or neck-shoulder complaints, score 0 vs. 1-6).

Results: in relation to the most fortunate eri ratio ("0.2"), the or for disability (1st ass.) increased gradually with rising ratio (e.g. ratio=1.0: or 7.0 (5.2-9.4) and ratio=1.5+: or 12.3 (8.7-17.5)). among all participants without disability, at the 1st assessment (n=5584), the risk of having developed disability after 12 months was increased with increasing eri ratio (1st ass.) (e.g. ratio=1.0: or 2.0 (1.3-3.1) and ratio=1.5+: or 2.5 (1.4-4.3)). for both measurements no significant difference was found between individuals with the same ratio but with a different extent of effort and reward.

Discussion: the results indicate that it is the imbalance that matters, independently of extent of exposure. consequently, high efforts at work might be just as successfully compensated by high rewards to prevent ill health as low efforts require low rewards only. methodological limitations, however, need to be considered (e.g. distress assessment, self report outcome).

Working Conditions and Masked Hypertension

Paul Landsbergis* (1), Peter Schnall (2), Karen Belkic (3), Joseph Schwartz (4), Dean Baker (2), Thomas Pickering (5)

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Blood pressure (BP) measured with an ambulatory (portable) monitor (ABP) reflects a person's BP during normal daily activities, including work, and is more strongly associated with subsequent CVD than traditional "casual" clinic BP. The observation that a person with normal clinic BP may have elevated awake ABP has been labeled "masked" (or "occult") hypertension. Masked hypertension is associated with increased CVD risk and has been observed in 10-30% of adults with normal clinic BP. Methods: Data are presented from two New York City studies: 1) The 1985-2000 longitudinal Work Site Blood Pressure Study (n=267 men at the first round of data collection and n=195 men from the second round 3 years later); and 2) The 2004-2005 cross-sectional Mount Sinai Work and Health Study (n=42 male and 133 female hospital workers). Participants wore an ambulatory monitor at least during waking hours on a workday. Masked hypertension was defined, as recommended, as awake systolic ABP \geq 135 mm Hg or diastolic ABP \geq 85 mm Hg and casual clinic BP $<$ 140/90 mm Hg. Associations between work stressors, education and masked hypertension were tested by multiple logistic regression among participants with normal casual clinic BP ($<$ 140/90 mm Hg). Results: The association between job strain and masked hypertension in the Work Site Study was OR=1.54 (95% CI 0.61-3.91) at baseline and OR=5.74 (95% CI 1.86-17.72) at the 3-year follow-up, adjusted for age, race, BMI, education, smoking, alcohol and worksite. In the Mount Sinai Study, odd ratios ranged from 1.5-5.0 for job strain, effort-reward imbalance, evening, night or rotating shift work, and having only a secondary education, adjusted for a similar set of potential confounders. Conclusions: This is the first study to test and find associations between job stressors and masked hypertension. A public health approach incorporating clinical guidelines, workplace surveillance, and improved working conditions will be discussed.

Have a Heart: Adaptation to the Workplace with Cardiac Illness

Fergal O'Hagan*

University of Toronto (Peterborough, Canada)

Objectives: How do workers adapt to the challenge of return to work following the onset of cardiac illness? Research literature provides little understanding beyond a range of “factors” that are associated with return to work outcome. The aim of this qualitative, workplace-based study is to characterize the experience workers, the process of adaptation to the workplace and the interaction between their agency and workplace and other influences involved in this process. The focus of this presentation will be on work practices and workplace relationships as enabling and constraining influences on adaptation.

Methods: The study was ethnographically-oriented, using grounded theory to inform the sampling and analysis framework. Data were derived from semi-structured in-depth interviews with 12 workers, having suffered occupational disability owing to cardiac illness and returning to work at a large auto manufacturing plant within the past three years. Longitudinal information was obtained from nine of the workers through follow-up over a six to eight month period. The University of Toronto Research Ethics Board approved this project.

Results: All participants were male, had experienced a range of cardiac problems in terms of form, severity and onset, and fulfilled diverse roles in the plant, including a variety of assembly jobs and trade work. Adaptation to the workplace was influenced by work demands, immediate relationships with supervisors, coworkers, occupational health personnel and practices around disability and benefit management. For their part, workers deployed creative strategies to respond to these influences, contingent upon the quality of work relationships and the role they occupied in the plant.

Conclusions: Work demands, relationships and structures provide a range of possibility for worker adaptation within the constraints of the production imperative present. Implications for practice for work and health researchers and professionals will be discussed as well as potential linkages to theory.

Psychosocial Factors at Work and Biomarkers of Stress

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Kazan State Medical University (Kazan, Russian Federation)

Aim: The aim of the study was to investigate effects of job stress factors on biomarkers, which contribute to the development of cardiovascular diseases: saliva cortisol, serum cholesterol, free radicals, and microcirculation as well.

Methodology: Psychosocial factors were measured by use of the Russian versions of the Job Stress Questionnaire (JCQ) and the Effort-Reward Imbalance Questionnaire (ERI). Workers collected saliva samples four times a day (a wakening level, 30 minutes after wakening, 8 hours after wakening, and before going to bed) twice a week - on a weekend and a workday; totally 432 saliva samples from 54 workers were analyzed. Serum cholesterol, free radicals in blood, and blood flow in microvessels (laser doppler fluometry) were investigated in 166 workers.

Results: As for saliva cortisol, in the job stress group (either iso-stress, or job strain, or effort-reward imbalance) the most unfavorable changes were observed: after statistically significant morning rise, the cortisol levels quickly fell, reaching the minimum in evening time, both on a weekend (15,2, 21, 10,8, and 7,2 ng/ml) and a workday (12,9, 22,1, 10,5 and 9,4 ng/ml). Hence, the state of this group was described as perceived chronic stress and decreased functional capacities. The link between job stress levels and serum cholesterol was not revealed. At the same time in the low control group 58,4% of workers were classified as having an increased risk of coronary heart disease on the base of the Framingham equation compared with 41,6% in the autonomous group ($p=0,051$).

Blood hydroperoxides levels were higher in the job strain group (high demand and low control) compared with non-strained workers: 11 (SD 4,6) vs 9,0 (SD 4,0) relative units. Capillary tonus was higher in the low control group as well.

Conclusion: Non-lipid hypothesis explaining the development of cardiovascular diseases in presence of job stress might be proposed.

Self-Reported Hypertension and Job Strain in Nursing Teams

**Luciana Portela* (1), Lúcia Rotenberg (1), Rosane Griep (1),
Paul Landsbergis (2)**

(1) Oswaldo Cruz Foundation (Rio de Janeiro, Brazil); (2) Mount Sinai
School of Medicine (New York, USA)

Description of the problem: Hypertension is a common health problem and evidence suggests that the workplace plays an important etiologic role. There is no agreement concerning the best way to assess job strain, but the continuous form of the variable dichotomized at the highest quartile may leave only a small number of subjects highly exposed to job strain.

Objectives: To investigate the association between high job strain and self-reported hypertension in 1307 female nurses at three hospitals in Rio de Janeiro-Brazil.

Methodology: Job strain (assessed by the Swedish demand-control scale translated to Portuguese) was defined according to (a) the four psychosocial categories proposed by the demand-control model: “low strain” (reference group), “passive job”, “active job” and “high strain” and (b) the ratio between job demand and job control (quotient term), using the upper quartile defined as having high job strain. The self-reported hypertension outcome was characterized according to four questions related to this variable. Logistic regression, adjusted odds ratios and 95% confidence intervals are presented.

Results: After adjusting for age, marital status, education, ethnicity/background, income and occupational category, high job strain was significantly related to hypertension (OR=1.45; 95%CI: 1.03-2.05) only when considering the top quartile of the quotient term. Using the quadrant term, compared to workers in low strain jobs, the prevalence of self-reported hypertension was 1.22 (0.83-1.80) for workers in passive jobs, 1.12 (0.77-1.63) for nurses in high strain jobs and 0.86 (0.63-1.18) for workers in active jobs.

Conclusions: In this study, the quotient term was more sensitive to associations with self-report hypertension than the quadrant term. These results are particularly interesting considering the significant association using self-reported hypertension, which can offer an alternative to situations where using blood pressure monitoring is not feasible. The relation between hypertension and occupational stress deserves more investigation.

Financial support: CNPq/FAPERJ/Mount Sinai School of Medicine

Oral Session 15

Psychosocial Risks and Mental Health Problems among Different Groups of Workers

Chair: **Bernadette Stringer**

McMaster University (Hamilton, Canada)

015-1

Job Strain and Effort/Reward Imbalance in Call-Centre Operators

Paul Maurice Conway*, Paolo Campanini, Donatella Camerino, Silvia Punzi, Giuseppe Paolo Fichera, Samantha Sartori, Giovanni Costa

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Publication not authorized.

015-2

Motivation at Job Entry, Reward and Well-Being in Call-Centre Operators

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Introduction: Since few people usually access a job in call-centres being highly motivated about their choice, in this study we aimed to evaluate whether the impact of initial motivation to seek employment in a call-centre on psychological well-being and thinking of leaving the job, changes according to conditions of effort-reward imbalance.

Participants and measures: 474 Italian call-centre operators reported their initial motivation to accept the job and this was labelled as “casual – instrumental” or “intrinsic”. The Siegrist’s Effort/Reward Imbalance questionnaire was used to assess work stress deriving from a lack of rewards at the workplace. One item measured “thinking of leaving the job”. The General Health Questionnaire was used to assess “psychological well-being”. A multivariate linear regression analysis was conducted adjusting for sex, age, education, presence of children and working hours.

Results: As a whole, only 11,4% of operators entered the job being “intrinsically” motivated. Of these, 8,9% suffered from an effort/reward imbalance condition which was also reported by 29,3% among those with no such “intrinsic” motivation. Adjusted regression analysis showed that workers with an intrinsic motivation to work in a call-centre at entry had higher “psychological well-being” and lower “thinking of leaving the job” (betas 0.10, 0.12; $p < .01$). The adverse effects of motivation at job entry on both “psychological well-being” and “thinking of leaving the job” were higher among those reporting an effort/reward imbalance condition (betas 0.16, 0.22 $p < .001$).

Conclusions: These results suggest that, irrespective of initial motivation to work in a call-centre, adequate rewards (in terms of esteem, career and pay) provided by an organization to balance efforts spent, may favour psychological health and the will to stay in the job. This may be attributed to the fact that when external conditions can foster personal growth, employees may shift their job attitudes towards a more “intrinsic” motivation.

Call Centre and other White-Collar Employees: Evaluating Stressors and Health

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The problem: The limited research available on call centre workers (CCW) indicates that they suffer higher work-related stress and report poorer health.

Objective: To evaluate the perceptions of CCW relative to those of other white-collar workers (WCW) from the same large service organization (WCWS) and from a specialized government unit (WCWG), regarding their stressors and health, utilizing the Copenhagen Psychosocial Questionnaire (COPSOQ), and the Work Productivity and Activity Impairment Questionnaire (WPAI).

Methods: In the context of a pre and post feasibility intervention study, CCW, WCWS and WCWG completed the WPAI and the following COPSOQ dimensions: Quantitative demands, Cognitive demands, Influence on work, Development possibilities, Meaningfulness of work, Commitment to the organization, Quality of leadership, General Health, Mental Health, and Vitality. Modified Dillman strategies were used to enhance response.

Results: Questionnaires were returned from 50 CCW, 48 WCWS and 44 WCWG, with response rates of 46%, 84% and 76%, respectively. The response rate from the CCW may have been decreased due to questionnaire administration during a busy season. The CCW had more male (46%), non-permanent (18%), and part-time employees (52%); they were younger (mean age 34 vs 46 years), and less experienced (3 vs 15 years). Using linear regression, controlling for age, work experience and gender, WCWG and WCWS reported higher quantitative demands, and WCWG greater cognitive demands, than CCW. However, CCW reported lower Influence than WCWS and WCWG, and less Development possibilities, Meaningfulness of work, and Commitment than WCWG. Although the groups did not differ on the mental health or vitality scales, CCW reported worse general health and their WPAI scores indicated a greater impact of health problems on productivity at work.

Conclusions: Call center workers demonstrate low influence and meaningfulness of work and evidence of worse health relative to other white-collar workers.

Constraints and Mental Health: the Situation of Firefighters

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Firefighters are exposed to numerous risks likely to harm their mental health. In addition to the risks inherent to their occupation (risk of injury, intense physical work, risk of death, etc.), other existing constraints in the psychosocial environment of workers can also influence their mental health, as demonstrated by numerous studies on social epidemiology.

Our research aims to measure the presence of certain psychosocial factors in the work environment of firefighters (N: 429; 98% response rate) and their mental health status. Thus, a questionnaire was constructed, based on validated scales and used in similar studies on other types of workers. The psychosocial factors were measured by, among others, the Karasek Job Content Questionnaire for job strain and the Siegrist Effort/Reward Imbalance questionnaire. The mental disorders included psychological distress: K6 (CIDI revision); post-traumatic stress disorder: Modified PTSD Symptoms Scale; and burnout: the Copenhagen Burnout Inventory.

Despite the numerous risks related to their job, firefighters seem to be in good mental health. In fact, the prevalence of burnout was 2.4% (compared to 49% among 911 operators), while that of PTSD was 1.3%, and that of psychological distress was 27.8% (compared to 42.9% in the Canada Health Survey). Moreover, the analysis of the psychosocial factors reveals that, compared to other workers, firefighters enjoy a psychosocial environment with few constraints (prevalence of job strain was 13.3% compared to 84.4% among 911 operators, 18.3% among white-collar workers and 21.7% in the Quebec Health Survey; Effort/Reward Imbalance: 11.8% compared to 89.3% among 911 operators and 25% among white-collar workers). These results provide directions for interventions in different work environments, based on theoretical approaches to the organization of work in a high-risk environment.

Research funded by the Canadian Institutes of Health Research (CIHR) and the Institut de recherche Robert-Sauvé en santé et sécurité au travail (IRSST).

Acknowledgment and Psychiatric Symptoms in Police Officers in Switzerland

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The way supervisors acknowledge specific contribution and efforts of their employees has an impact on occupational health and well-being. Acknowledgement is a protective factor when it is sufficiently provided. We carried out a study about occupational health in police officers with special emphasis on acknowledgment and reward.

A questionnaire was sent to 1000 police officers and inspectors working for a cantonal administration in Switzerland. In total, 695 participants answered the questionnaire. We used the TST questionnaire (French version of the Langner's questionnaire on psychiatric symptoms) to identify cases characterized by potential mental health problems. Multiple choice items (5 modalities ranging from "not at all" to "tremendously") were used to measure acknowledgment.

The score for psychiatric symptoms was high (TST score ≥ 9) for 86 police officers and inspectors for whom health might be at risk. Compared with police officers having low or medium scores for psychiatric symptoms (TST score < 9), police officers with high TST scores were more likely to report the lack of support and attention from the supervisors (odds ratio [OR] 3.2, 95% confidence interval [CI] 2.0 to 5.1) and the lack of acknowledgment by the hierarchy (OR 3.0, 95% CI 1.9 to 4.8). They were also more likely to mention that judicial authorities have a low consideration for police officers (OR 2.7, 95% CI 1.7 to 4.3) and that the public in general have a low appreciation of police officers (OR 1.8, 95% CI 1.2 to 2.9).

Preserving mental health in occupations characterized by high emotional demand is challenging. Our results show that acknowledgment and mental health are associated. Further research should address a potential causal relation of acknowledgment on mental health in police officers and inspectors.

New Teachers Under Stress: Social Support Predicts Turnover Intention

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Objectives: Voluntary employee turnover is a problem within all occupations, but is especially critical among teachers. Less than 10% of teachers reach normal retirement age, while new teachers are 2.5 times more likely to leave the profession than those who have been teaching for more than 2 years. Existing theory and empirical evidence suggests that intention to turnover itself is the strongest predictor of leaving. Social support has emerged as a key predictor of turnover intention. The present study examined three routes through which social support may exert its influence on turnover intention, in a sample of new teachers: (a) directly, (b) as a buffer against workload, and (c) indirectly, through job satisfaction.

Methods: Questionnaires on the study variables (i.e. workload, social support, turnover intention) were collected from 71 new teachers. There were 14 men (19.7%) and 57 women (80.3%), and the average teaching experience was 1.82 years (SD = 1.71). We controlled for the possible effects of age, gender and teaching experience in our analyses.

Results: First, we found evidence for a direct relationship between social support and turnover intention. Second, a significant interaction emerged between support and workload. Social support buffered the effects of high workload on turnover intention, such that teachers with higher social support had lower turnover intention in the face of higher workload, compared to teachers with lower support. Third, we examined a mediational hypothesis, and found evidence that social support acts indirectly, through job satisfaction in relation to turnover intention.

Conclusions: These findings suggest that social support can be a valuable resource for new teachers and that it can affect their turnover intention through multiple routes: directly, via increasing job satisfaction, and by ameliorating the negative effects of workload.

Social Support in Teachers' Work

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Introduction: The psychosocial work environment plays a major role regarding workers' health. Psychosocial factors at work are recognized to be critical in causation and prevention of occupational diseases as well as in health promotion. Social Support at Work (SSW) is a psychosocial factor recognized to be related to workers' health promotion and has been related to prevention of occupational diseases, to their biological and psychological effects.

Objectives: To identify and to describe SSW structure in terms of its definitions and its main health effects, focusing on those arising SSW for teachers.

Method: A bibliographic search and review were carried out in Medline, Lilacs, PsycInfo, Sociological Abstract, Nioshtic, CisDoc, Labor-doc databases, from 1980 to 2006.

Results and discussion: There are diverse concepts and health effect mechanisms as well as theoretical disagreements related to SSW. The main health effects are pointed out as well as a SSW definition is proposed. One emphasizes the importance of SSW as a key factor in analyzing the work environment, workers' health, disease processes and prevention. SSW is characterized by emotional, instrumental, appraisal and informational supportive acts provided mainly by colleagues and supervisors at work. SSW has been found to protect workers' health, prevent health injuries and promote healthier work environment. Nevertheless, organizational and environmental conditions in schools are associated with psychosocial factors that impact on teachers' health and well-being. Teachers' SSW has been related to: (a) reduction of occupational injuries from work overload, (b) lower levels of episodic occupational stress, (c) lower levels of emotional exhaustion, (d) work commitment, (e) burnout prevention.

Conclusions: Social support in teachers' work environments plays a role in preventing injuries and promoting a healthier psychosocial work environment. Teachers' SSW structure has not been deeply studied. Further research should focus on its potentials, its structure description and its theoretical framework.

Thinking Hard: Psychosocial Risk in Knowledge Work

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Knowledge workers tend to perceive themselves, and to be perceived by those outside the work, as having considerable control over their work. However, this control may be illusory with some literature suggesting that the paradigm of professionalism can restrict their capacity to control their high workload and the significant cognitive and emotional demands. This paper reports a series of studies of psychosocial risk in a particular type of knowledge work system – the legal system – aiming to determine whether the job control available to knowledge workers was sufficient to balance the high intellectual and quantitative demands of the work. The studies were initiated because of workforce reports of job stress and extreme demands. The two organisations involved in these studies sought to identify, assess and control the risks of workload. In all, three studies were conducted each using a consistent method, applying two key tools to assess the workloads and systems of work: qualitative data from individual and focus group interviews with a random sample of staff (N = 234) about their perceptions of their work; and quantitative assessment of psychosocial risk factors using the Copenhagen Psychosocial Questionnaire (N = 292). Standard statistical tests and qualitative analysis techniques were used to analyse the data. The studies found inadequate job control in the face of extreme demands. They demonstrated that the control available to professionals can be difficult to exercise when workloads are overwhelming and determined by factors outside the work systems. The consequent job stress in these workplaces was already associated with poorer health indicators. Rather than professionalism providing an avenue for increasing opportunities to control psychosocial risk, the perception that, as professionals, they should be 'in control', made psychosocial risk harder to address, with professional identity presenting a barrier to effective control strategies.

Oral Session 16

Organizational Interventions to Prevent Health Problems at Work

Chair: **Debora Glina**

School of Medicine, University of Sao Paulo (Sao Paulo, Brazil)

016-1

Reflection Groups: Collective and Participatory Approach for Work Transformation

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Introduction: The methodology of Reflection Groups was created by Siqueira et al. (1998), to facilitate ergonomic interventions.

Objective: Evaluate the contributions of Reflection Groups with administration and production workers' representatives who worked in the food service of a cardiologic hospital in São Paulo, Brazil in the implementation of ergonomic recommendations.

Methods: Group dynamics were based on ergonomic recommendations. Meetings were coordinated by the psychologist and occupational therapist who was also responsible for performing the ergonomic work analysis while being observed by university trainees in occupational therapy. Representatives from each job were chosen by the workers. In 2007, 34 meetings with groups of different compositions took place in various hospital locations with durations ranging from 1.5 to 3 hours. Tasks for the following meeting were determined at each meeting.

Results: Reflection groups propitiated : establishment of a public space for discussion; workers' awareness of what they could change; better work relations by conflict revelation and resolution; improvement on work organization and processes by means of cooperation; knowledge about each other's work and how others perceive their work; better understanding of prescribed work organization and negotiation of a more realistic one; appropriation of work roles, by learning how to exercise them; establishment of a program of continuous improvement with workers' participation (including menu and work schedule definition); understanding and participation in ergonomic interventions; decrease of work pressure; more frequent and adequate training; decrease in absences, delays and work pace; decrease in resistance to change.

The limited number of workers reduced Reflection Groups' effectiveness.

Conclusion: Reflection groups contribute to ergonomics because they allow for discussion, disclosure of problems and incorporation solutions, enabling interventions in working organization, psychosocial environment and relationships in a collective and participatory approach, promoting health and social integration.

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016-2

A Randomized Controlled Study Testing a Participative Intervention Approach

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Problem: Health circles (structured and moderated discussion groups with a strong focus on employee participation) seem to be an effective tool to improve the work environment. Studies with methodologies of high quality are still missing.

Objective: To test the effects of the health circle approach in a randomized controlled trial.

Methodology: In each of four Danish municipalities, two elderly care homes were randomly assigned to either the intervention group or the control group. While the four intervention workplaces used the health circle approach, the four control workplaces continued with their usual activities. At the intervention workplaces, employees were asked to elect colleagues to represent the different shift-groups and departments. The health and safety manager, one shop steward and management representatives were also part of the health circle group which was composed of 8-10 people, but with a majority of employee representatives. Under the leadership of a trained facilitator and based on results of a workplace-wide comprehensive questionnaire survey on work and health, problems were identified and suggestions for improvement were developed. All important steps of the intervention process were documented. Outcome results will be assessed one year after the beginning of the intervention.

Results: The concept was appreciated by the participating employees as well as the employers. The health circle groups met regularly and attendance to the meetings was high. On average, 19 problems (mostly with regards to the psychosocial work environment) were identified, 24 suggestions were developed and implementation was started. At the end of the implementation phase, the number of suggestions that have been implemented will be assessed.

Conclusion: The health circle concept is an effective tool to develop suggestions for improvement and to start the implementation process. Further analysis will show if the concept leads to better working conditions and better employee health than usual activities done to improve the working environment.

Psychological Distress: Subjects in Search of Renewed Social Bonds

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Constraints of the psychosocial work environment reported in models of job-related psychosocial risks are recognized as factors influencing the emergence of symptoms of psychological distress. To understand the subtlety of this influence, we invited workers from the public sector to participate in group exchanges within the framework of an intervention study. The aim of the exchanges was to document constraints of the psychosocial work environment, symptoms of psychological distress and possible solutions in order to reduce the difficulties encountered at work.

After five meetings with six groups (7 to 14 persons) over a period of 24 to 36 months, we documented different situations experienced by workers, problems to which they were confronted, the effects that the problems had on workers and organizational change that should be implemented primarily in the psychosocial work environment.

Our results allowed us to formulate a model to examine connections between constraints of the psychosocial work environment and psychological distress. This model highlighted the subjective dimensions of the workers' experience in the workplace as a result of ignorance of the human subject, denial, subjection or self-effacement. It suggests that the truncated existence of the subject creates a gap between the image workers have of themselves and valorize and the image that is reflected of them in the way their work is organized. It proposes interpreting the symptoms of psychological distress as manifestations of bereavement triggered through the loss of the idea of self-investment at work.

Our research also allowed us to formulate a two-pronged intervention combining a recommendation to limit constraints when possible (prescriptive approach) and to establish communication (participative approach). The communicational approach aims at renewing social bonding at work in an ethic of cooperation which is likely to generate improved self-image among workers and groups capable of facing constraints through research into the best compromises conducive to promoting mental health.

Preventing and Managing Discomfort, Pain and Injury

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The Accident Compensation Corporation (ACC) administers New Zealand's "no fault, 24-hour" Injury Prevention, Rehabilitation and Compensation scheme. Under the scheme, ACC delivers a range of injury prevention programmes, focused on the reduction of injuries which occur within the workplace and the community.

Over the last 10 years, ACC has developed different programmes to address the issues of back pain and gradual process injuries in the workplace, with some success. Recently, it has been identified that many of the factors that contribute to these types of musculoskeletal issues are similar, if not the same. Therefore, rather than having different programmes for different conditions, it would serve the workplace better to have one that encompasses all musculoskeletal discomfort, pain and/or injury (DPI).

The DPI programme was set out to ensure that all of the contributory factors that may play a part towards the onset of musculoskeletal injuries are considered and managed appropriately. The contributory factors cover elements about: the person, the task, the organisation of the workplace and the workplace environment. They have been grouped as indicated below:

- Individual factors
- Psychosocial factors
- Work organisation
- Workplace layout and awkward postures
- Task invariability
- Load and forceful movements
- Environmental issues

Traditionally, most programmes have focused on 'workplace layout and awkward postures' or 'load and forceful movements' to the detriment of the other factors. The enormous challenge that has been experienced in NZ workplaces – with a culture of 'she'll be right mate' – is to have the other areas also taken into account, with none being as difficult as the 'psychosocial factors'.

This paper looks at the DPI programme itself and discusses how it has been implemented within the NZ workplace, and the results that have been achieved.

Cross Cultural Assessment and Intervention for Work Related Stress

Patricia Murray*

Health and Safety Authority (Dublin, Ireland)

In order to deepen our understanding of work-related stress, an assessment process should be designed so that the methodological flaws of self-assessment can be minimised and in order to ensure that interventions are both effective and efficiently targeted. A process approach to the issue is crucial.

Cultural differences within organisations (department to department) and between organisations of similar and different types should be captured. Also, comparison across country borders may prove enlightening.

For this piece of action research, HSA Republic of Ireland joined with HSE NI (Northern Ireland) to carry out risk assessments in six organisations matched for type, on both sides of the border. The same Management Standards * HSEUK Work Positive * HSA assessment tool was utilised. This tool was based on research carried out in the UK and Ireland over the period 1997 – 2004. It is based on prevailing scientific models of work-related stress, as a consequence of the mismanagement of the following six work processes: demands, control, support, relationships, role and change. This represents a state-enterprise partnership approach, as part of the Irish and UK states' commitment to preventive approaches to psychosocial risks. Results will be discussed as well as methods of both assessment and intervention.

Adverse Working Conditions of Physicians: A Prospective, Controlled Intervention Trial

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(2) Technical University of Munich (Munich, Germany)

Background and aims: Adverse working conditions in the hospital partly explain the increased incidence of impaired psychological health in physicians, especially during residency. Furthermore, physicians' strain may influence the quality of patient care. Limited evidence from the area of nursing work indicates that work-directed interventions reduce stress symptoms and improve psychophysical health; there are no trials involving doctors. The aim of this controlled trial is to (1) analyze working conditions in a hospital (work stressors), psychological health of physicians (strain) and the perceived quality of patient care; (2) initiate changes of adverse conditions in order to reduce stress, strain and to improve quality of patient care.

Methods: Two departments for internal medicine and two for surgery, in a general hospital with four independent chief physicians, were selected. The baseline assessment of each doctor's individual working conditions, psychological and physical strain, and of patients' perceptions of quality of care was completed in 2007 and will be repeated in identical manner in summer 2008. Work design interventions started in 2008, randomly chosen, in two of the four departments. In continuous small group meetings ("health circles"), representatives of physicians prioritize problems of work conditions, and design solutions, supported by external experts. An empowered council of hospital managers and head physicians decides about the implementation of changes.

Results: Of 99 eligible physicians, 63 participated. Work stressors with critically high scores were interruptions, time pressure, additional efforts, patient-related and organizational stressors. Resources with critically low scores are participation, feedback, (transparency of) time planning, and lack of clear training curriculum. Stressors correlate positively, resources negatively with indicators of impaired well-being, especially with emotional exhaustion.

Conclusions: Clearly defined high stressors and low resources are targeted by a participatory work-design intervention for hospital physicians. More results of this controlled trial will be presented and discussed.

Oral Session 17

Managing a Return and the Prevention of Incapacity

Chair: **Patrick Loisel**
Université de Sherbrooke (Longueuil, Canada)

017-1

Coordination Between Welfare Authorities in Promoting Return-to-Work

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In Sweden, several coordination alliances between welfare authorities have been formed to initiate financial coordination, in order to promote work ability and employability. The political goal is to make better use of public resources and to improve participation of the individual in return-to-work. Earlier research indicates that intermediary stakeholders might facilitate the return-to-work process, but that involving stakeholders is associated with friction, especially regarding differences in organizational structures and perspectives.

Objectives: The aim is to analyse how four authorities, the Social Insurance Office, the Labour Office, Social Security and Health Care, jointly creates new work forms and strategies to improve cooperation. Focus is on whether the involvement and experience of joint responsibility for coordination alliances transfers into regular work in the cooperating authorities, and how the principles of coordination are implemented.

Methodology: Qualitative interviews were conducted with direction boards and coordinators in two coordination alliances, and with responsible managers in the four authorities.

Results: Results show that interest in cooperative projects varies between stakeholders. There are differences between the representatives, whether cooperation is viewed as a limited part of the organization's work, or if it is conceived as relevant for the organization as a whole; the former stance is the most common. Although positive to the aims of the associations, stakeholders do not give cooperation priority regarding changes in their regular work: cooperation is designed as projects, while implementation into regular practice is neglected. Therefore, the coordinator becomes central in promoting cooperation among the stakeholders.

Conclusion: Coordination among the stakeholders is considered as a positive and necessary development to assure a fair rehabilitation process. In practice, it is affected negatively by not being given priority in regular practice, due to lack of time, organizational friction, resources and interest. Thus, cooperation becomes a project rather than a part of the regular work.

017-2

From Knowledge to Action: Lessons from an Implementation Failure

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Background: In 2000, the Québec workers' compensation board (WCB) funded the creation of a provincial public work rehabilitation consortium. This consortium, known as the Réseau en réadaptation au travail du Québec (RRTQ), consisted of a partnership of 11 rehabilitation institutions in the province of Québec (Canada). The aim of the RRTQ was to implement evidence-based prevention and work rehabilitation programs.

Aim: The aim of this presentation is to expose the challenges encountered during the implementation of this network.

Methods: Before a broad implementation of an evidence-based program throughout the province of Québec, a 30-month pilot study was held in 4 rehabilitation institutions. In each institution, an interdisciplinary team was set up and each team received theoretical and practical training on the program and on the latest evidence in work rehabilitation. Training was reinforced with site visits by the director, training seminars, and a skill-upgrading workshop that brought together stakeholders.

Results: The program implementation progressed well within the rehabilitation institutions. Interdisciplinary teams were put in place as planned, and expertise was developed and shared. The model of coaching and mentoring used was generally successful in achieving the aim of the program, which was healthy and stable return to work. While this pilot implementation went well for the clinical part, significant opposition from the WCB rehabilitation counsellors arose during the study, which brought the network to an end.

Conclusion: This study demonstrated that close mentoring and coaching strategies may be effective to implement complex interventions. However, the implementation focused primarily on the clinical team training and no coaching was done with other stakeholders. Also, the partnership was discussed only with the directors of the institutions and upper management of the WCB. This highlights the utmost importance of involving all stakeholders, at all hierarchical levels, throughout the implementation process of evidence-based interventions.

Process Evaluation of a Swedish Workplace-Based Program for Return-to-Work

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Linköpings University (Linköping, Sweden)

Background : A return-to-work program was initiated by a Swedish employer in March 2004. The program incorporates interventions that earlier research has suggested facilitate return-to-work. Critical features in the program are early intervention, multiprofessional assessment, peer support groups, vocational training and preparatory meetings at the workplace before re-entry, stakeholder collaboration and case-management.

The aim of the present study is to;

1. Describe the return-to-work program
2. Analyse how the program has been experienced and applied
3. Describe identified weaknesses and strengths in program application

Methods: An inquiry form was provided to supervisors to map out key informants. Individual interviews were conducted with eight supervisors, and the project leader. Two qualitative group interviews with occupational health service personnel were conducted.

Results: Several discrepancies were identified between the program intentions and the perceived implementation, such as lack of support towards the workplace and co-workers, and the neglect of preparatory meetings at the workplace. Strengths within the program were identified as improved communication and collaboration between stakeholders, innovative solutions for vocational training and multiprofessional assessment of health.

The informants had different understandings regarding optimum timing of an employee's referral to the program, and expressed different views and interpretations of who had the primary responsibility of the return-to-work process.

Conclusion: According to earlier research findings, the employer has incorporated several strategies for facilitating return-to-work. Although, the findings demonstrate critical shortcomings in program implementation e.g. lack of early intervention and lack of supportive workplace-based interventions due to varying interpretations among informants regarding program appliance. There is a discrepancy between the employers' intention of the return-to-work program and program application. The study highlights a need for further development of return-to-work strategies that target the workplace- and organisational level, not only the individual level.

Cochrane Systematic Review about Workplace Interventions for Preventing Work Disability

*Sandra van Oostrom**, Maurice Driessen, Henrica de Vet, Jean-Baptiste Fassier, Renée-Louise Franche, Eva Schonstein, Patrick Loisel, Willem van Mechelen, Johannes (Han) Anema
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Publication not authorized.

017-5

Do Compensation Policies in Six Countries Affect Low Back Pain?

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Publication not authorized.

017-6

Can Workers With LBP Shift from Pain-Oriented to Function-Oriented Behaviour?

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Publication not authorized.

017-7

Successful RTW Coordination - What are the Essential Competencies?

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Considerable evidence supports the role of the return to work (RTW) coordinator as an important component of a work disability treatment and prevention program. However, the competencies required for success in this role have not been systematically inventoried or supported by previous research. The **objective** of this study was to apply qualitative research methods (focus groups) to identify the skills, knowledge and attitudes that RTW coordinators felt were most important to facilitate RTW effectively among working adults with health-related work absences. **Methods:** We conducted a series of eight focus groups involving 75 experienced RTW coordinators in 3 countries. Participants had a variety of backgrounds, including nursing, case management, occupational therapy, medicine, ergonomics, kinesiology, and human resources; all worked directly, in-person, with workers and employers to facilitate RTW of workers, after injury or illness. **Results:** 255 unique terms describing competencies for coordinating RTW were identified; 89 of them were endorsed by at least half of the focus groups. Affinity mapping was used to further reduce the number of unique items, and this led to eleven major competency groups for RTW coordinators. These included basic attributes, specific knowledge, credibility, and skills related to administration, information-gathering, evaluation, communication, general and RTW-specific problem-solving, conflict management, and persuasion. This research provides an evidentiary base for selection and training of return to work coordinators.

017-8

Propagating a New Paradigm in Workers' Compensation and Disability Benefits

Jennifer Christian*

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Publication not authorized.

Oral Session 18

Insertion and Remaining on the Job Despite a Health Problem

Chair: **Stavroula Leka**

University of Nottingham (Nottingham, United Kingdom)

018-1

Action on Mental Health Barriers for the Canadian Workforce

Ian Arnold*

(Ottawa, Canada)

In the fall of 2007, the Mental Health Commission of Canada (MHCC) formed a Workforce Advisory Committee, to consider how to improve the job entry, retention, disability management, and return-to-work for people with mental health issues. Committee representation includes health, rehabilitation, corporate, human resources, policy, academic, military and labour sectors; and “consumer” representatives. The Committee has identified several problem areas related to mental health and the workforce:

- Rising rates of mental disability in the workplace are driving greater costs, both economic and humanitarian; - Employment rates for persons with serious and persistent mental illness remain very low;
- While work (re)entry is difficult, early intervention means healthier outcomes; - Evidence on effective management practices in the workplace is needed.

This paper describes the key priorities considered essential to removing barriers blocking and/or impeding the gainful employment of individuals living with mental health challenges. Factors considered as barriers include job (re)entry, finding employment, sustainable employment, workplace-based factors, training, and development of skills for gainful fulfilling employment.

Six key priorities identified for future action include:

- Organizational leadership and policy development;
- Workplace practices;
- Disability management;
- Sustainable income;
- Improved mental health care for the Canadian workforce;
- Review of legislative measures that regulate workplace mental health risks.

Dr. Ian Arnold, an occupational health physician and a member of the Workforce Advisory Committee of the Mental Health Commission of Canada, will present the committee's activities in identifying barriers and possible strategies to remove or reduce these barriers. In addition, ICOH participants will be invited to provide feedback to further assist the Mental Health Commission of Canada in their search for strategies and solutions.

(This paper is the result of the collaborative efforts of all members of the Workforce Advisory Committee of the MHCC.)

018-2

Employment Programs for People with Mental Illness: an Organizational Perspective

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Publication not authorized.

Programmatic Analyses of Supported Employment Programs in Canada

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Supported employment (SE) has been documented in the United States as an evidence-based practice that helps people with severe mental disorders obtain competitive employment. SE programs usually supply individual placements in competitive employment by facilitating job acquisition, for example by sending an employment specialist to accompany clients on interviews, and by providing ongoing support once the client is employed.

The objective of this study was to assess the fidelity and quality of components of the SE programs offered in 18 different agencies (spread into 62 sites) located in three Canadian provinces (British Columbia, Ontario and Quebec).

To assess the fidelity and the quality of services offered to registered clients, program directors or supervisors and employment specialists from the participating SE programs were met in a semi-structured interview and asked questions related to their program's implementation. The Quality of Supported Employment Implementation Scale (QSEIS) was used to gather information about the components of the programs. The QSEIS consist of 33 items rated on a 5-point behaviourally anchored response scale. Results from factor analyses indicated five subscales: job placement (7 items), integration with mental health treatment (4 items), long-term support (5 items), teamwork (4 items) and engagement (4 items).

Results demonstrate that several adaptations of the supported employment model exist in Canada. It was found that those adapted supported employment programs could better fit agencies' philosophies and particular needs of clients. Different philosophies often result from the integration with other services already offered in the agency, the geographical particularity of their regions and the way they are funded.

Predictors for Return to Work after Spinal Cord Injury

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Guangdong Provincial Work Injury Rehabilitation Center (Guangzhou, China)

Objective: To study the predictors of return to work after spinal cord injury (SCI), more specifically the psychosocial aspects, in China.

Method: A structured questionnaire was used to capture demographic, injury-related status, psychosocial and post injury work related information. Face-to-face or telephone interviews were done. Possible predictors were tested with logistic regression analyses.

Results: 101 people (mean age = 37.68) with SCI were interviewed; only 38.4% of them were returned to gainful employment at the time of survey. The logistic regression results showed that Rosenberg's self-esteem (OR=0.93) and WHO-Daily Activity Scale (OR=0.66) were significant predictors for returning to gainful employment after injury.

Conclusions: Psychosocial factors were strong predictors of return to work. The return to work rate is low after SCI. Rehabilitation interventions that put more efforts on self-esteem, self-perceived health status and self-care ability could improve employability after SCI.

The Changing Role of Occupational Health and Safety Professionals

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Training and education in occupational health

This presentation reports on research conducted to identify how the role of the occupational safety and health practitioner is changing and what the implications of change might be in terms of training needs. The research involved a Delphi consensus building exercise with an expert panel of 30 stakeholders who had considerable knowledge and experience in this area. The panel included regulator and organisational bodies, sector skills councils, and educational and professional bodies. The findings of the Delphi exercise informed the design of a survey which was completed by more than 1,600 members of the UK Institution of Occupational Safety and Health (IOSH).

There was overall agreement among health and safety experts and practitioners on the highest priorities for workplace health, namely common mental health problems and work-related stress. Despite different prioritization of other key issues between the two groups, other key areas include health surveillance and identification of emerging risks, musculoskeletal disorders, sickness absence, planning for major health-related scares and incidents, work-related driving, work-life balance, engagement and advice of SMEs, evaluation of health and safety interventions, work-life balance and immigrant/migrant population. Experts and practitioners also agreed as to the key knowledge and skills required for the future role of health and safety practitioners. Key knowledge areas include attitudes, persuasion and behaviour change, risk perception and communication, change management, development of legislation and guidance, organisational culture, professional codes of conduct, the multi-factorial nature of ill health, awareness of boundaries and other groups' professional competencies. Key skills areas include influencing, making the business case for workplace health, early identification of workplace health priorities, leadership, understanding business models and processes, project management for OSH issues, presentation skills, assertiveness and practice and evaluation of workplace health interventions, mediation and conflict management.

Factors Associated with Offer and Acceptance of a Work Accommodation

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Description of the problem: Recent evidence on the effectiveness of a work accommodation as a workplace disability prevention strategy confirms that it facilitates return-to-work and reduces work absence duration. However, little is known about factors that influence offer and acceptance of a work accommodation.

Objectives: This study aims to identify characteristics of workers and their workplaces that are associated with 1) not receiving a work accommodation offer, 2) receiving a work accommodation offer, but refusing it, and 3) receiving and accepting a work accommodation offer.

Methods: Ontario lost-time claimants (n=481) completed a telephone survey one month after a work-related back or upper extremity musculoskeletal injury. Multinomial logistic regression modeling was used to measure associations of 18 explanatory worker- and workplace-based variables with the outcome of work accommodation offer and acceptance.

Results: Older age, heavy physical work demands, and job tenure of less than one year were associated with both not receiving, and receiving, but refusing a work accommodation offer. High disability management culture, repetitive work demands, and longer duration from injury date to interview date were associated with receiving and accepting an offer; while pink collar occupations and vibration work demands were associated with receiving, but refusing an offer. Finally, high supervisor support was associated with not receiving an offer. All other explanatory variables (i.e., gender, mental health, perceived pain, job satisfaction, unionization, firm size, people-oriented culture, safety climate, ergonomic practices) were not significant.

Conclusions: Our findings suggest that job- and workplace-level factors, and policy about minimum job tenure for mandatory work accommodation, are stronger determinants of offer and acceptance of a work accommodation than individual health factors, one month post-injury. More specifically, occupational classification, organizational disability management practices, and job tenure, are particularly salient. Potential reasons underlying the negative relationship between supervisor support and work accommodation will be discussed.

The Double Whammy of a Work Handicap

Romy Steenbeek*, Jan Fekke Ybema
TNO (Hoofddorp, Netherlands)

Description of the problem

The relation between health and working conditions is unclear. Chronic health problems may lead to inferior jobs and/or worse working conditions, which in turn, may lead to worse work-outcomes and, as a consequence, more health complaints. In addition, employees with chronic health complaints may be more vulnerable to working conditions than healthy employees.

Objectives

To determine the relation between health, work, working conditions and outcomes.

Methodology

Data come from the longitudinal Study on Health at Work (SHAW, n=1597 employees). We used multiple regression analyses on the second and third waves of the study. Analyses focused on three groups: 1) healthy employees, 2) employees with a chronic disease without a work handicap and 3) employees with a work handicap.

Results

A comparison between the three groups showed that employees with a work handicap had less favorable working conditions: they experienced higher emotional work demands, higher physical workload, less supervisory and co-employee support and less autonomy than other employees. They also scored lower on outcome variables: they scored lower on engagement, job satisfaction and general health, and they experienced more depression, burnout and had higher sickness absence. Moreover, some work conditions deteriorated over time as a result of having a chronic disease or work handicap.

In addition, employees with a chronic disease were more vulnerable to effects of physical workload, static work load, low social support by the supervisor and low autonomy. Employees with a work handicap were more vulnerable to effects of high static workload, high autonomy and high work pressure.

Conclusion

Employees with a work handicap experience a double whammy: they have less favorable working conditions, and they are more vulnerable to the negative effects of these unfavorable working conditions than healthy employees.

Working with Health Problems: Building a Fuller Picture

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The impact of health on work is a complex issue involving interactions between medical, occupational, economic, cultural and psychological factors. The aims of the Well-being in Work project were to begin to build a fuller picture of how Blue, Yellow and Black flags fit together in understanding sickness absence and sub-optimal performance. The research was carried out in Merthyr Tydfil, UK, where there are high levels of socio-economic deprivation, long-term limiting illness and dependence on state incapacity benefit. 505 employees participated in a web-based survey investigating how health, objective and perceived characteristics of work impact on self-reported sickness absence and work performance, which was followed up over a 12 month period. Focus groups (n=63) and one-to-one interviews (n=38) were carried out to investigate employees' beliefs about health and work, and gather in-depth information on people's experiences of working with illness and return to work after absence to supplement and strengthen the quantitative work. In both studies, perceptions of work were found to be of central importance in understanding how health impacts on work, whereas the objective characteristics of work had little impact. The quality of inter-personal relationships at work, ability to make adjustments to work and the key role of managers emerged as major themes in the qualitative study. Effects of organisational policies and their implementation (or lack of) were discussed. The findings were considered within the organisational and regional context of the study. The study highlighted that a multi-faceted strategy is needed to address the impact of health on work, directed not only at occupational rehabilitation but also on sub-optimal performance, which may be a precursor of sickness absence, job loss and entry into benefits.

Session orale 19

Surveillance populationnelle des risques psychosociaux et des problèmes de santé mentale

Modératrice: **Carole Chénard**

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019-1

Iso-Strain et incidence de santé de salariés du Nord (France)

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Objectifs

Évaluer la relation entre l'apparition de problème de santé et l'apparition du stress au travail (iso-strain) dans la cohorte GERICOTS.

Méthodes

Le même questionnaire a été soumis aux 1154 salariés (797 hommes/357 femmes) entre 1999 et 2004. L'évaluation du stress au travail s'est faite à partir des trois axes du modèle de Karasek (latitude décisionnelle, demande ou charge psychologique et soutien social). La santé perçue a été évaluée par l'axe réaction émotionnelle du Nottingham Health Profile - NHP -. Les sujets sont considérés stressés (IS) s'ils ont une faible latitude décisionnelle, une forte demande et un soutien social faible. La comparaison entre les deux étapes a été effectuée par des tests appariés non paramétriques. Les résultats sont donnés en fonction du sexe sous forme de rapports de cotes (OR : odd ratios) ajustés pour l'âge, avec un intervalle de confiance à 95%.

Résultats

Lors de la 1ère étape, on note une prévalence supérieure de problèmes de santé chez les IS comparativement à celle des autres salariés. Par exemple, pour la réaction émotionnelle chez les hommes OR= 3.24 [2.04 – 5.14] et chez les femmes OR= 2.46 [1,31 – 4.60]. Entre les 2 étapes on relève une légère augmentation du stress chez les cadres, chez les hommes, 9,9% vs 14,0% (p=0,051), et chez les femmes, 15,3% vs 23,5% (p=0,089). Par contre, chez les non-cadres, les pourcentages n'ont pas évolué. Par ailleurs, nous avons mis en évidence une relation significative entre l'apparition de problèmes de santé et l'apparition du stress au travail, en tenant compte de l'âge : pour la réaction émotionnelle chez les hommes OR=2.63 [1,31 – 5.29] et chez les femmes OR=3.52 [1.31 – 9.47].

Conclusion

Les résultats soulignent la relation entre l'iso-strain et les réactions émotionnelles. L'analyse longitudinale a montré un lien entre l'émergence des problèmes de santé évalués par le NHP et l'émergence du stress au travail.

019-2

Veille en santé mentale au travail, le programme français Samotrace

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L'organisation du travail a fortement évolué depuis quelques décennies dans les pays industrialisés. Les effets liés à ces changements sur la santé mentale des populations sont de mieux en mieux documentés. Pourtant, l'importance du poids de ces facteurs sur la santé publique est mal connue en France.

Le programme Samotrace, développé par l'Institut de veille sanitaire a pour objectif de mettre en place une surveillance nationale et pérenne de la santé mentale au travail. Le programme comporte trois volets indépendants. Chacun d'entre eux est actuellement mis en place dans deux zones géographiques pilotes : région Centre (et voisines) et région Rhône-Alpes. Le volet épidémiologique en entreprises permet d'obtenir des prévalences de troubles de santé mentale selon la profession et le secteur d'activité, ainsi que des fréquences d'expositions à leurs facteurs de risque, par des médecins du travail volontaires. Le volet de recueil monographique comporte une analyse qualitative de situations de souffrance mentale au travail par des médecins du travail formés dans ce domaine. Le volet médico-administratif recense et décrit tous les cas de salariés mis en invalidité pour des problèmes de santé mentale et s'appuie sur la collaboration des médecins-conseils de l'Assurance Maladie. Environ 250 médecins participent au volet en entreprises ; plus de 7000 questionnaires ont déjà été recueillis. Les premières analyses fournissent des indicateurs couvrant un très large ensemble de catégories professionnelles et de secteurs d'activité. Des résultats plus détaillés seront présentés. L'analyse de 800 fiches d'invalidité pour troubles psychiatriques dans le volet médico-administratif montre que certaines catégories professionnelles (employés et ouvriers) et certains secteurs d'activités comme par exemple, les activités financières, sont plus particulièrement concernés. Les données de cette phase pilote permettront un premier état des lieux général des troubles de santé mentale selon l'emploi, inexistant actuellement en France.

Symptômes dépressifs et activité professionnelle dans l'enquête décennale santé 2003

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L'intérêt pour les facteurs sociaux occupe une large place au sein de l'épidémiologie de la santé mentale. Les résultats des études internationales vont globalement dans le sens d'une association entre une fréquence élevée de troubles mentaux et des variables de situation sociale défavorables. Parallèlement, les liens entre certains facteurs psychosociaux au travail et la santé mentale sont désormais reconnus.

L'objectif de cette étude est de décrire les associations entre la déclaration de symptômes dépressifs et certaines conditions de travail au sein des catégories professionnelles. Il s'appuie sur les données de l'Enquête décennale santé 2002-2003 menée en France par l'Institut National de la Statistique et des Études Économiques (Insee) et mises à la disposition de l'Institut de veille sanitaire. La population d'étude correspond aux actifs occupant un emploi au moment de l'enquête (6082 hommes, 5521 femmes). Les symptômes dépressifs, mesurés par le Ces-d, la description de l'emploi exercé ainsi que des conditions de travail relatives aux horaires atypiques, aux contraintes psychosociales par rapport à la pression temporelle, l'exigence psychologique, l'autonomie et le soutien ont été les principales données étudiées par questionnaire auto-administré. La prévalence de symptômes dépressifs parmi les actifs au travail est d'environ 11 %. Elle varie selon les catégories professionnelles et les secteurs d'activité. Les associations entre les contraintes de travail et les symptômes dépressifs diffèrent selon la catégorie professionnelle et le sexe. Seule « l'aide insuffisante pour mener à bien sa tâche » est systématiquement associée aux symptômes dépressifs quelle que soit la catégorie professionnelle. En dépit de certaines limites, l'exploitation de cette enquête dans le domaine de la santé mentale au travail constitue un apport au plan des connaissances jusqu'à présent peu disponibles en France et pourrait permettre, dans un objectif de surveillance épidémiologique, d'orienter des interventions prioritaires et d'en évaluer les effets.

Autoévaluation du stress: indicateur de santé au travail invalide

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L'étude porte sur l'analyse des données de l'Enquête sur la santé dans les collectivités canadiennes réalisée en 2002 et portant sur 2877 travailleurs. Les problèmes de santé mentale retenus sont : l'épisode dépressif majeur, l'indice global de dépression, la détresse psychologique et l'autoévaluation du stress au travail. Les contraintes psychosociales mesurées sont: la latitude décisionnelle, la demande psychologique, le soutien social, la sécurité d'emploi et les efforts physiques. Les résultats montrent une augmentation significative du faible soutien social qui passe de 45 % en 2002 à 49 % en 2005, alors que le nombre de personnes qui estimaient que la plupart de leurs journées de travail étaient assez ou extrêmement stressantes s'est améliorée de façon significative entre 2000-01 et 2005, passant de 42 % à 38 %. Les résultats des analyses multivariées montrent que le faible soutien social apparaît comme significativement associé aux quatre indicateurs de santé mentale utilisés. En raison du caractère ambigu du concept de stress au travail, son évolution favorable entre 2000 et 2005, pourrait indiquer une normalisation ou une résignation face à la perception du caractère inéluctable, par exemple, de l'intensification du travail liée aux nouvelles formes d'organisation, et non à une réelle réduction des contraintes psychosociales du travail, lesquelles, au contraire, ont augmenté au cours de cette période, si on se réfère à la mesure du faible soutien social au travail. On peut ainsi émettre l'hypothèse que, face à ces contraintes, les personnes exposées ont adopté des stratégies individuelles de protection, telles le repli sur soi (ce qui peut réduire le soutien social disponible dans le milieu) ou encore le désinvestissement de la sphère professionnelle. L'autoévaluation du stress peut se révéler trompeur, surtout en présence d'un soutien social qui se détériore.

Outil de dépistage des entreprises à risques psychosociaux élevés

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L'objectif de cette grille est d'évaluer certains facteurs de risques psychosociaux à partir d'une cueillette de renseignements caractérisant le milieu de travail ainsi que certains aspects liés aux pratiques de gestion qui peuvent avoir un impact sur la santé psychologique du personnel. Il s'agit d'un outil de mesure simple qui comporte également une dimension pédagogique afin d'aider le milieu à identifier les actions à mettre en place ou les cibles à atteindre dans l'entreprise.

La grille comprend 12 items : six données de base et six composantes clés de l'organisation du travail. Les « données de base » réfèrent à certaines caractéristiques de l'organisation (contexte de l'emploi, absentéisme, activités de prévention en santé au travail ou pour contrer le harcèlement psychologique ou mesures facilitant la conciliation travail et vie personnelle ou le retour au travail suite à une absence maladie). Les composantes « clés de l'organisation du travail » réfèrent à des pratiques de gestion reconnues pour être des sources importantes de problèmes de santé psychologique (demande psychologique élevée, faible reconnaissance, faible soutien social, faible latitude décisionnelle) auxquelles nous ajoutons la communication déficiente.

Pour chacun des items, un score variant de 0 à 3 est attribué en fonction d'énoncés caractérisant le mieux l'environnement de travail. Plus le total obtenu est élevé, plus la situation est défavorable à la santé psychologique des travailleurs. À la fin du processus, un niveau de risque global variant de 0 à 36 est calculé selon les résultats obtenus à chacun des items. Il s'agit d'une aide pour éveiller ou activer des actions de prévention de la part des acteurs concernés par les risques à la santé psychologique au travail.

Réduction du temps de travail et santé en France

Vincent Chouraki*, Claude Buisset, Michel Vézina, Jean-Louis Edmé, Xénophon Vaxevanoglou, Jean-Louis Salomez, Paul Frimat, Ariane Leroyer
(Lille, France)

Contexte

La réduction du temps de travail (RTT) est souvent incriminée dans la survenue de tension au travail et des pathologies qui en découlent (troubles musculo-squelettiques (TMS), infarctus du myocarde, ...). Néanmoins, peu d'études prospectives ont exploré cette hypothèse.

Objectif

Etudier l'influence de la RTT, à travers la mise en place réglementaire des 35 heures de travail hebdomadaires en France en 2000, sur l'apparition de problèmes de santé.

Méthodes

L'enquête GERICOTS a recueilli des données socioprofessionnelles et relatives aux conditions de travail chez 2036 salariés du Nord de la France en 1999 ainsi qu'en 2003-2004. Un sous-groupe homogène de 1074 personnes (travail à temps plein en 1999 et 2003-2004, pas de changement d'entreprise ni de profession) a été utilisé pour les analyses. Divers problèmes de santé ont été étudiés par des questionnaires standardisés : tension au travail (questionnaire de Karasek), troubles du sommeil, isolement social, hyperréactivité émotionnelle (Nottingham Health Profile), TMS et appréciation de la santé perçue globale. Les associations entre les modalités de passage aux 35 heures et ces paramètres ont été évaluées par des tests du χ^2 et de Fischer exact.

Résultats

L'âge moyen des sujets était de 40.5 ans en 1999. Le sexe-ratio était de 2.17 hommes/femmes. Les variations de temps de travail hebdomadaire induites par la RTT n'étaient pas significativement associées aux problèmes de santé étudiés ($p > 0.05$). Le fait de travailler plus souvent le samedi, du fait du passage aux 35 heures, était significativement associé à l'apparition, entre 1999 et 2003-2004, de tension au travail ($p < 0.05$) et de TMS des membres supérieurs ($p < 0.01$).

Conclusions

Dans la cohorte étudiée, contrairement à ce qui était attendu, la mise en place de la RTT ne semble pas avoir eu d'impact majeur sur la santé des salariés.

Oral Session 20

Population Survey of Psychosocial Risks and their Effects on Mental Health

Chair: **Hermann Burr**

National Research Centre for the Working Environment (Copenhagen, Denmark)

020-1

Trends in Working Conditions Affect Sickness Absence in the Netherlands

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TNO Quality of Life (Hoofddorp, Netherlands)

Problem statement: The effects of recent trends in working conditions on work-related sickness absence are largely unknown.

Objectives: The aims of this study were to describe the trends in working conditions among Dutch employees between 2003 and 2006, and to describe the effects on (work-related) sickness absence that can be inferred from these trends.

Methods: A national representative sample of 55.278 employees aged 15 to 64 years that participated in the Netherlands Working Conditions Surveys of 2003, 2005 and 2006 was used. Linear and logistic regression analyses were performed to investigate the association between the year of assessment and several working conditions.

Results: Between 2003 and 2006, no change was observed in contractual working time, whereas working overtime showed a large increase. Increases were observed also in time pressure and visual display work. Decreases were observed in the physical demands of work, in workplace violence and harassment, dangerous work, skin contact with watery fluids, skin contact with several other specific substances, and in the prevalence of breathing specific substances.

Employees in the upper quartile of the working conditions that have increased (working overtime, time pressure, and visual display work) reported less than average sickness absence. More often than average, however, their absence was work-related. Work-related sickness absence in these employees was more often than average related to a psychological complaint, or a common complaint (flue, cold or headache), and was less often related to a musculoskeletal complaint.

Conclusion: Working conditions in The Netherlands are shifting. Exposure to physical and environmental risks is decreasing, whereas visual display work, time pressure, and working overtime are increasing. The cluster of these latter working conditions is associated with less overall sickness absence, but also with relatively more work-related sickness absence, especially due to psychological and common complaints.

020-2

Nordic Questionnaire for Monitoring the Age Diverse Workforce (QPSNORDIC-ADW)

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In order to get elderly people to continue in the work force until their normal pension age, their preferences and needs must be accounted. The goal of the Nordic project group was to develop a valid monitoring instrument for these purposes.

The General Nordic Questionnaire for Psychological and Social Factors at Work (QPSNordic) was selected as the basis for the questionnaire, since, in 1994-1998, considerable effort was focussed on producing it. Moreover, it includes scales that are relevant for the older age groups.

During the process of validation of the new questionnaire, two sets of data were used. The first data set (n=42318) from the AHA project of Karolinska Institute was used to study the factor "structures" of the QPSNordic. Based on these analyses and a literature study carried out, a restructuring of the QPSNordic scales was carried out. The content areas of the new questionnaire, the Nordic Questionnaire for Monitoring Age Diverse Workforce (QPSNordic-ADW), were classified into task, social and organizational level and into individual level scales and items.

In the second part of the project, the construct and predictive validity of the scales of QPSNordic-ADW were tested on members of teachers' unions from Finland, Norway and Sweden (n=1001). The QPSNordic-ADW includes 97 questions, of which 73 compose 22 scales. Internal consistency of the scales varied between 0.61 and 0.91 measured by Cronbach's alpha. 24 single items measure their own content area. In addition, 13 questions on personal and organizational background factors are included.

The new structure of the QPSNordic-ADW was confirmed to be satisfactory and the factor structures suggested in previous studies (QPSNordic; AHA-project) were confirmed. The QPSNordic - ADW scales also showed associations with the selected measures of individual well-being produces. The results also showed differences between age groups.

Which Came First, Poor Health or Lacking Labour Market Participation?

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Introduction

High correlations between poor health and lacking labour market participation has been shown in many cross-sectional studies. However, the process leading to this association is poorly studied. This study deals with the determination of the relative importance of two processes, namely (1) causation, that is health as a consequence of labour market participation, and (2) selection, that is labour market participation as a consequence of health.

Method

Three consecutive five-year cohorts in the Danish Work Environment Cohort Study were included, the total participation rate was 64%. The basis of the analyses was 14,189 observations on 7,441 people. In the analyses the Markov assumption was applied. First the number of transitions with respect to health or labour market participation was tabulated, and the probabilities of all possible 12 transitions calculated. Logistic regression analyses were carried out in order to control for gender, age, and vocational status.

Results

Only 2,9% of the subjects changed both health and labour market status within the 5 year time windows, these were excluded from the analyses. The observed probability of first losing good health and then labour market participation (downward selection path) was 1.2% whereas the probability of first losing labour market participation and then good health (downward causation path) was 0.5% – the selection path was twice (2,10; 95% CI=1.56-2.82) the probability of the causation path – controlled for gender, age and vocational education. Conversely, the observed probability of the upward selection path was 8.8% and of the upward causation path was 6.8% – controlled for gender, age and vocational education these probabilities were similar (1.06; 0.69-1.68).

Discussion

Selection is more important than causation. However, this is only the case for downward transitions. One should be cautious to generalize these results to other countries as the Danish labour market is unique regarding low unemployment and high turnover rates.

The Relationship Between Occupational Stressors, Coping Strategies, Burnout and Absenteeism

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TNO Quality of Life | Work & Employment (Hoofddorp, Netherlands)

Description of the problem:

It remains unclear whether absences from work are a likely, an effective or a typical response to stress.

Objectives:

The present study examines the relationship between occupational stressors, coping strategies, burnout and absenteeism. We examined avoidant and active coping strategies of workers and tested whether these can moderate effects of occupational stressors on burnout, as well as on the duration and frequency of absenteeism. Specific hypotheses for these interactions were drawn up.

Methodology:

Data from the Study on Health at Work (SHAW), a longitudinal study among a sample of 1888 Dutch workers, is used. The data was gathered through an internet panel. Measurements took place in 2004 and 2005. Surveys were sent by email to 3,100 members of an existing panel (response rate over two measurements 62%). Hierarchical multiple regression analyses were performed.

Results:

Results show that negative effects of a high workload on the risk of developing burnout symptoms are reinforced by an avoidant coping strategy. The results also show that, in a situation of low control, active coping leads to higher absence frequency. The negative effects of a high workload on the frequency of absenteeism are reinforced by an avoidant coping style. An avoidant coping strategy also reinforces the negative effects of a high workload on absence frequency.

Conclusions:

Sickness absence is a frequently used measure of ill health, because it is observed that when individuals are unable to effectively cope with stressors in the workplace, health problems and sickness absence may arise. Our results seem to suggest that absences from work may also be a form of conscious coping with stress, exactly to avoid health problems. As yet, little empirical work has been done on this phenomenon. This study will be extended in order to investigate this further.

Cross-language Differential Item Functioning of the JCQ among European Countries

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The objectives of this study were to assess the extent of cross-language differential item functioning (DIF) of the 27 items of the skill discretion, decision authority, psychological demands, supervisor support, coworker support, and physical demand scales of the Job Content Questionnaire (JCQ) among seven research centers from five European countries (Belgium, France, Italy, the Netherlands, and Sweden) and to test whether or not its effects on the scale-level mean comparisons were substantial. A partial gamma coefficient method was used for DIF statistical analyses. Additionally, a judgmental review on translation equivalence between the Flemish (Belgian-Dutch) and Dutch JCQs was done and compared to the results of DIF items statistically identified. On average, 34.0% to 39.5% of the total tested items appeared to be cross-language DIF items. The percentages of DIF items varied by center but were largely a function of similarity of language and culture. The judgmental review indicated that a half of the DIF items might be associated with translation difference. The impact of the DIF items on the scale-level mean comparisons was minor generally. However, some substantial impact cases were observed with the psychological demands, supervisor support, and coworker support scales in one or two research centers. The JCQ scales are comparable across the seven European research centers with due cautions. A stricter translation process, including DIF analysis and qualitative methods, needs to be employed for reducing cross-language DIF of JCQ items in the future.

Distribution and Correlates of Burnout among Employees in Taipei City

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Publication not authorized.

National Surveillance of Psychosocial Risks; the Australian Workplace Barometer

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(1) UniSA (Adelaide, Australia); (2) Uni Melbourne (Melbourne, Australia); (3) Erasmus University (Rotterdam, Netherlands); (4) SA Dept Health (Adelaide, Australia); (5) University of Toronto (Toronto, Canada)

A Round-table meeting was convened at the 2nd International Commission on Occupational Health (ICOH) International Conference on Psychosocial Factors at Work (Japan, August 2005) involving 26 international experts in organizational psychology, stress and burnout research, and surveillance systems. Two resolutions, the Okayama Resolutions, were unanimously supported: (1) The development of an Australian National Research Agenda and Action Plan for the Prevention of Psychosocial Risk and Promotion of Wellbeing at Work, and (2) That the chief priority for an Australian National Research Agenda for immediate action is the implementation of a national surveillance system of psychosocial risk factors. We report on progress towards these goals, in particular on national action and funding to develop a system in Australia. We report on the content of the national tool and the sampling method, and congruence with other national surveillance systems for psychosocial risks and outcomes (N = 36 national systems across 20 different countries; N = 4 multi-country systems). The system will enable international benchmarking of Australian work conditions against international standards, and the tracking of important temporal trends in conditions and work-related mental and physical health.

Longitudinal Analysis of the Psychosocial Work Environment and Postpartum Depression

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Problem: Postpartum depression is a prevalent and debilitating mental disorder. Although more than one-half of mothers with infants participate in the workforce, little research has addressed the association between the psychosocial work environment and postpartum depression.

Objective: To identify the psychosocial work and family factors associated with women's postpartum depressive symptoms over the first year after childbirth.

Methods: We employed a prospective cohort design and utilized econometric methods specific to panel data to estimate the effects of leave duration, job strain, and work-family conflict on postpartum depressive symptoms. Eligible employed women, 18 years or older, were interviewed in-person at 3 Minneapolis and St. Paul hospitals while hospitalized for childbirth in 2001. Telephone interviews were conducted at 5 weeks (N=716), 11 weeks (N=661), 6 months (N=625), and 12 months (N=575), after delivery. Depressive symptoms (Edinburgh Postnatal Depression Scale) were measured at each time period.

Results: The women averaged 30 years old, 86% were Caucasian, and 46.5% were primipara. Two Stage Least Squares analysis showed an additional day of leave from work after childbirth until 6 months postpartum decreases depressive symptoms. Fixed effects regression analyses revealed that work stressors (psychological demands and family-to-work conflict) and home stressors (work-to-family conflict, infant sleep problems, and infant fussy behavior) increase depressive symptoms. Increased psychosocial resources (job flexibility, perceived control, and social support from family and friends) decreased depressive symptoms. Supervisor support and social support from family and friends buffered the effects of work-to-family conflict on depressive symptoms while job flexibility buffered the effects of family-to-work conflict.

Conclusions: There is an interdependent relationship between stress from paid work and stress from unpaid home tasks that affects postpartum depressive symptoms. We identified factors amenable to change that can inform leave policy discussions, employer policies and healthcare providers with the ultimate goal of positively influencing employed mothers' health.

Oral Session 21

Psychosocial Factors and Health among Health Care Professionals

Chair: **Regis de Gaudemaris**

EPSP - TIMC CNRS UMR 5525 (Grenoble, France)

021-1

Psychosocial Work Characteristics and Job Burnout in Chinese Nurses

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Objective: To examine the association between psychosocial work characteristics and job burnout in Chinese hospital nurses.

Methods: With a prospective study design, 1983 female nurses from 7 hospitals in Shanghai were recruited in our baseline survey, from December 2006 to January 2007. We used the validated Chinese version of the Copenhagen Psychosocial Questionnaire (COPSOQ) and the Copenhagen Burnout Inventory (CBI), to measure psychosocial work characteristics and job burnout, respectively. The one-year follow-up data collection has been undertaken in January 2008.

Results: After adjusting for the potential confounders by multivariate logistic regression, the analysis of baseline data showed that the nurses with high demands at work, low job satisfaction, poor work organization and content, and poor interpersonal relations and leadership had an elevated risk of job burnout; the ORs (95% CIs) were 5.41 (3.94, 7.44), 3.62 (2.47, 5.30), 1.73 (1.25, 2.39), and 1.54 (1.10, 2.14), respectively.

Conclusion: At baseline, the psychosocial work characteristics were strongly associated with job burnout in Chinese nurses. The causal relationships will be analyzed further in our ongoing follow-up study.

021-2

Internal Validation of a Score to Measure Hospital Working Conditions

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Introduction: In order to measure psychological and organisational factors that affect hospital workers and their health condition, validated measures are needed. A score was thus designed, using the RNWI (revised-Nursing Work Index) as a basis, and adding dimensions unexplored by the RNWI.

Objective: To explore the internal structure of this questionnaire as a first step of validation.

Method: The RNWI questionnaire was back-translated, and 19 questions were added; 2453 nurses and 1632 health-care assistants from 7 University Hospitals in France, from the ORSOSA study, were included and filled up the questionnaire. The internal structure was analysed by factorial analysis (ACP), on a random sample (50% of the sample), then validated on the other half of the population. Internal consistency of the dimensions was studied by the Cronbach index.

Results: Eight dimensions were observed from the ACP:

- an organization promoting communication
- support from the head nurse
- adequate amount of staff
- relationships among nursing staff
- interruptions during work
- sharing work values
- administrative support
- an organisation respecting days off

These dimensions were found to be concordant in the remaining sample as well as in all subgroups defined by job, age, seniority, sex or sectors of activity. More than 50% of the total variance was explained, and the Cronbach indices were constantly over 0.7. Finally, 28 items were kept into the questionnaire.

Conclusion: This questionnaire adds new original dimensions to the RNWI, related to organisational factors. The validation of this tool will be pursued by concurrent validity (working conditions observed by a specialist) and predictive validity in reference to health, in the next step of the ORSOSA cohort in 2008.

Factors Associated with Working Time among Nursing Professionals

Frida Marina Fischer* (1), Amanda Aparecida Silva (1), Flavio Borges (1), Lucia Rotenberg (2), Mauro Fonseca (1), Nilson Soares (1), Paul Landsbergis (3)

(1) University of Sao Paulo, School of Public Health (Sao Paulo, Brazil); (2) FIOCRUZ (Rio de Janeiro, Brazil); (3) Mount Sinai School of Medicine (New York, USA)

Introduction: Working time influences occupational exposures as well as the daily life of workers. This study aims to evaluate sociodemographic, working conditions and health outcomes associated with long working times (> 44 hours/week).

Methods: A comprehensive self-report questionnaire was answered by 696 nursing professionals working at a university public hospital in São Paulo, Brazil. Working conditions included working hours, time on the job, time as a nurse or nurse aide, environmental work stressors, the Brazilian version of the short version of the demand-control scale. The health variables investigated were: sleepiness on the job, work injuries, and work-related diseases. Hierarchical logistic regression was used to evaluate the factors associated with long working hours.

Results: Study participants were mainly females (88.8%), with a mean age of 34.9 yrs and monthly family income of US\$ 1,400.00. Long working times were reported by 43.5 % of men, and 27.0 % of women; 50.4% worked 12-hour night shifts in a hospital (50.7% held one night job, 19.1% two night jobs, and 30.2% one day and one night jobs). Registered nurses were 22.4%; 37.6% of females reported more than 16 hours per week performing domestic work, compared to 11.8% of men ($\chi^2=22.11$; $p < .001$). Variables independently associated with long working hours were: being a sole breadwinner, performing domestic work less than 16 hours/week, working night shifts and being a registered nurse.

Conclusions: Sociodemographic and work variables play a role influencing the working hours. Long work hours seem to be more common among those with greater demand for income and/or those who did not devote too many hours to domestic work (likely to be men and registered nurses).

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Psychosocial Work Environment and Absenteeism: Using Two Job Stress Models

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Description of the problem: The Demand Control Model (DCM) and the Effort-Reward Imbalance (ERI) model offer putative explanations of the relationship between stressful working conditions and health. These models are based on different psychosocial factors; their combination is recommended by some authors as a way to improve risk estimation of health outcomes.

Objectives: to compare the predictive validity of the DCM and ERI separately, and in combination, for absenteeism.

Methodology: A cross-sectional study with nursing personnel (N=1509) at three public hospitals in Rio de Janeiro, Brazil was performed. A multidimensional questionnaire was used including both stress scales (DCM and ERI). Multivariate analyses were carried out in steps: (i) the DCM and the ERI were separately tested as to the association with absenteeism, (ii) the association between DCM, ERI and absenteeism was estimated while adjusting each job stress model for the other and (iii) the combined effects of DCM and ERI on absenteeism were tested by means of four groups: neither DCM nor ERI, DCM present but ERI absent, DCM absent but ERI present, and both DCM and ERI present. Crude and adjusted odds ratios (OR) and 95% confidence intervals (CI95%) were calculated ($p=0.05$).

Results: About 37% of the sample was absent from work at least one day in the last 12 months. Both stress models were shown to be separately associated to absenteeism. Nevertheless, when adjusting each model for the other and for confounders, only ERI was significantly associated to absenteeism (OR_{adj}=1.77; CI95%=1.33-2.35). An improved estimation of absenteeism risk resulted from the simultaneous exposure to DCM and ERI (OR=2.07; CI95%=1.48-2.90).

Conclusion: ERI seems to be stronger than DCM as an explanatory variable for absenteeism in our sample. An improved risk estimation of absenteeism by combining information from two job stress models was observed.

Oral Session 22

Violence, Harassment at Work and Health

Chair: **Maarit Vartia**

Finnish Institute of Occupational Health (Helsinki, Finland)

022-1

Organizational and Personal Risk Factors in Workplace Bullying

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Workplace bullying – a form of destructive conflict in organizations – has been mainly studied in terms of the detrimental effect to health for the exposed individuals. However, research has still to gain a clear picture of what the causes of bullying are. It remains controversial whether organizational factors play a critical role in the occurrence of the phenomenon once personal factors are also taken in consideration. **Objective:** The hypothesis investigated was that common psychosocial stressors at work are risk factors for workplace bullying over and above personality factors. **Method:** Subjects were 818 predominantly white-collar employees of a public administration in Italy. Components of the demand-control-support and ERI models of work stress, role conflict and ambiguity, neuroticism and workplace bullying were investigated by means of widely used tools. Two different logistic regression models were run, in which bullying was operationalized in terms of (1) perceived exposure to the phenomenon according to a widely used definition (yes vs. no), and (2) perceived exposure to a number of bullying behaviours (highest quartile of the scale distribution vs. others). **Results:** In both regression models, after participant's level of neuroticism was adjusted for, organizational factors significantly and substantially improved prediction. Specifically, both models were consistent in showing that lack of support from coworkers, job insecurity, low esteem, and role conflict were risk factors for bullying. Neuroticism showed a more moderate, although statistically significant, odd ratio in the final models. Surprisingly, lack of support from supervisor, as well as job demands, effort and salary/promotion were not identified as risk factors for workplace bullying. **Conclusion:** Results support the idea that organizational factors are important in workplace bullying, and imply that commonly used interventions to alleviate work stress, such as increasing social support among coworkers, may be effective in reducing the occurrence of workplace bullying.

022-2

Perceived Health and Variety of Negative Actions in Workplace Bullying

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(1) University of Milan (Milan, Italy); (2) IRCCS Maggiore Hospital (Milan, Italy)

Several studies have supported an association between workplace bullying and poor health by considering frequency and duration of bullying situations, but none has focussed on the impact of the number of different negative behaviours. The more bullying behaviours are of different type, the less an individual may have effective coping resources, with a possible increase of the health impact. This study aims at evaluating whether the variety of workplace bullying behaviours has an impact on sickness absence and perceived health status.

A self-reported questionnaire was administered to 9229 workers employed in different companies in Lombardy (Northern Italy), with the support of the Italian trade-unions. The questionnaire includes 38 different behaviours typically associated with workplace bullying. It also investigates workers' health and quality of life and reported number of sickness absence days in the previous 12 months.

The sample was mainly composed of men (53.0%); 32.3% were aged ≥ 45 yrs; 28.1% were blue collars, 57.8% white-collars, and 8.9% managers (5.2% missing).

Mean days of sickness absence per year was 7.4 (range 0-365) and mean number of different negative bullying actions was 1.3 (0- 22). Results indicated that 7% of the sample were at risk for workplace bullying.

As a whole, after adjustment for several confounders, each additional bullying behaviour corresponded to about a 40% increase in the likelihood of reporting poor health (OR 1.4 95%CI 1.34-1.44) and a 16% increase in the likelihood of reporting more than 24 days of sick-leave (OR 1.16 95%CI 1.12-1.20).

This study clearly indicates that, along with frequency and duration, also variety of bullying behaviours is relevant for workers' health. Different negative behaviours strengthen the subjects' awareness of suffering of a bullying situation and might result in increased health risks.

More focused studies might be useful to delve more into the mechanisms explaining this association.

Effects of Mediation on Experienced Stress in Bullying Situations

Maarit Vartia* (1), Timo Pehrman (2)

(1) Finnish Institute of Occupational Health (Helsinki, Finland); (2) Valio Ltd (Helsinki, Finland)

Practical methods to settle bullying situations are currently sought for at workplaces. Mediation is suggested to be one such method. Several studies have shown strong associations between perceived and observed bullying and lowered psychological well-being.

The aim of this case study was to investigate the perceived effectiveness of mediation in conflict and bullying situations and the effect of mediation to the level of stress and mental health among the personnel of the work unit. Before the mediation session/s an external mediator interviewed the whole personnel of the work unit. At the beginning of the interview, the interviewees filled in a questionnaire about stress (single item) and mental health (GHQ 12). The interviewees were also asked about the cause of their stress.

Five workplaces participated to the study: two parishes, one university telephone exchange, one warehouse, and one hospital ward. In total, 44 employees were interviewed. Three were only victims of bullying, four perceived themselves as victims but were also accused of bullying, five were named as bullies, seven were supervisors and there were 25 other members of the work units.

Most of the victims and some of the bullies experienced a great amount of stress before the mediation session. Some employees accused of bullying, only experienced slight stress. Of the members of the units, two out of five people experienced at least some stress. Most supervisors reported feeling some stress. A similar trend was observed regarding mental health. Most of the employees who experienced at least some stress said that the conflict situation or bullying was either the sole or the most important (40%) or a partial (35%) cause of their stress. Follow-up measures will be carried out in March and April 2008.

Psychosocial Work Environment, Interpersonal Violence and Psychotropic Drug Use

Éric Lavigne*, Renée Bourbonnais

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The use of psychotropic drugs has increased over the past years. For workers, the consumption of psychotropic drugs can be harmful in terms of sickness absence, productivity at work and occupational accidents. Many empirical researches have reported a positive association between psychosocial risk factors in the workplace and psychotropic drug use. In addition to adverse psychosocial risk factors at work, interpersonal violence has been studied a lot in the recent years. However, to our knowledge, no study explored the association between interpersonal violence in the workplace and psychotropic drug use.

An intervention research is now being realized to reduce psychosocial risk factors and interpersonal violence at work as well as mental health problems among correctional officers (COs). However, little is known about the prevalence of psychotropic drug use among CO's and the association between psychosocial risk factors at work, interpersonal violence and psychotropic drug use among CO's.

This presentation aims to describe the prevalence of psychotropic drug use, the association between a high level of job strain, interpersonal violence and the use of psychotropic drugs and the association between Effort Reward Imbalance, interpersonal violence and the use of psychotropic medications among COs and determine whether social support at work and overcommitment modified these associations.

A self-administered questionnaire assessed demands and latitude at work with the JQC from Karasek, extrinsic and intrinsic efforts, rewards with Siegrist's instrument, psychotropic drugs consumption during the month prior to data collection and sociodemographic variables.

The study included 1275 participants. The prevalence of psychotropic drug use was 14.7%. A positive association was found between an imbalanced extrinsic efforts-rewards ratio and psychotropic drug use, with a prevalence ratio (PR) of 1.4 (95% CI 1.1-1.9). Job strain and interpersonal violence were not associated with psychotropic drug use. Overcommitment and social support at work did not modify any association.

Oral Session 23

Return to Work after a Mental Health Problem

Chair : **Roland Blonk***

TNO Quality of Life (Hoofddorp, Netherlands)

023-1

Evaluation of Return-to-Work Interventions for People with Common Mental Disorders

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Publication not authorized.

023-2

Work Limitations in Posttraumatic Stress Disorder: Implications for Disability Management

Jaye Wald *

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Posttraumatic stress disorder (PTSD) is a severe and common psychiatric disorder that develops after exposure to a severe traumatic event, which involves an actual or perceived threat of death or serious injury (e.g., road traffic collisions, serious accidents, disasters, sexual and physical assaults, childhood abuse, witnessing traumatic events, military combat). This disorder follows a chronic course, and is accompanied by persistent functional impairment, psychiatric and medical comorbidity, and decreased quality of life. Occupational impairment and disability is a particularly common consequence of PTSD as reflected in high rates of sickness absence (work-loss and cut-back days) and unemployment. However, relatively little known is about the impact of PTSD on work performance. No empirical research has yet examined the types of work difficulties that are experienced by persons with PTSD. Furthermore, there are no validated measurement tools for assessing work limitations or abilities for this disorder. Thus, the first objective of this paper is to review the research literature on work impairment and disability in PTSD and examine the current state of knowledge regarding disability management practices of this disorder. The second goal is to provide empirical data from a study that examined work limitations among a sample of employed persons with PTSD. Results showed that employed people with PTSD experienced significant work-related difficulties as measured by the Work Limitations Questionnaire (Lerner, et al., 2001). Findings also identified specific functional limitations at work, including difficulties with time management (e.g., problems working the required hours), mental-interpersonal demands (e.g., attention and concentration problems), and output demands (e.g., problems working to capacity). Implications for disability management practices are discussed and a program of future research aimed at developing improved assessment and interventions to optimize the work functioning, productivity and health of persons with PTSD is presented.

023-3

**Partial Return to Work and Recovery
from Work-Related Psychological Complaints**

Roland Blonk*

TNO Quality of Life (Hoofddorp, Netherlands)

Publication not authorized.

023-4

**Cohort Study on RTW & Mental Health
in Six EU-Countries**

Irene Houtman*, Seth Van den Bossche

TNO Work & Employment (Hoofddorp, Netherlands)

Publication not authorized.

RÉSUMÉS / ABSTRACTS
AFFICHES / POSTERS

Poster Session

Organizational Interventions to Reduce Psychosocial Risk Factors and Mental Health Problems

P01

Future Inquiry: Participatory Ergonomics Improving the Psychosocial Work Environment

Verna Blewett* (1), Andrea Shaw (2)

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The need for participative techniques for organisational and other interventions is well-established, but sometimes techniques are less than satisfactory, being consultative rather than participative. We introduce a new technique we have developed that has broad application in organisational design and management. Called Future Inquiry, this large group process builds on existing methods (Appreciative Inquiry and Futuresearch) to produce insights that are grounded in the experience of stakeholders, reflecting the reality of everyday working life, and identifying existing strengths as well as needs. Appreciative Inquiry has a focus on what works; Futuresearch asks for the 'whole system' in the room so that many perspectives collaborate on a common agenda, to look for common ground amongst diverse actors. Developing commitment to actions that are grounded in reality are important aspects of Future Inquiry, and it is especially valuable where there is a history of conflict. The process allows participants to legitimately develop new working relationships amongst traditional adversaries, as differences of opinion are discussed on the basis of evidence, rather than petulance or ideology. We have tested and used this technique in a wide variety of settings: in organisations undergoing change, as a strategic planning tool for organisations, to help set new agendas at industry level, as well as in community development in Australia and East Timor. We have found it to be robust and influential. We report on its use in research data collection and its application in developing intervention strategies to improve the psychosocial work environment.

P02

Workers Perception of Ergonomic Intervention and Job Satisfaction

Lys Rocha (1), Debora Glina* (2), Marcelo Pustiglione (3), Laerte Salera (3), Elizabeth Cardoso (3), Mitsue Isosaki (3)

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Objective: To analyze workers' perception and job satisfaction following an ergonomic intervention in a cardiac hospital food service located in São Paulo, Brazil.

Methods: - A questionnaire applied to 89 workers (77 % of population) before and after an ergonomic intervention, containing items on socio-demographic, working conditions and job satisfaction, based on Cooper's Occupational Stress Indicator (OSI) questionnaire. - Statistical analyses based on Wilcoxon paired tests with 5% of significance. - An ergonomic intervention including changes related to environment, equipment, organization and psychosocial aspects.

Results: 81% were females, with a mean age of 37 years old, with secondary education, married, with children, with a mean time in the organization of 9.3 years. Work was characterized by mental (82%) and physical (69%) demands, intense work pace and great volume, low participation in decision making (33%), possibility to ask help from colleagues (72%) and supervisors (63%). Workers' perception of improvements resulting from an ergonomic intervention included: better illumination (65%); acquisition of work equipment (61%), safety equipment (54%) and utensils (66%); use of disposable plastic instead of glass plates (92%); acquisition of more chairs to improve posture changes (91%); monthly meetings between supervisors and workers (66%) and a program of physical work exercises (97%). There was no significant change related to job satisfaction: 61% and 51% of the workers reported being satisfied, and 39% and 49% were dissatisfied in 2006 and 2007 respectively ($p=0,093$). The reasons for satisfaction and dissatisfaction changed. There was an increase of satisfaction with job security ($p=0,028$), and an increase of dissatisfaction with the psychological climate ($p=0,005$), communication flow ($p=0,001$) and wages ($p<0,001$). No hiring to replace workers on sick leave or retired happened and the number of provided meals increased dramatically.

Conclusion: Workers perception of improvements on working conditions was accurate but job satisfaction hasn't improved, because unless a decrease on workload results, ergonomic interventions' effectiveness are limited.

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Efficacy of Psychoeducation on Cognitive Therapy by General Practitioners

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Background: There are numerous reports on the efficacy of cognitive therapy. However, it is unknown whether psychoeducation-based cognitive therapy is effective for employees, and whether general practitioners would be able to deliver it. In the workplace, many workers face potential a risk of developing depressions and anxiety disorders. We think that cognitive therapy is suitable not only for clear patients but also for wider members of the workplace.

Aim: To assess the efficacy of psychoeducation-based cognitive therapy delivered by general practitioners in the workplace.

Methods: A cross-sectional study, with 250 white-collar workers, 30-35 years old, was carried out in 2007. The participation rate was 96.4%. Participants were assigned to an intervention group (n=137) or a waiting list control group (n=104). Participants in the intervention group were offered a three hour group session of cognitive therapy by specialists. After the session, three personal sessions were offered through e-mail with general practitioners. Those in the control group were offered no education. The questionnaire consisted of the Center for epidemiologic scales for depression (CES-D), the Self Esteem Scale (SE), and several questions about the understanding of the sessions. They were assessed at baseline and one month later.

Results: Baseline characteristics were fairly similar in both groups. 111 participants (81%) completed the intervention protocol. We detected differences between groups in changes in the CES-D score from pre- to post- intervention ($p=0.048$). Participants in the intervention group showed a decrease in CES-D score, while those in the control group showed an increased score. No significant differences were detected between the groups in SE scores.

Conclusions: This study showed the efficacy of psychoeducation-based cognitive therapy delivered by general practitioners in the workplace. Further in-depth field work is needed to determine the intervention effect.

Annual Professional Consultations as Supporting Resources for Employees from Abroad

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Objectives: The aim of this presentation is to discuss how to support employees from abroad with the activities of annual professional consultation programs for foreign residents in the suburbs of Tokyo.

Background: In 2005, the national survey showed that there were 770 thousand foreign employees in Japan. The rate for all employees in Japan was only 1.1% and it was quite smaller compared to that in other developed countries. However, they have been rapidly increasing in number today, especially employees from China and the Philippines. Nearly half of them were manufacture or construction workers, 12.7% were professional technicians, and 11.8% were engaged in service industries.

Method: To examine data of annual professional consultation activities for foreign residents from 1998 in M City International Association (MIA) in the suburbs of Tokyo. MIA was a NPO founded in 1989, with the purpose of international cultural exchanges and mutual understanding with people from abroad. Consultations were made by various kinds of professionals such as lawyers, counselors, psychiatrists, work consultants, etc.

Results: A total of 435 consultation cases from 1998 to 2006 was examined. The most common topic was qualifications for residence; then, marriage, family and work issues followed. Consultation for mental health issues represented 12.6%. With the support of volunteer interpreters, sixteen languages were used for the consultations.

Discussion: Foreign residents had various problems to settle down. A few Asian people consulted for psychological issues from the beginning. These matters were often revealed after consultations on other topics. In these cases, collaboration between counselors, psychiatrists and other professionals is essential.

P06

P07

Suicide and the Workplace: Strategies for Employers

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Suicidality and suicide attempts may manifest for a number of reasons. Accumulated workplace stressors may be a precursor to depression and burnout, which can elevate risk for suicide. The literature identifies unique features of work that may both increase suicide risk and access to means. The purpose of this project was to provide information to employers, volunteers, and health care professionals on factors that increase suicide risk in the workplace, and to provide guidance on suicide prevention efforts that can be implemented in the workplace. Working With the Client Who is Suicidal: A Tool for Adult Mental Health and Addiction Services was developed by the Centre for Applied Research in Mental Health and Addiction. It provides an overview of recommended evidence-based practices in assessing and treating suicidal behaviour in adults. This document is consistent with the goals identified in the Blueprint for a Canadian National Suicide Prevention Strategy, developed by the Canadian Association for Suicide Prevention (CASP) in 2004. Features of work such as client dependence, status integration and social isolation may increase suicide risk. The workplace can play an important role in: addressing workplace factors that may increase suicide risk; implementing suicide prevention initiatives in the workplace; attending to and addressing return to work following a suicide attempt; and, appropriately handling information about suicide deaths that occur in the workplace. An overview of evidence-based resources that employers can utilize will be provided.

The Role of the Workplace in Promoting Prevention & Self-Care

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Publication not authorized.

Session d'affiches / Poster Session

Les facteurs modifiant la relation entre facteurs organisationnels et problèmes de santé Modifying Factors of the Association between Organizational Factors and Health

P08

Drinking Habit among Shift Workers and its Health Effects

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Objectives: Shift workers suffer more from sleep disturbance than fixed daytime workers. Several shift workers drink just before bedtime in order to get asleep easily after night work. It might have adverse effects on sleep quality and cardiovascular diseases' risk. Thus, we investigated the association between such habit and sleep quality as well as cardiovascular risk factors among shift workers in a cross-sectional study.

Methods: Subjects were 576 three-shift workers (40.7±11.5 years old) from a factory in Japan. A questionnaire on sleep quality and life style as well as a physical examination were carried out. The subjects were divided into two groups, with or without a drinking habit just before bedtime, and we compared sleep quality and physiological data between the groups.

Results: 1) Prevalence of drinking habit just before bedtime was 26.8% among all shift workers, 16.3% among workers of less than 35 years old, 27.9% among workers aged 35-44 years old and 35.3% among workers of 45 years old and over. The amount of alcohol intake was higher among shift workers having such drinking habit as compared with others. 2) Quality of sleep was poorer among workers with such habit. These results were more apparent among workers aged 35 years old and more. 3) Mean blood pressure was higher among workers with drinking habit just before bedtime as compared with others after adjustment for age. HDL cholesterol was higher and LDL cholesterol was lower among shift workers with such habit.

Conclusion: The presence of a drinking habit just before bedtime seemed to be more prevalent as longer at shift work. Drinking habit just before bedtime might relate to a higher amount of alcohol intake and an increased blood pressure.

P09

Shift Type and Exposure to Traumatic Events

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Police officers witness numerous traumatic events on the job, including severely injured victims and death. Such exposure can result in development of post-traumatic stress disorder and/or depression. Most violent criminal acts occur from 6PM to 6AM; the majority of those which result in severe injury to the victim occur between 6PM and midnight. Our goal was to determine whether officers who work night shift report witnessing more work-related traumatic events than officers who work day shift.

Participants were 100 randomly selected Buffalo, NY officers. Payroll records from 1994 until the examination (2001 to 2003) were used to classify officers into three work shifts based on start time: day, 4-11AM; afternoon, 12-7PM; and midnight, 8PM-3AM. During the exam, participants completed a 9-item Police Incident Survey, which asked officers to indicate whether they witnessed certain traumatic events (i.e. seeing a fellow officer shot, seeing abused children) during the past year, that were particularly disturbing.

Officers working midnight shift reported witnessing a mean of 5.5 traumatic incidents compared to 5.0 for afternoon and 3.3 for day shifts (p-value = 0.002). Adjustment for age (5.6 vs. 5.0 and 3.3, respectively, p-value = 0.005) and age, gender and education (5.2 vs. 4.7 and 3.3, respectively, p-value = 0.0325) had minimal impact on these results. Stratification by demographic variables (gender, age, years of service and rank) yielded no differences in the magnitude of association between shift work and traumatic events.

These results indicate that officers who work midnight shift are exposed to more traumatic events than officers working day shift. This study provides quantitative estimates of the increased risk of exposure to traumatic events associated with midnight shift work and may indicate a relatively greater need for potential assistance among officers working night shift where the risk of witnessing multiple disturbing events is increased.

Interaction Between Psychosocial and Physical Work Factors on Musculoskeletal Symptoms

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Introduction: Little is known about the impact of the interaction between psychosocial and physical work factors on the incidence of musculoskeletal symptoms. Musculoskeletal symptoms are believed to be the first step towards chronic musculoskeletal disorders.

Objective: To investigate an interaction effect between psychosocial and physical work factors on the incidence of self-reported musculoskeletal symptoms, among a group of white-collar workers.

Methods: Psychosocial and physical work factors were assessed in a cohort of 2336 white-collar workers (baseline participation: 80%, follow up participation: 93%). Psychological demands and decision latitude were measured using two 9-item scales (Karasek, 1985). Physical factors related to Visual Display Unit work were assessed using a self-reported questionnaire. Three years later, the 6-month incidence of musculoskeletal symptoms at three different anatomical sites (shoulder-neck, lower back, and upper limb) was estimated with a modified version of the Nordic questionnaire. Analyses were stratified for gender. Effect modification of social support was tested. Interaction effect was computed with the attributable proportion due to interaction (Hallqvist et al., 1996) and its 95% confidence interval (95% CI).

Results: A significant attributable proportion of 0.80 (0.23 - 1.37) was observed for men for the lower back. An indication of interaction between psychosocial and physical work factors was found for all anatomical sites in women with attributable proportions of 0.44 (-0.06 - 0.94), 0.27 (-0.34 - 0.88) and 0.36 (-0.33 - 1.05) for shoulder-neck, lower back, and upper limb respectively. Social support did not modify the interaction between psychosocial and physical work factors.

Conclusion: Interaction between psychosocial and physical work factors has possibly an effect on the incidence of musculoskeletal symptoms in white-collar workers, particularly in men for the lower back region. Larger studies are needed to confirm these results.

Burnout Syndrome in Employees of University Hospital and Public University

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Burnout Syndrome (BS) is presented as a new collection of symptoms that a professional can develop in labor exercise. The instrument most used to survey the BS, the Maslach Burnout Inventory (M.B.I.), is spread out among scholars.

Objective: To evaluate the professional exhaustion of employees of a University Hospital and a Public University using the MBI. The selection of workers aimed to consider several professional activities divided into health care, operational, administrative and technique of therapeutic and diagnosis. This is a transversal, quantitative study that describes the prevalence of BS and its relation with social-demographic and occupational profile. 214 questionnaires have been answered, 112 by female workers and 102 by male workers, aged from 18 to 64 years old. Regarding length of service in the institution, the majority had 16 years or more (42%), followed by employees with 1 to 5 years (23%), mostly working 8 hours daily. The average for the emotional exhaustion (EE) dimension was 24, indicating the average level of Burnout. However, the majority of the workers, 78 (36%), present a high level of EE, mainly for the female workers. The higher level of EE is found among those involved in health care activities (47%). Nevertheless, in diagnosis and therapeutic function, the high level only appears in 25% of workers. Employees with a high level of EE have a greater incidence (69%) of health problems, pain in general (42%) and psychological problems (19.3%). Only 20% of those with a low level of EE revealed health problems and 16.7% revealed pain, while none indicated psychological problems. Workers with a high level EE have more physical and psychological discomfort when compared with workers presenting a low level of EE. This study indicates that possible risk factors for developing BS are professional activity related to assistance, female gender and age between 50-59 years old.

Conceptualisation: santé au travail dans un contexte de globalisation

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La globalisation caractérise le processus socio-historique de complète reconfiguration de l'espace social des 25 dernières années, accompagné, dans les sociétés dites développées, du développement de connections transplanétaires entre les êtres humains et processus soumis, dans sa gestion actuelle, à la prééminence néolibérale. Parallèlement, une certaine « souffrance au travail » émerge. Une moins bonne santé mentale au travail compterait-elle comme l'un des malaises de ce « nouveau monde global » (NMG)? Globalisation et santé mentale au travail seraient-ils dès lors liés ? Si oui, de quelle manière?

Au cours des deux dernières décennies, le travail a connu de profondes transmutations qui pèsent lourd sur la santé et le bien-être des salariés. La « surcharge mentale au travail » ou le « stress professionnel » constitue actuellement le second défi pour la santé au travail. La dynamique d'agression-adaptation, au cœur de cette problématique, différentes perspectives tentent de mieux comprendre l'effet déstructurant de l'environnement actuel de travail et d'en mesurer les contraintes psychosociales. Il devient fondamental de recadrer l'émergence ou le développement de tels problèmes et leurs répercussions dans le contexte de travail de notre époque (facteurs ressources/protecteurs et facteurs risque de maladie/aggravants).

La (sur)charge mentale au travail peut-elle être appréhendée en interrelation avec le contexte de globalisation (périodisation 1980-2007)? En nous basant sur le modèle analytique de « santé publique globalisée » développé par Véronique Lapaige, la visée de cette communication est de recadrer conceptuellement les liens (macro et méso) pouvant exister entre la globalisation et la (sur)charge mentale au travail, nous permettant ainsi de mieux cerner la problématique et d'appréhender le futur.

Du point de vue méthodologique, cette communication prend assise sur une recherche qualitative portant sur la transmutation de la santé publique et sur la gouvernance en santé en contexte global (Lapaige, à paraître), inscrite dans une perspective transdisciplinaire et affiliée à la pensée complexe et de non-linéarité.

Session d'affiches / Poster Session

Identification des problèmes de santé mentale attribuables au travail

Identification of Mental Health Problems Attributable to Work

P14

A Study on Mental Health of Japanese Temporary Workers

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Introduction: The number of temporary workers is increasing, however the health of this group has been of little concern in Japan. We investigated the mental health of Japanese temporary workers and the influence of occupational factors on them.

Methods: A survey was conducted with 1150 temporary workers in 2007. Their mental health status was evaluated using the Japanese version of K6 (Kessler et al, 2002), and the questionnaires contained items related to occupational stressors, suicide ideation, attempted suicide, job and life satisfactions, problem drinking, health behaviors and socioeconomic characteristics.

Results: Data from 744 workers (523 men and 221 women) who provided valid responses to the questionnaire were subjected to analyses. The prevalence of poor mental health (mood disorder or anxiety disorder) was 21.8% in male workers and 25.8% in female workers. It was significantly associated with age, work satisfaction and life satisfaction among male workers, while it was significantly associated with working hours and life satisfaction among female workers. The prevalences of suicide ideation and attempted suicide were 39.0% and 3.6% in male workers, 51.1% and 7.7% in female workers. The occupational factors observed in the poor mental health group were problems in interpersonal conflicts with supervisors and co-workers, quantitative work load, job content, reward, working hours, temperature and humidity in the workplaces, work hazards and job ambiguity among male workers, and problems in interpersonal conflicts with supervisors and job ambiguity among female workers.

Conclusion: The prevalence of poor mental health, suicidal ideation and attempted suicide were high among Japanese temporary workers. The factors observed in the poor mental health group were different by gender. Further studies are needed to clarify the occupational and non-occupational stressors and their impact on mental health among temporary workers.

P15

Organizational Justice and Quality of Life in Japanese Workplace

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Background- Organizational justice has attracted attention as a predictor of employees' health. Some studies showed that organizational justice was associated with employees' quality of life (QOL). However, the association between organizational justice and QOL has not been studied in Japan.

Objectives- The aim of this study was to estimate the association between organizational justice and QOL in Japan.

Participants- The sample for this study was recruited from a manufacturing industry and the participants' types of job were researchers, operators and office workers.

Main outcome measures- Organizational justice: We used the Japanese version of the organizational justice scale (OJS), which was developed by Colquitt and includes 20 items. It is conceptualized as four distinct dimensions: procedural, distributive, interpersonal and information justice. All items use a 5-point Likert scale with anchors of 1=to a small extent and 5=to a large extent. QOL: We used the Short form 8 health survey questionnaire (SF-8), which assess health related quality of life of individuals. It measures health on eight multi-item dimensions and its result can be divided into two groups: physical component summary (PCS) and mental component summary (MCS).

Results- 264 employees answered the organizational justice scale and SF-8. The correlations between MCS and all four components of OJS were statistically significant but weak ($r=0.223$, $p<0.001$). Very weak correlations were also found between PCS and procedural justice ($r=0.122$, $p<0.05$) and between PCS and interpersonal justice ($r=0.152$, $p<0.05$). The results suggest that there is a potential association between organizational justice and QOL of Japanese employees.

Garder le sourire: une stratégie parmi d'autres des serveurs(euses)

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Objectifs: Une analyse du travail du métier de serveurs(euses) de restaurant a été demandée par la Fédération du commerce (CSN). Ce métier, féminin à 79%, est la 9e profession en importance chez les Québécoises et est pratiqué par près de 47 000 personnes. La demande visait surtout la reconnaissance des compétences.

Méthodes: L'étude comprend deux approches, dont seule la première fera l'objet de la présente communication : A- analyse ergonomique de l'activité de travail de serveurs(euses), et B- enquête épidémiologique. L'analyse ergonomique a inclus 84 heures d'observations (préliminaires et systématiques) du travail. Les observations systématiques étaient précédées d'un entretien individuel et suivies d'une confrontation des observations de la chercheuse avec la perception des serveurs(euses), pour fins de validation ou de précision. Deux entretiens collectifs ont permis des validations plus globales.

Résultats: Les tâches effectuées sont très diversifiées et les serveurs(euses) ont acquis plusieurs compétences physiques, cognitives et émotionnelles, qui sont peu reconnues. Elles utilisent plusieurs stratégies, par exemple pour diminuer le nombre de pas faits pendant le travail ou pour diminuer les impacts du transport de charges. Aussi, elles ont développé une expertise dans la gestion des émotions allant du plaisir à la colère ou la tristesse, aussi bien les leurs que celles des clients avec qui la relation est au cœur de ce travail de service.

Conclusions: Le métier de service aux tables, comme plusieurs emplois à prédominance féminine dans le secteur des services, souffre d'une sous-estimation des compétences requises, ce qui nuit à l'exercice du métier, et directement et indirectement à la santé des serveurs(euses).

Session d'affiche / Poster Session

Identification des risques psychosociaux et des problèmes de santé mentale dans diverses populations de travailleurs

Psychosocial Risk Identification and Mental Health Problems in Different Professional Groups

P17

Modèle du programme conjoint d'aide aux employés pompiers de Montréal

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Comment le Programme conjoint d'Aide aux Employés pompiers de la ville de Montréal (PAE), programme par les pairs aidants, agit sur l'ensemble des facteurs favorisant le maintien et le retour à une santé mentale?

Nous aimerions présenter le modèle actuellement en place et les orientations futures envisagées.

- L'efficacité d'un programme paritaire patronal/syndical.
- L'importance que les pompiers accordent aux pairs aidants en première ligne. La présence des pairs aidants est sécurisante et facilitée par une disponibilité 24 heures par jour.
- Comment l'implication paritaire et des pairs aidants favorise le sentiment d'appartenance.
- L'action préventive d'une équipe de pairs aidants, ayant une formation de base et de la formation continue, par la présence constante du PAE dans le milieu.
- Organigramme, rôle de chacun des intervenants clairement défini.
- Le bienfait du support des pairs aidants, excellent complément aux professionnels.
- Possibilité d'un court témoignage.
- L'implication des pairs aidants lors d'événement de stress aigu, lors de désordre de stress post-traumatique.
- Les pairs aidants dans les dossiers de médiation, d'harcèlement psychologique ou de conflit dans les équipes de travail.
- Le soutien continu offert lors du retour au travail.
- Etc.

P18

Effects of Railway Accidents on Psychological Health of Subway Drivers

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In Korea, over a hundred 'person under train' (PUTs) occur annually. From the subway driver's point of view, a PUT incident is a serious life event. Since the second city subway line (5-8th line) has started in 1994, a third of the drivers have experienced PUTs. This study estimated the relationship between PUT experiences and psychological health among subway drivers in Korea. We evaluated drivers' psychological health using the Korean version of the Composite International Diagnostic Interview (K-CIDI). We also investigated their PUT experiences, job stress, coping skills, as well as psychosocial work environment. 836 drivers among a total of 961 drivers (87%) were interviewed. Among them, 265 drivers experienced PUTs and only 13 drivers (4.9%) have had a medical consultation after the accident. We diagnosed 7 drivers with PTSD, 6 drivers with panic disorder, and 11 drivers with major depression. As compared with the general population in Korea, drivers were 2 times higher with major depression, 4 times higher with PTSD, and 7 times higher with panic disorder after adjusting for age effect. Drivers who experienced PUTs were 13 times higher with PTSD than drivers who did not experienced PUTs (OR=13(1.6-108.4)). OR was 2.13 (0.43-10.64) for panic disorder and 2.58 (0.78-8.53) for major depression. Drivers who experienced PUTs had higher depression scale scores (CES-D, Center for Epidemiologic Studies Depression scale) than other drivers ($p < 0.01$). These results suggest that a PUT experience is related to psychological health for subway drivers. Therefore, it is necessary to install a platform screen door system to prevent PUT incidents, as well as to set a compulsory medical care provision system for drivers who experience such events.

Job Satisfaction among Workers from a Hospital Food Service

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Objective: To evaluate the prevalence and the reasons for satisfaction and dissatisfaction among workers of a cardiac hospital food service in São Paulo, Brazil.

Methods: Cross sectional epidemiologic study. A questionnaire was applied by researchers external to the organization, to 115 workers (90% of the population). It contained items on socio-demographics, working conditions and job satisfaction based on the Cooper's Occupational Stress Indicator (OSI) questionnaire (Robertson et al, 1990) translated and validated by Swan et al. (1993).

Results: 81% of participants were females, with secondary education (58%), married (50%) with children (61%) and working as nutritional attendants (66%). The age average was 37 years old and the length of service in the hospital was 9 years. As regards job satisfaction 61% of participants reported being satisfied and 39% were dissatisfied. The most reported reasons for satisfaction were: identification with the organization (89%), personal relationships (82%), job content (75%), job security (74%) and motivational feelings (58%). As for job dissatisfaction, the most reported reasons were: inadequate methods of conflict resolution (70%), low degree of participation in decision-making (70%), lack of career opportunities (70%), inadequate method of performance appraisal (70%), limited possibilities to use competences at work (65%), organizational structure (63%), organizational climate (63%), management style (61%), organizational change (60%), and volume of work (60%). Workers' suggestions for improvement included: to increase the physical space in the kitchen, to acquire better equipment and utensils, and to hire more workers.

Conclusions: The reported reasons for job satisfaction are mostly related to job content and relationships at work and are in agreement with Herzberg's (1961) motivational factors. The reasons for job dissatisfaction are mostly related to management style, human resource policies, undersized number of workers in the section and inadequate fit between workers' competences and work demands.

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Facteurs de l'environnement: secteurs métal et nettoyage

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Les lois reconnaissent l'importance des facteurs psychosociaux dans la prévention de la santé des travailleurs et nous demandent une meilleure connaissance des conditions de travail pour pouvoir les améliorer.

Objectifs : - Détection des facteurs et des causes qui produisent les risques psychosociaux

- Propositions de moyens préventifs

Méthode : Enquête auprès de groupes de travail, délégués de prévention du syndicat UGT, accords collectifs, modèle AMIGO et méthodologie PRENLAB

Résultats : 1) Étude quantitative :- Pourcentage de travailleurs qui ont souffert au moins une fois de troubles psychologiques au travail dans ces secteurs.- Différences statistiquement significatives entre les travailleurs de ces secteurs par rapport à leurs connaissances en ergonomie et psychosociologie, par rapport à la prédisposition perçue dans la direction pour la prévention des risques psychosociaux, par rapport aux stratégies défensives personnelles face aux risques psychosociaux, et entre ceux qui ont soumis ces risques et ceux qui ne les ont pas soumis.

2) Étude qualitative :- La connaissance des problèmes est plus grande que la volonté de les résoudre.- L'initiative pour leur faire face revient d'abord aux travailleurs.- Les remplacements changent les noms des travailleurs avec problèmes, et ceux sans problèmes.- L'autonomie diminue les taux de risques psychosociaux.- Le manque d'information est la responsabilité directe de l'entreprise.- Les contremaîtres sont perçus comme faisant partie du problème, et non de la solution.- La sous-traitance augmente le risque psychosocial.- Le stress et le harcèlement sont plus fréquents dans le secteur du nettoyage.- La connaissance des risques physiques est supérieure à celle des risques psychosociaux

Conclusions : Les risques psychosociaux sont connus et présents dans les secteurs du métal et du nettoyage. La formation est nécessaire, particulièrement parmi les cadres. Les syndicats doivent jouer un rôle plus important, travaillant avec les services de prévention. Les conventions collectives doivent avoir une mention spécifique pour la prévention des risques psychosociaux.

Pourquoi se sont-ils suicidés?

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Problématique: Présenter, à partir de quatre interventions réalisées suite à des séries suicides, les dynamiques professionnelles ayant rendu possible cette succession de drames.

Objectif: Présenter les enseignements tirés au point de vue de l'organisation du travail, de la méthodologie d'intervention, des conduites à tenir en situation de crise et des démarches de prévention.

Méthodologie: Enquête par interview sur population volontaire après débat social, débat contradictoire dans les équipes, partage des analyses et propositions d'actions mesurées dans la durée.

Résultats: Suicide et dynamique professionnelle des quatre interventions : Un suicide en lien avec des organisations confuses. Quatre suicides en lien avec le passage à l'acte d'un cadre de haut niveau valeurs, référent pour la population de travail de 800 personnes, en raison d'un ébranlement de ses valeurs personnelles dans un climat de négociation sociale. Trois suicides dans un contexte de mutation des métiers dont un directement en lien avec des organisations matricielles non régulées. Quatre suicides dans un contexte de changement organisationnel contesté dont un faisant l'objet d'une hypermédiatisation dans un climat syndical d'opposition très dure. Démarches de prévention possible organisationnelles : recréer du débat social, analyse des risques organisationnels, travail en groupe, individuelles : ciblage de populations à risque du fait des contraintes professionnelles et actions concertées sur celles ci. Conduite à tenir en situation de crise : communication interne adaptée, débriefing psychologique avec l'entourage, débat avec les représentants du personnel, recherche de causes organisationnelles si imputation professionnelle, plan d'action

Conclusion: La perte de régulation d'une organisation matricielle est un risque organisationnel majeur : sa redéfinition est un enjeu capital. La contagion des suicides par identification est un fait réel. L'apaisement du climat social est un facteur de réussite important dans l'arrêt d'une « épidémie » de suicides.

Session d'affiches / Poster Session
Conciliation travail-vie personnelle
Work-family Balance

P22

**Contraintes psychosociales au travail,
responsabilités familiales et tension artérielle**

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Introduction: Une seule étude a évalué l'effet de la double exposition aux contraintes psychosociales au travail (demande psychologique élevée et faible latitude décisionnelle) et aux responsabilités familiales sur la tension artérielle chez les femmes et aucune étude, à notre connaissance, chez les hommes.

Objectif: L'objectif de cette étude transversale était de déterminer, dans une population de cols blancs de Québec, si la double exposition à des contraintes psychosociales au travail et à des responsabilités familiales élevées était associée une élévation de la tension artérielle (TA).

Méthodes: La population était composée de 2 003 participants (1184 femmes et 819 hommes) employés de trois entreprises. Les contraintes psychosociales au travail ont été mesurées à l'aide du questionnaire de Karasek. Les responsabilités familiales (le fait d'avoir des enfants ou non, la charge reliée aux enfants, la charge domestique et la charge familiale) ont été évaluées à l'aide d'un questionnaire. La TA ambulatoire a été mesurée sur une période de sept heures durant les heures de travail, à l'aide d'un moniteur électronique. Une analyse de covariance a permis de calculer les moyennes et les différences de moyennes de TA ajustées.

Résultats: Chez les femmes âgées de moins de 45 ans, celles qui étaient en situation de double exposition avaient une élévation significative de la TA diastolique de 1,8 mm Hg (IC à 95% : 0,1 ; 3,5) par rapport aux non exposées. Les hommes en situation de double exposition avaient une TA systolique de 2,8 mm Hg (IC à 95% : 0,2 ; 5,4) plus élevée que les hommes non exposés.

Conclusion: Ces résultats suggèrent que la double exposition est associée à une élévation modeste mais significative de la TA chez les femmes et chez les hommes. Ces résultats seront réévalués dans le cadre d'une étude prospective actuellement en cours dans cette population.

P23

**The Prevalence of Work-Home Interference
in the Netherlands**

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Problem description: In the past decades, the number of employed women has increased substantially. Due to the increase of dual-earner couples, combining work and non-work is increasingly becoming an important object of interest. The problems and conflicts which may appear in the process of combining work and non-work may be severe, leading to depressive complaints and fatigue (Van Hooff et al., 2005). Recent research shows that the prevalence of work-home interference has remained relatively stable in the period from 2000 to 2004 in the Netherlands. Furthermore, the prevalence of work-home interference appears to be particularly high among male, middle aged, high educated workers (Bakhuys Roozeboom et al., 2007).

Objectives: The objectives of this study are to identify explanatory variables for the differences in prevalence of work-home interference according to gender, age and education.

Methodology: For this purpose, the TNO Work Situation Survey (TAS) was used. The TAS has been conducted in 2000, 2002 and 2004 and included about 4,000 workers (employees and self-employed) each year. The survey questions were tested in previous studies and included items related to demography, work contract, company, work situation, health and well-being. Regression analyses were performed to identify determinants of work-home interference, using gender, age, education, working hours, working overtime and work pressure as predictors.

Results and conclusion: This study reveals that work pressure is an important determinant for work-home interference, followed by working hours and education. This study shows that differences in the prevalence of work-home interference for male and female workers could be explained by differences in the number of working hours. Interestingly, although work pressure appears to be an explanatory variable for work-home interference, work pressure has slightly decreased from 2000 to 2004, whereas work-home interference has remained relatively stable in the same period of time.

Duration of Parental Leave and Breastfeeding: Are They Related?

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Problem: Although the duration of breast-feeding has increased in Quebec over the last decades, it remains below current recommendations. Among women who successfully go through the first weeks of breast-feeding, the timing of the return to work appears to be a factor in its continuation. Few studies have examined this association beyond the first few months of postpartum.

Objectives: The study aimed to compare the duration of breast-feeding and its continuation after returning to work, among women who benefited from the parental leave granted by the federal program of employment insurance before and after its extension from six months to one year (December 31, 2000).

Methods: A prospective design was adopted. Participants were 334 workers of the network of Health and Social services, from three areas of the province of Quebec (Canada), requesting maternity leave in 2000-2001. Participants filled two standardized questionnaires (before giving birth and around two months after), and responded to two structured telephone interviews (before and after returning to work).

Results: Among the 170 workers who breast-fed for at least two months, those who anticipated giving birth after enactment of the new one year parental leave breast-fed longer than those who anticipated giving birth before its enactment (10.2 ± 4.5 months vs 8.1 ± 3.7 months; $p=0.002$). However, there was no association between this parental leave and the continuation of breast-feeding after returning to work (17.5% vs 22.2%; $p=0.565$).

Conclusion: A longer parental leave seems favourable to breast-feeding. Being able to benefit from a one year leave gives women the possibility of remaining longer with their child and seems to support the continuation of breast-feeding, particularly before returning to work.

Gender Difference in Health Effects of Work-Family Conflict

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Poster Session

Psychosocial Risk Factors in Developing Countries

P26

Psychosocial Factors and Sickness Absenteeism in Slovenia

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Problem: Psychosocial factors at home and at work influence upon sickness absenteeism. They are supposed to be a hindrance that reduces productivity to the employers and well-being at work to the employees.

Objectives: In the Health Insurance Institute of Slovenia a research was carried out to establish the extension of sickness absenteeism (longer than 30 days) regarding psychosocial factors in the Republic of Slovenia (861 523 employees). Preventive measures should be introduced especially in the working places.

Methods: Data about sickness absences that exceeded 30 days (which is paid by the health insurance) was collected for all the employees in the Republic of Slovenia in the period from 01.01.2007 to 31.12.2007. All the active population was observed about sickness absences in total and especially whether sickness absences were due to one or more of the following diagnoses (International Classification of Diseases-10):

F00-F99: Mental and behavioral disorders,

F43: Reaction to severe stress, and adjustment disorders

Z56.2: Threat of job loss

Z56.3: Stressful work schedule

Z56.4: Discord with boss and workmates

Z56.6: Other physical and mental strain related to work

The number of sickness absences were collected, their duration, frequency rate ($FR = \text{number of new spells of absence per year} / \text{total number of employees} \times 100$), mean duration of absence ($MDA = \text{total number of days absence per year} / \text{total number of spells}$), mean duration of absence per employee ($MDA/E = \text{total number of days absence per year} / \text{total number of employees per year}$) for the above mentioned diagnoses and for all diagnoses (A00 – Z99).

Results: 2,80 % of spells and 6,71% of days of total sickness absenteeism was associated to the observed diagnoses (F + observed Z). Frequency rate was 2,57 (for all diagnoses 91,65), mean duration of absence was 37,20 days (for all diagnoses 15,55) and mean duration of absence per employee 0,95 days (for all diagnoses 14,25).

Conclusion: We expected that sickness absenteeism connected to psychosocial factors would amount 10% of total sickness absenteeism paid by the health insurance. It was less than 10 % as it is usually mentioned in the literature from occupational medicine. Further observation will follow and more caution and accuracy will have to be dedicated to correct classification by ICD-10.

Poster session

Intercultural-immigrant Challenges and Older Workers

P27

Culture-Specific Differences in Occupational Risk-Behaviour of Rescue Service Staff

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Background: The aim was to analyze risk exposure (physical and mental) along with risk behaviour among rescue service staff. Of special interest were safety culture differences between countries. Such differences may reveal a potential for preventive measures for improving health and safety at work.

Methods: In a cross-sectional study, 546 employees in Austria (AT), Germany (D) and Sweden (S) completed a standardized questionnaire. It covered parts of the Copenhagen Psychosocial Questionnaire (COPSOQ) and additional items assessing occupational threats, risk perception and risk behaviour. The response rate was 52% (AT 36%, D 56%, S 59%). ANOVA and Chi2-test have been used to describe differences in groups.

Results: Employees in D reported the highest rate of severe accidents at work during the previous 12 months (D 25%, AT 14%, S 8%). Risk preventive behaviour (e.g. fastening seatbelt) was significantly lower in AT than in D and S (AT 52% vs. D 97%/ S 84%, $p < .001$). Wearing protective gloves was significantly more frequent in D and AT than in S (D 76%/ AT 72% vs. S 66%, $p < .01$); this was associated with a higher prevalence of skin diseases in D and AT than in S (D 12%/ AT 7% vs. S 3%, $p < .05$). In all countries, the risk of burnout was low compared to nursing staff, but increased significantly with experienced "health threats" (e.g. by aggressive patients, $r = .28$, $p < .001$).

Conclusions: Cross-cultural comparisons of occupational groups may exhibit meaningful differences in relevant aspects of occupational health and safety, which most likely would have remained undetected in national surveys. Although the work tasks of rescue service staff are similar in the countries investigated, there are differences in relation to risk exposure and risk behaviour at work. Results and findings might lead to more specific prevention strategies, e.g. through adaptation and extension of (further) education.

Poster Session

Insertion and Maintenance in the Workplace Despite a Health Problem

P28

Effort-Reward Imbalance, Workability and Utility Estimates in Chronic Kidney Failure

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In the US about 300.000 Chronic Kidney Failure (CKF) patients are of the working age. Despite longer survival and improved quality of life (QOL), the employment rate of CKF patients is low. Factors associated to job retention after disease onset are under-investigated. We examined the relationship between Effort-Reward Imbalance (ERI), Workability, and QOL in Hemodialysis (HD). Also, we examined the association of Workability and sick leave rate (SL) in the post-enrollment month. Forty employed HD patients answered a self-administered survey including the ERI, the Work Ability Index (WAI), and the Kidney Disease QOL 36 items (KDQOL-36) questionnaires. We also computed SF-6D utility index, a tool suitable for cost-benefit analyses. We recorded 4-week SL by computer-assisted telephone interview. We tested the associations of ERI quintiles with WAI, KDQOL-36 and utility estimates with Spearman's partial correlation adjusted for age, hourly income (HI), and number of comorbidities (NoC). Patients were classified by WAI scores (Group A if $WAI \leq 27$, Group B otherwise). Differences in SL between groups were assessed by Mann-Whitney test. Sample mean age was 46.9 (SD=8.2). Almost 95% of subjects reported at least one concurrent disease and 65% reported 3 or more comorbidities. Sixteen (40%) were hand laborer. Only 3 (7%) reported ERI values indicating disequilibrium between job efforts and rewards. However, WAI ($= -0.41, p < 0.012$), SF-6D ($= -0.47, p < 0.001$) and KDQOL scale ($= -0.48, p < 0.001$) were negatively correlated to ERI after adjusting for age, HI and NoC. The mean SL was 5.9 days/month (SD=10.4 days/month). Subjects with poor WAI reported 11.8 sick days/month compared to 4.0 sick days/month for subjects with moderate or higher WAI ($p=0.049$). Our data showed that workplace psychosocial environment might have a significant effect on patients' clinical care, workability, and absenteeism rates. It provides the rationale for interventional studies aimed at sustaining HD patients' job retention.

P29

Effect of Exposure in Vivo on Work Functioning: Systematic Review

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Background: Anxiety disorders are associated with functional disability, sickness absence and decreased productivity. Effective treatments of anxiety disorders result in remission of symptoms; however this does not automatically generate complete functional recovery at work. This study is a systematic review of the effect of exposure in vivo in anxiety treatment on work-related outcomes for workers. PTSD studies were excluded as a category that needs a specific approach.

Method: A systematic search was conducted using text words based on bibliographic research. Inclusion and exclusion criteria were defined. After the search, we used the snowball method based on reviews, references, citations and authors of included publications. We assessed the quality of included publications by a checklist. High and low quality studies were incorporated in an evidence synthesis evaluating the level of evidence.

Results: The systematic search resulted in two included publications, by snowballing we found another three. Four studies were aimed at Obsessive Compulsive Disorder (OCD), while one study included a mixed group of participants with either OCD or severe phobias. All studies were rated as being of low quality. Using the rules for evidence synthesis, we found conflicting evidence for a positive relationship between exposure in vivo in anxiety treatment and work-related outcomes.

Conclusion: We found five relevant studies. All studies concerned patients with Obsessive Compulsive Disorders (OCD). For these patients, we found conflicting evidence that exposure in vivo is effective on work-related outcomes. There is a lack of high quality intervention studies aimed at anxiety disorders, apart from PTSD, measuring work-related outcomes.

Attributions for Job Termination among People with Severe Mental Disorders

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People with severe mental disorders often have difficulty obtaining and maintaining employment. Even though the vast majority of these people have the ability and desire to work, 70 – 90% do not. For those who do have a vocational activity, job tenure is generally brief, averaging 3 – 7 months. An important question to ask is: why do these people lose their jobs? The objective of this presentation is to analyze, using Weiner's Attribution theory (1986), the reasons given by people with severe mental disorders for their job termination. According to Weiner, explanations for job termination may be categorized according to their locus of control (internal vs. external) and controllability (perceived capacity to influence the situation). Generally, people have the tendency to attribute success to themselves (internal) and failure to others or to chance (external). This is called the self-serving bias and it may protect or even enhance self-esteem. In a study conducted in Canada, we analyzed the reasons for job termination given by 126 participants (60 women) with severe mental disorders who were registered in supported employment programs and who had at least one occupational activity. The results showed that 73% of participants voluntarily terminated their job and that the termination was attributed mainly to external factors (64%). In analyzing controllability, 53% of the participants' explanations reported perceived uncontrollability. Unexpectedly, self-esteem did not predict the locus or the controllability. In addition, sociodemographic variables, such as gender, were related to the type of explanation given. Men reported significantly more external and uncontrollable explanations than did women (2 (2) 6.19 = 0.045; 2 (2) 9.68 = 0.008, respectively). In conclusion, we suggest that it is important to further explore the environmental factors influencing job termination.

Reemployment Facilitating Factors of 30 Working Women with Mental Illness

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When working women fall into psychiatric illness, most of them have to quit their job rather than be absent. We have followed 30 Japanese working women who have fallen into psychiatric illness and quit their job. Psychiatrists have to help them begin a new way of life by encouraging them to accept a new job in their mourning process. We studied prognostic factors facilitating the obtention of their next job.

Objectives: To analyze 30 cases of Japanese women who quit their job due to mental illness, and who have been visiting our outpatient clinic from July 2003 to June 2007. Their prognosis was determined on December 2007.

Methodology: Those cases were analyzed according to age, complicated physical diseases, cohabitant, job before onset of illness, time length between onset of disease and quitting the job, time length between quitting the job and obtaining their next job, and classification of mental illness according to ICD-10. Status presence was decided on December 2007.

Result: No one received a higher income as compared to their previous working place. The period between the onset of their illness and quitting their job was significantly longer in single women. The period from quitting their job to finding the next one was shorter in single women. The rate of finding a new job was higher in single women. Those who had a complicated physical disease also had greater difficulty in finding a next job. F2 group showed a higher employment rate compared to that of others.

Conclusion: Detecting the factors which regulate the period to begin a "new life" is necessary to facilitate reemployment. It is important to help them accept their next job as a mourning process under psychiatric observation.

Making a Proper Vocational Assessment for Clients with Psychiatric Disabilities

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Background: For individuals with mental disabilities, seeking employment is often critical to recovery. It is also important for them to get an exact evaluation, to decide the appropriate rehabilitation services needed. Vocational assessment is an important process in vocational rehabilitation for adults with psychiatric disability. Since the vocational assessment system for clients with psychiatric disabilities in Taiwan has just been implemented and is at its early stage, there is a need to examine its effectiveness and outcomes. The purpose of this study is to identify what should be evaluated when professionals desire to assist clients with psychiatric disabilities to return to work.

Method: 17 professionals from different disciplines were invited to participate in three focus groups. They included psychiatrists, occupational therapists, vocational evaluators, job placement workers, vocational counsellors, vocational rehabilitation supervisors and the academic professors. Responses were audio taped, transcribed, and coded.

Results: According to the results of the focus groups, what the professionals considered of vocational assessment for clients with psychiatric disabilities is that it should contain seven domains: medical aspects, demographic characteristics, psychological aspect, social aspect, environmental aspect, work-related function and others. The participants regarded work-related functions, medical factors, and environmental factors as the most important information that we have to obtain from our clients. These factors are also seen as important predictors of psychiatric clients' return to work.

Conclusions: The results of our focus groups are consistent with past studies, which showed that both the individual and environmental factors can help or hinder one's return to work. These are also what we should consider while carrying out the vocational assessments for clients with psychiatric disabilities. Therefore, we can help them to get proper vocational rehabilitation services. The details of the focus groups' contents and the evolved themes will be discussed.

Session d'affiche / Poster Session

Intervenir pour réduire les facteurs de risque psychosociaux et les problèmes de santé mentale en entreprise
Organizational Interventions to Reduce Psychosocial Risk Factors and Mental Health Problems

P33

Antidepressant Skills @ Work: Self-Care Strategies for Depression in the Workplace

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Virtual Reality: A Treatment Oriented Approach to Workplace Stress

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Description of Problem: Workplace stress has been costly to workers, organizations, and overall productivity. Research has provided rich theoretical frameworks to help understand and address workplace stress, yet the reformist movement has been pushing for a more multifaceted modern approach. Virtual Reality or VR is an emerging technology that provides a unique opportunity to propel theory and understanding into a new treatment-oriented approach. VR is a motion-driven simulation of real or imagined scenarios in 3D, spanning height, depth, and width in a digitally-generated environment that encompasses multisensorial feedback, real-time interaction, and a sense of realism that immerses subjects into a virtual world, while subconsciously compelling them to respond as though it were reality.

Objectives: In Italy, Dr. Riva's 2005 Dream Island project investigated the efficacy of VR, as a modality to help reduce stress when and where it occurred, in this study of 90 subjects.

Methodology: To reduce their stress level while traveling during rush hour, on a stress-inducing train ride, three groups were randomly assigned. One group received VR, the second watched a DVD movie, and the control group received no intervention at all. The movie and VR relaxation system consisted of a vacation-like, mood-inducing scenario downloaded to subjects' easily accessible cell phone. The VR groups were to interact and immerse in their virtual vacation when their stress level became overwhelming.

Findings: According to pre and post tests as well as the physiological parameters, the VR group enjoyed almost immediate relief and the most significant increase in relaxation, compared to the other groups.

Conclusion: VR could be ideal for organizations. By taking a virtual vacation, workers could reduce their stress level when and where they experience stress. Theoretically, workers can return to their actual work environment with enhanced coping skills, enabling them to be even more productive.

Effects Intervention Employees with a Chronic Disease on Work Behavior

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The objective of this study is to evaluate the effectiveness of a self-management program for employees with a chronic physical illness like rheumatoid arthritis, COPD/ Asthma and diabetes, on the participants' self-efficacy behavior at work. This program is based on the validated Chronic Disease Self-Management Program (CDSMP) from Stanford University. The original CDSMP has been slightly modified to fit the needs of employees with a chronic disease. In order to study the effectiveness of the program, determinants of self-management behavior at work were studied. The Attitude-Social influence-Self-efficacy (ASE) model was applied (De Vries and Backbier, 1994). According to this model, behavior is best predicted by the intention of the person to perform that behavior. Self-efficacy behavior at work has been defined as: 1) To be able to ask help from colleagues and boss when needed (ask for facilities at work, ask for change in job demands), 2) To be able to cope with symptoms such as pain, fatigue, breathing problems and emotional disturbances at work, and 3) To be able to re-organize work according to illness (plan work according to illness, take pauses when needed and be able to say 'no' when needed). Different research methods have been used in this study. Firstly, a RCT based on the cross-over method had been carried out. A questionnaire based on the ASE model was set out before the course, after the course and six months after the course. Secondly, semi-structured interviews have been carried out with participants attending the program. Thirdly, all brainstorm topics and action plans generated in the course have been analyzed using content analysis. The results of the RCT and qualitative data will be presented at the conference.

The Danish Way – A National Strategy for Job Stress Prevention

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Job stress is a known contributor to physical and psychosocial health problems as well as an increasing economic burden for enterprises and society as a whole. Furthermore, many enterprises experience job stress as challenging to address.

To strengthen and qualify work on job stress prevention, the Danish Government has launched a national strategy. Part of the strategy consists of increased inspections by the Danish Working Environment Authority (DWEA), aimed at assessing health and safety risks concerning job stress and job-related violence.

25 sector-specific guidance tools have been developed to help DWEA inspectors assess job stress risks in all Danish enterprises. Based on recent research (COPSOQ, NRCWE 2003), the guidance tools consist of the three most important risk factors in each sector: quantitative demands, emotional demands and work-related violence, as well as important preventive factors, such as quality of management, influence/control and training. In addition, enterprises with identified stress-related health or safety risks are offered extra guidance by DWEA on how to make qualified action plans.

During the first year of the strategy, there has been a 150% increase in the amount of improvement notices issued regarding job stress and job-related violence. The tools have increased the comprehension of the improvement notices, as well as reduced DWEAs time consumption per enterprise. Furthermore, many enterprises with job stress problems have asked for and received DWEA guidance regarding action plans.

The guidance tools seem to be a suitable and efficient way of assessing health and safety risks concerning job stress and job-related violence, thereby allowing the DWEA to detect more of the existing problems. Continuous challenges projected for the strategy include qualifying all DWEA inspectors for proper use of the tools and continuously refining the tools based on further research and experiences from practice.

L'intervention ergonomique comme outil de prévention des risques psychosociaux

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Les composantes du travail, pouvant être éprouvées par les sens, sont prises en considération sous différents aspects : risques pour la santé (efforts physiques, psychologiques), guidage dans le travail (prise d'informations visuelles, acoustiques et tactiles), qualification professionnelle (savoir-faire sensori-moteurs), etc. Pour autant, les caractéristiques humaines ne se limitent pas aux dimensions physiologiques et cognitives. Les aspects psychiques et sociaux doivent venir enrichir et complexifier nos modèles de l'action humaine. Souvent, même lorsque la conception de situations de travail est « centrée sur l'homme », elle ne l'est que par la prise en compte de dimensions physiques, voire cognitives : caractéristiques « objectives » de l'activité. Les aspects psychiques et sociaux, souvent considérés comme « subjectifs » et généralement occultés par les concepteurs, contribuent pourtant largement au développement d'un rapport sensible au travail, issu de la mobilisation des opérateurs : un rapport pré-réflexif aux objets qui engage la sensibilité, l'histoire personnelle et l'ensemble des expériences incorporées. Ce rapport sensible au travail crée de la valeur au plan productif et au plan du développement individuel. Sans cela, les salariés peuvent se trouver dans l'impossibilité d'assurer « un bon travail », mais également de « se retrouver dans ce travail », de « s'y sentir bien ». De nombreux travaux soulignent les liens entre ces situations et les atteintes à la santé, qu'il s'agisse plus particulièrement de Troubles musculo-squelettiques ou de santé mentale. De nombreux projets, issus de volontés de rationalisation des organisations, conduisent les salariés à devoir renoncer à cette dimension du travail, avec les conséquences associées. Dans ce sens et à partir de plusieurs interventions ergonomiques, nous discuterons de résultats concernant les caractéristiques des situations de travail et des démarches de conception associées permettant, selon nous, d'avancer en termes de prévention des risques psychosociaux.

Session d'affiches

Identification des risques psychosociaux et des problèmes de santé mentale dans diverses populations de travailleurs

P38

Facteurs de l'environnement: secteurs sécurité et nettoyage

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Introduction: Les lois européennes et espagnoles reconnaissent l'importance des facteurs psychosociaux dans la prévention de la santé des travailleurs et nous demandent une meilleure connaissance des conditions du travail pour pouvoir les améliorer.

Objectifs: - Détection des facteurs et des causes qui produisent les risques psychosociaux, ainsi que les facteurs qui peuvent jouer un rôle dans la prévention des conflits. - Propositions des moyens préventifs utilisés pour la rédaction de protocoles destinés à la prévention ou à la réduction des risques psychosociaux dans les entreprises basques du métal et du secteur du nettoyage.

Matériel et méthodes: Les travailleurs des entreprises des secteurs sécurité et nettoyage qui travaillent dans l'UPV/EHU sont la cible de notre étude. Ce sont deux secteurs tout à fait différents par rapport au genre, à l'organisation du travail, aux risques et aux facteurs liés à la conciliation du travail et la vie personnelle. Moyennant une enquête et plusieurs groupes de travail, l'équipe de travail s'adresse aux travailleurs, pour obtenir l'information de ses entreprises. Au même moment, tous les accords collectifs seront étudiés pour pouvoir proposer une meilleure rédaction, plus efficace face aux risques psychosociaux. On utilise le modèle AMIGO et la méthodologie PRENLAB pour le diagnostic et la prévention des risques psychosociaux au travail (Peiró 1999,2004; Rodríguez et al. 2007; Sauter, Hurrell, Murphy et Levi, 2006).

Résultats: L'étude finira au mois de juin 2008.

Conclusions: L'étude finira au mois de juin 2008.

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Relation environnement psychosocial-détresse psychologique auprès d'équipes multidisciplinaires en santé mentale

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Les difficultés inhérentes à la pénurie de main d'œuvre et à l'augmentation des besoins de la population obligent les établissements de soins à faire de la qualité de vie au travail et la santé de leurs employés, une priorité pour continuer d'offrir de meilleurs services. C'est dans ce contexte que s'inscrivent les transformations entreprises ces dernières années en santé mentale. En plus d'ouvrir de nouvelles perspectives, ces transformations offrent des opportunités de recherche indéniables, entre autres, l'étude des relations entre l'environnement de travail et la santé des professionnels en vue d'identifier des pistes d'action pertinentes pour améliorer la présence au travail, l'accessibilité et la qualité des soins.

Objectif : Étudier les relations entre les dimensions de l'environnement psychosocial du travail et la détresse psychologique vécue par les professionnels de la santé au sein des équipes multidisciplinaires.

Méthode : L'échantillon est composé de 149 professionnels de la santé œuvrant dans différentes disciplines, au sein de deux centres spécialisés en santé mentale. Les répondants ont complété un questionnaire portant sur les aspects psychosociaux au travail et la détresse psychologique. Des analyses corrélationnelles ont été réalisées à l'aide du progiciel SPSS (version 15), permettant d'identifier des liens entre l'environnement psychosocial et la détresse psychologique.

Résultats : Les corrélations indiquent d'une part, une relation significative mais négative entre le soutien social et un niveau élevé de détresse psychologique ($r = -0.263, p < .01$), et d'autre part, une relation significative positive entre le déséquilibre effort-reconnaissance et un niveau élevé de détresse psychologique ($r = .361, p < .01$).

Conclusion : La santé psychologique des professionnels d'équipes multidisciplinaires semble être favorisée dans un contexte de gestion valorisant entre autres, un équilibre entre l'effort et la reconnaissance et un soutien social de la part des collègues et des gestionnaires.

Accueil clientèle à EDF/GazdeFrance : relations conditions de travail/santé

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Objectifs: décrire les conditions du travail des entreprises EDF et Gaz de France en charge de l'accueil clientèle, leur santé, et rechercher d'éventuelles associations entre les deux.

Méthode: enquête transversale par auto-questionnaire réalisée sur un échantillon représentatif de 2000 salariés (sur 10000) en charge de l'accueil clientèle dans les entreprises, complétée par des données d'absentéisme issues des fichiers d'assurance maladie. Les associations entre 62 conditions de travail et 5 critères de santé ont été analysées.

Résultats: 87 médecins du travail et 9 infirmier(e)s ont participé à la collecte des questionnaires entre juillet 2005 et juillet 2006, et 2011 salariés ont accepté de participer. Trois activités principales sont exercées : accueil téléphonique, gestion, accueil physique. L'existence de références externes confirme la pénibilité particulière de ce métier : les scores moyens de latitude décisionnelle sont 12 % plus faibles et les scores de demande psychologique sont 13 % plus élevés que ceux observés dans l'enquête nationale SUMER 2003. L'absentéisme annuel concerne un nombre plus élevé de salariés (d'environ 50 %) que dans les autres secteurs des entreprises. Trois groupes de conditions de travail potentiellement délétères se dégagent : 1) des temps contraints, 2) la violence effective ou vécue, 3) l'évaluation du travail sur des critères de quantité.

Conclusion: cette enquête met en évidence des associations concordantes entre certaines conditions de travail et des altérations de la santé psychique. Sept recommandations fondées sur ces résultats et l'expérience clinique des médecins sont proposées aux partenaires sociaux.

Le middle manager, un impétrant instable

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Cette communication est issue d'un travail de recherche mené pendant 3 années au sein d'une banque régionale française. Cette recherche est partie de l'étude d'un refus de middle managers d'accepter de nouvelles délégations du Directoire alors que, semble-t-il, ces mêmes middle managers avaient exprimé l'intention d'avoir de nouvelles responsabilités et délégations. A partir d'entretiens et d'observation passive, cette recherche fait ressortir que l'expression d'une intention n'est pas obligatoirement l'expression d'une volonté de passer à l'acte. Plus précisément, des middle managers qui expriment l'intention d'avoir de nouvelles responsabilités sont plus dans une recherche de légitimation de leur statut et de leur rôle, que dans une volonté de passage à l'acte. Notre recherche fait ressortir que le middle manager est en crise de légitimité du fait de son positionnement multipolaire. Il est situé à l'interface de quatre pôles: il est un relais stratégique de la Direction de l'entreprise (ici le Directoire); il est en même temps le supérieur hiérarchique de collaborateurs qu'il doit gérer; il entretient enfin des relations avec ses pairs ainsi qu'avec l'environnement de l'entreprise. Notre recherche démontre que le middle manager cherche à légitimer ce positionnement auprès de ces quatre pôles, et cette quête permanente de légitimité fait de lui un impétrant instable qui peut exprimer l'intention d'avoir de nouvelles responsabilités, pour les refuser par la suite quand on les lui propose.

Poster Session

Insertion and Remaining on the Job Despite a Health Problem

P41

Identify the Barriers in Vocational Assessment for Psychiatric Clients

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Background: Past studies have shown that vocational assessment is an important process in vocational rehabilitation for adults with psychiatric disability. Since the vocational assessment system for clients with psychiatric disabilities in Taiwan has just been implemented and is at its early stage, there is a need to examine its effectiveness and outcomes. The purpose of this study is to identify the barriers faced in vocational assessment for clients with psychiatric disabilities by related professionals.

Method: 17 professionals from different disciplines were invited to participate in three focus groups. They included psychiatrists, occupational therapists, vocational evaluators, job placement workers, vocational counsellors, vocational rehabilitation supervisors and the academic professors. Responses were audio taped, transcribed, and coded.

Results: The discussions of three focus groups highlighted the difficulties faced in vocational assessment including: (1) disintegrated systems of vocational rehabilitation in Taiwan, (2) insufficient training of vocational evaluators on the characteristics and assessment principles for clients with psychiatric disabilities, and (3) specific characteristics of the clients with psychiatric disorders, which may limit the validity and reliability of vocational assessment.

Conclusions: The results of the study were consistent with literature emphasizing that an integrated system for services and adequate training of the personnel including assessment and knowledge about psychiatric illness are necessary components in a vocational assessment system.

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Self-Care Strategies for Mood Difficulties Associated with Chronic Illness

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Chronic health conditions represent a significant cause of work-related disability. In addition to being a primary contributor to disability, chronic health conditions may also impact work function via their impact on mood. However, employees (and the general public) have limited access to evidence-based, non-pharmacological supports for mood difficulties secondary to health conditions. As such, the workplace is an ideal setting and agent for change, insofar as it can serve the role of increasing access to evidence-based resources for employees.

There is significant research literature indicating that self-management training has a substantial benefit for chronically ill patients. As such, the purpose of this project was to develop a self-care workbook, titled *Positive Coping with Health Conditions (PCHC)*. It was designed to enhance the ability of individuals dealing with a range of chronic illnesses to self-manage psychological distress. A draft manual was created based upon: (a) a comprehensive review of evidence-based methods for self-management and managing psychological distress; and (b) a review of existing self-care manuals for mood difficulties (e.g. *Antidepressant Skills Workbook*, Bilsker & Paterson, 2005). Extensive consultations and focus groups were conducted with clinical experts and treatment providers in chronic illness, and patients with chronic illnesses.

The draft manual provides: (1) a rationale for learning new coping skills to deal with psychological distress; (2) step-by-step instruction in seven relevant coping skills derived from cognitive behavioral therapy; (3) a series of illustrative stories showing application of these coping skills by individuals with different chronic health conditions; and (4) further instruction in methods for managing such issues as medication adherence, dealing with the health system, poor sleep, pain, and increasing physical activity. PCHC is a freely available, evidence-based resource that workplaces can freely disseminate to employees. This presentation will address ways in which the workplace can implement and disseminate the PCHC manual.

Evaluation of Rehabilitation Programmes in Work-Disabled Chronic Fatigued Patients

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Problem: Complaints of prolonged fatigue are considered a major health problem, as it can affect daily functioning and lead to work disability.

Objective: To study interventions focussing on fatigued patients, a pre-post study was designed to evaluate two established rehabilitation programmes for patients with prolonged fatigue.

Methodology: New clients from two outpatient clinics who reported fatigue as their major health complaint and who suffered from functional impairments were included. Prog. 1) A multidisciplinary treatment programme of 18 weeks, consisting of physical training and cognitive behavioural approach. Thirty-two new clients were included during the period of 2002-2006. Fatigue complaints (Checklist Individual Strength (CIS)), quality of life (MOS SF-36) and percentage of return to work were measured pre- and post treatment and at three months follow-up. Furthermore, client and employer satisfaction was measured. Prog. 2) A training programme of six weeks, three times a week, consisting mainly of physical endurance training, relaxation therapy and breathing exercises. Eighteen patients were included in 2005. At baseline, three weeks and six weeks from baseline, fatigue complaints were assessed with the CIS.

Results: Fatigue complaints decreased significantly in clients attending the multidisciplinary treatment programme (from CIS-score 102 (SD =19,0) to 64 (SD =35,0), $p = .001$) and the six-week training programme (from CIS-score 106 (SD =13.3) to 78 (SD =21.8), $p = .001$). The percentage of CIS scores below 76 (determined as the cut-off point for chronic fatigue) increased from 10% to 57% after the multidisciplinary treatment and from 0% to 38% after the six-week training programme. Quality of life and percentage of return to work increased significantly after the multidisciplinary treatment. Furthermore, 90% of the clients reported diminished complaints after the training and 82% of the employers were satisfied with the results achieved.

Conclusions: After a multidisciplinary treatment programme, positive changes were found in quality of life and work participation in patients with prolonged fatigue. In both rehabilitation programmes, significant and clinical effects on decreased fatigue complaints were found.

Poster Session

Violence, Harassment at Work and Health

P44

Psychological Harassment at Work: Types, Victims, Main Diagnoses

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Objective: To analyze cases of moral harassment at work, in terms of victims' sociodemographic characteristics, types of mobbing and most frequent diagnoses.

Methods: An epidemiologic study, with 15 cases, was conducted in 2007, in the Occupational Health Service of the Hospital das Clínicas in São Paulo, Brazil. The data was collected by psychologists via individual structured interviews, including questions about socio-demographic characteristics, psychiatric and psychosomatic symptoms and clinical diagnosis, working and life conditions, drug consumption habits, worker's perception on work's contribution to health outcomes and on what constituted psychological harassment at work.

Results: 60% were females, with ages ranging from 29 to 48 years old, 93% were Caucasian, 60% married and with children, with an education level from incomplete high school to post graduation, 60% were São Paulo state natives. Participants were mainly from private organizations (60%), from different economic activity branches with a great variability of jobs, including both blue and white collar workers. Length of service at the job varied from 3 to 31 years. 94% worked more than 44 hours weekly, 80% did overwork. 93% reported moderate to fast work pace and 80% reported no control over work rhythm. Symptoms showed impairment: 100% in reasoning, memory, affectivity, vital tendencies, and attention, 80% in sensations, 67% in critical capacity and speech, 53% in space and time orientation. 53% reported cardiovascular symptoms. Stress disorders (67%) and depression (33%) were the most frequent diagnoses. Reported types of harassment were: humiliations (93%), dismissal menaces (87%), changes on job attributions and interference on wages, benefits or work rights (73%), work pressure, discrimination and lack of equity (67%), interference on working time (almost 50%).

Conclusion: Psychological harassment at work is a democratic phenomenon, affecting workers from different backgrounds, jobs, and economic activity branches. There is a great variability on the types of psychological harassment. Workers are submitted simultaneously to various kinds. It can cause psychiatric and psychosomatic diseases.

P45

Violence Prevention Training in Health Care Settings for Hospital Workers

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Purpose: In recent years, violence prevention training has been provided for nursing staff in psychiatric hospitals. However, other staff members in the hospitals are excluded from the training. Even worse, few general hospitals provide their workers with such training, and the training benefits for hospital workers have not been substantially examined. Therefore, the present study aims to elucidate the positive effects of violence prevention training on general hospital workers.

Methods: In three general hospitals, questionnaires were distributed to 86 workers who participated in the training. The Nonviolence Crisis Intervention program (9 to 12 hours) developed by the Crisis Intervention Institute was carried out. Participants were asked to freely describe the benefits of the training. Methods for protecting the privacy of the participants and how the research would be published were also explained, in order to obtain each participant's consent.

Results: 73 female (84.9%) and 13 male (15.1%) hospital workers participated in the training. Regarding job type, 76 (88.4%) were nurses, 9 (10.5%) were clerks, and one (1.1%) was a PT. According to the questionnaire responses, after the training, the participants were able to:

- Minimize the extent of damage without escalating violence
- Deal with violence according to its level
- Ensure the security of patients and hospital workers
- Confirm and clarify how they should deal with violent situations
- Communicate with other staff members more easily

Conclusions: The benefits of the training included the effective prevention of violence, the minimization of violence damage, and learning how to deal with violence. In the hospitals, nursing staff and other workers come into contact with patients. Due to the limit of an individual's capability to deal with violence, it should be addressed as a team. Accordingly, it is necessary to provide violence prevention training for hospital workers of various job types.

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Factor Analysis and Construct Validity for a Vigorous Well-Being Measure

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In his 1998 presidential address to the American Psychological Association (APA), Martin Seligman heralded the call for more research to understand how psychological well-being contributes to optimal human functioning, spurring research on optimal functioning at work. Recent research on work engagement by academic researchers (Britt, 1999; Saks, 2006, Schaufeli & Bakker, 2004; Shirom, 2003) and organizational managers and executives (Harter, Schmidt, & Hayes, 2002; Corporate Leadership Council; 2004) has provided evidence that this call has been embraced. Shirom (2003) characterized vigor as affective energetic responses to elements of the work and work environment. Accordingly, Shirom developed a 12-item scale labelled the Shirom-Melamed Vigor Measure (SMVM) to assess how three energetic components (cognitive liveliness, physical strength, and emotional energy) contribute to the expression of vigorous affect in the workplace. The current research looks to provide support for the construct validity of Shirom's purported measure of workplace engagement, vigor. Employing a sample of 889 quick-service restaurant employees (split for cross-validation), the current research attempted to replicate the factor structure of the SMVM. In addition, converging evidence assessing the construct validity of the vigor subdimensions to other desirable organizational outcomes (i.e., intent to stay, job satisfaction) was investigated. In both samples, results supported the three-factor structure of the SMVM. Construct validity analyses generally supported all organizational constructs as significantly related to vigor and its subdimensions. Implications of this research include its ability to further support the construct validity of the SMVM, and its underlying factor structure, as important correlates of desirable organizational constructs. Understanding these relationships can provide organizations with another effective tool to encourage employee well-being and workplace efficiency. Additionally, this research has been important in further identifying a reliable measure of work engagement independent of its potential antecedents and consequences, a potential problem with other supported work engagement measures (Shirom, 2003).

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Factorial Validity of Brazilian Version of Demand Control Support Questionnaire

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Introduction: The Karasek's Demand and Control is the most cited theoretical model in international literature about job stress. The Demand-Control-Support Questionnaire (DCSQ) is a shortened and modified version of the Job Content Questionnaire (JCQ) that has been used in Brazil. Objective: To explore the factorial validity of the Brazilian version of DCSQ applied to hospital workers (2004-2005) and to restaurant workers (2006-2007).

Methods: The study encompassed 828 workers who completely answered the Brazilian version of DCSQ, 402 self-reported in a hospital (H) and 426 interviews in 9 restaurants (R), in Rio de Janeiro city. Reliability was assessed by internal consistency (Cronbach's alpha) for each dimension: psychological job demands, decision latitude and social support at work. Exploratory Factor Analysis (EFA, ordinal factor analysis with full information maximum likelihood - LISREL) with varimax rotation was conducted for each group separately. Confirmatory Factor Analysis (CFA) using Structural Equation Models was used to test theoretical structure of dimensionality defined a priori, choosing the best fit of models.

Results: Cronbach's alpha coefficients were 0.77 (H) and 0.58 (R) for psychological demands, 0.60 (H) and 0.53 (R) for decision latitude, and 0.84 (H) and 0.71 (R) for social support at work. EFA disclosed 4 (H) and 6 (R) empirical factors, but the most satisfactory model was with 3 (demands, decision latitude and social support at work) for both groups, explaining 41% (H) and 30% (R) of the variance. CFA supported the instrument construct in four dimensions: psychological demands, skill discretion, decision authority and social support at work. However, the item 'repetitive work' of decision authority dimension displayed low standardized factor loading.

Conclusion: For these study populations, results provided evidence for the validity of four dimensions of the Brazilian DCSQ. Future research using Item Response Theory models may require further exploration of gender gradients.

Fractions of CVD, Mental Disorders, and MSD Attributable To Job Strain

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Objectives: This study aims at evaluating fractions of diseases attributable to job strain according to Karasek's model among the French working population for three health outcomes: cardiovascular diseases (CVD), mental disorders, and musculoskeletal disorders (MSD).

Methods: Job strain was defined by the combination of high psychological demands and low decision latitude. The prevalence of exposure to job strain (PE) was estimated using the representative national sample of 24,486 employees of the French SUMER survey. Risk ratios (RR) for the studied health outcomes were estimated from a literature review (1990-2006). Inclusion criteria included scientific quality and accuracy of health outcome and exposure measurements. Attributable fractions were calculated as follows: $AF = PE(RR-1) / (1+PE(RR-1))$ for the whole working population and for specific occupational groups.

Results: PE estimates were 19.6% and 28.2% for men and women, and 10.3-36.2% according to occupational categories. RR estimates for CVD were 1.2-2.3. For men, 3.8-20.4% of CVD morbidity were attributable to job strain, 6.1-12.6% for women. AF was 22.1% for CVD mortality. RR estimates for mental disorders were 1.4-3.3. For men, 13.6-31.1% of mental disorders were attributable to job strain, 10.6-23.7% for women. RR estimates for MSD were 1.5-2.3, leading to fractions of MSD attributable to job strain of 11.7-26.8%.

Conclusion: Fractions of diseases attributable to job strain may be substantial and may reach 20-30%. Two limitations of our study may be: 1) estimates provided by different data sources (French data for PE, international literature for RR), and 2) small number of studies to allow accurate estimates of RR (for CVD mortality and MSD). This study emphasizes the need for further etiological studies using validated instruments, and the importance of evaluating fractions of diseases attributable to job strain as a public health issue. Furthermore, such results may be crucial to estimate the economic cost of diseases attributable to job strain.

Les facteurs psychosociaux prédicteurs de la présence au travail

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Le principe de la présence au travail consiste à maximiser une présence de qualité et en santé des employés. Chez Hydro-Québec, le volet préventif du projet de la Présence au travail se propose d'analyser les données disponibles dans l'organisation, afin d'identifier précocement les unités qui semblent les plus à risque et celles qui semblent le mieux performer. Contrairement à des approches utilisant des questionnaires ou des sondages, l'approche utilisée ne s'appuie que sur des données existantes. Cette présentation expose la démarche adoptée et les résultats obtenus jusqu'à ce jour.

Privacy in Occupational Health Care

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Description of the problem: An ethical dilemma is defined as a problem where there is a conflict between two or more values, where there are two or more 'right' courses of action. Ethical dilemmas around privacy issues are frequent occurrences in occupational health (OH) practice. Occupational health professionals (OHP) are often caught between the conflicting interests of employees who wish to maintain their privacy and employers who have a legitimate right to know. OHP must carefully balance these interests of both groups of clients, employees and employers.

Objectives: The research had two main objectives: 1) to identify the courses of action adopted in ethically problematic situations related to privacy, and 2) to identify the knowledge base used in decision-making concerning privacy.

Methodology: The postal inquiry, followed by a reminder card, was sent to randomly selected respondents in the winter of 2006. The overall response rate was 64%; 140 (77%) nurses and 94 (51%) physicians returned the questionnaire.

Results: The most valid course of action in dealing with sensitive subjects such as drug and work community problems, sexual harassment and sick leaves in the dual loyalty position, is to rely on tripartite cooperation. There were statistically significant differences between nurses and physicians, in relation to the courses of action adopted in the problematic situations of privacy. The most commonly used knowledge base in the choice of one's courses of action was work experience. Evidence-based decision-making remains as rare as it has been previously in Finnish OH.

Conclusion: If professional independence and impartiality are maintained, OHP have every chance to succeed in the challenging task: maintaining privacy of their two groups of clients, employees and employers.

Development of the Japanese Version of the Organizational Justice Questionnaire

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Objectives: Organizational justice has recently been proposed as a new job stress model, which consists of two components, i.e. procedural justice and interactional justice. In Europe, many prospective studies have reported that low organizational justice is associated with health problems. We developed the Japanese version of the modified English version of the organizational justice questionnaire (OJQ: seven-item scale for procedural justice; and six-item scale for interactional justice) developed by Kivimäki et al (the original English version was developed by Moorman). The present study reports the reliability and validity of the Japanese version of the OJQ.

Methods: A draft Japanese version of the OJQ was developed through developing a Japanese translation followed by revisions, by a group of experts in the field of job stress. A total of 185 male and 58 female workers of a manufacturing factory in Japan were surveyed, using a mailed questionnaire including the Japanese version of the OJQ and other job stressors.

Results: Cronbach's alpha coefficients of the two OJQ subscales were acceptably high (0.85-0.94), both for male and female subjects. A two-factor model (i.e. procedural justice and interactional justice) fitted well, but only for male subjects. The OJQ was correlated with job control, supervisor support, effort-reward imbalance, and job future ambiguity in expected directions for male subjects, while some unexpected correlations were observed for females.

Conclusion: The present study showed that the Japanese version of the OJQ has acceptable levels of reliability and validity for male subjects. However, the factor structure and the correlation with other job stressors were deviant from those theoretically expected for females, which is partly attributable to special characteristics of the sample.

Prevalence of Effort-Reward Imbalance in Mexican Population

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The Effort-Reward Imbalance Model has been outstanding in its relationship with several health outcomes. Nevertheless, research has been undertaken mainly in developed countries. The prevalence of Effort-Reward Imbalance (ERI) across Latin-American countries has remained unknown and there are elements to suppose that this problem is more important. This study intends to contribute to the lack of information on this issue, through an evaluation of ERI in a Mexican Sample. Therefore, the objective of this study was to analyze the psychometric properties of the ERI Questionnaire in Mexican employees, and to analyze the prevalence of ERI in different occupational sectors. A cross sectional study was carried out with (N=873) participants who answered a Spanish translation of the ERI Questionnaire (Fernandez, 2006) adapted for Mexicans (Juárez-García, 2007). The factor analyses with Varimax rotation brought out three factors which explained 43.87% of the whole variance (Rewards, Intrinsic and Extrinsic Effort). The alpha cronbach was .83 for Rewards, .70 for extrinsic effort and .58 for over involvement. According to the formula and cut off point suggested by Siegrist (2000), 5.3% of the evaluated employees suffer from high effort-reward Imbalance (> 1). The mean for Extrinsic effort was 12.31 (sd 4.24), 46.36 (sd 7.74) for Reward, 12.82 (sd 3.03) for intrinsic effort, and for ratio E-R, it was .52 (sd .09). Differences by sex, marital status, occupation and educational level were observed (women in a couple, working in health services and with a low education level were more vulnerable). These findings suggest that the ERI Questionnaire is valid and reliable in a Mexican context, and that the prevalence of the problem is not much higher than in developed countries. Future studies are needed so as to test convergent and divergent validation of the model considering socio-demographic factors.

The Development and Validation of Workers' Burnout Inventory

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Publication not authorized.

Session d'affiches / Poster Session

Comprendre les liens entre les facteurs de risque organisationnels et le développement de maladies cardiovasculaires

Understanding the Links between Organizational Risk Factors and the Development of Cardiovascular Diseases

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Burnout and Risk Factors for Arteriosclerotic Disease: Follow-Up Study

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Objective: There is no convincing longitudinal study that has investigated objectively diagnosed health indicators in relation to burnout measured with the Maslach Burnout Inventory (MBI), a universal standard to assess burnout. The purpose of this study was to examine the association between burnout and risk factors for arteriosclerotic disease in a follow-up study.

Participants: Intermediate male managers, employed in a manufacturing company in Japan.

Main outcome measures: The Japanese MBI-General Survey (MBI-GS). Risk factors for arteriosclerotic disease: waist, body weight, body mass index (BMI), blood pressure, triglycerides, HDL cholesterol, total cholesterol, fasting blood sugar, fasting insulin, HOMA-R, and HbA1c.

Methods: Time 1 (T1) data were collected from 442 managers, aged less than 55. They completed a physical health check-up and responded to the Japanese MBI-GS. We calculated Japanese-specific cut-off points of the MBI-GS and applied "exhaustion + 1" criterion to define healthy managers and those with burnout at T1. Biological measures at Time 2 (T2) were collected 4 to 5 years after T1 and 383 managers were followed up. The T1-T2 change values in each indicator between healthy managers and burnout managers were compared. The T1-T2 incidence rates of metabolic syndrome, hypertension, hypercholesterolemia, and impaired glucose tolerance were also compared.

Results: The T1-T2 change values in waist, body weight, BMI were significantly higher in burnout managers. The same result was obtained from co-variance analyses adjusted for the values of each indicator at T1. Furthermore, burnout was considered as a significant explanation variable compared to other variables (age, health behavior such as smoking). The T1-T2 incidence rate of hypercholesterolemia was significantly higher in burnout managers. The same result was obtained from analyses adjusted for other variables (the value of total cholesterol at T1, health behavior).

Conclusion: Burnout, the result from prolonged exposure to chronic work stress, is suggested as a risk factor for arteriosclerotic disease.

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Effort-Reward Imbalance at Work among Post-MI Patients: A Validation Study

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Introduction: Psychometric properties of the effort-reward imbalance (ERI) at work scales have been documented among healthy workers, but they have not yet been evaluated among workers who have gone through a major health problem such as myocardial infarction (MI).

Objective: The objective of the study was to examine whether the psychometric properties of the ERI scales could be replicated among post-MI patients and to measure criterion validity through their associations with psychological distress.

Methods: A survey was conducted among 814 patients (739 men and 75 women) who had returned to work after a first MI (1998-2000). Psychological demands (used as proxy for effort), reward and psychological distress were assessed during a telephone interview. Internal consistencies, construct validity, discriminant validity and criterion validity of the ERI scales were evaluated.

Results: ERI scales and subscales demonstrated adequate internal consistencies with alpha coefficients between 0.59 and 0.80. Theoretical structure of ERI was replicated using a confirmatory factor analysis. Variations in the means of ERI scales (effort, reward, ERI ratio) by age, education and occupational status for each gender supported the discriminant validity. Furthermore, effort, reward and ERI ratio were significantly associated with psychological distress (adjusted prevalence ratio [PR] =1.71; 95% confidence interval [CI] =1.26-2.31; PR=1.63; 95% CI=1.16-2.29 and PR=1.70; 95% CI= 1.17-2.47 respectively).

Conclusion: The psychometric properties of the ERI scales were reproduced among post-MI patients. Associations with psychological distress supported the criterion validity of the ERI scales in this population.

Hypertension artérielle masquée et facteurs de risque chez les travailleurs

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Contexte: L'hypertension artérielle masquée (TA ponctuelle \leq 140/90 mmHg, TA ambulatoire \geq 135/85) et l'hypertension artérielle soutenue (TA ponctuelle \geq 140/90 mmHg, TA ambulatoire \geq 135/85) ont des risques similaires de maladies cardio-vasculaires (Ohkubo et al. 2005). Malgré l'importance des risques associés à l'HTA masquée, l'identification des travailleurs à risque est peu documentée. En effet, les facteurs de risques associés à l'HTA masquée ont été principalement étudiés pour des populations de personnes âgées et des personnes traitées pour une tension artérielle élevée.

Objectifs: Déterminer si certains facteurs de risques modifiables (tabagisme, consommation d'alcool, indice de masse corporelle (IMC) et activité physique) ainsi que les contraintes psychosociales au travail sont associés à l'hypertension masquée, dans une population de travailleurs.

Méthode: La TA a été mesurée à la fois de façon ambulatoire durant une journée complète de travail et de façon ponctuelle (par deux mesures prises en position assise lors de l'installation de l'appareil), auprès de 2376 cols blancs (1451 femmes et 925 hommes) employés de trois entreprises publiques de la région de Québec. Les caractéristiques socio-démographiques, les facteurs liés aux habitudes de vie (tabagisme, consommation d'alcool, indice de masse corporelle (IMC) et activité physique) et les contraintes psychosociales au travail des travailleurs ayant une hypertension masquée ont été comparés à ceux ayant une TA normale.

Résultats: L'HTA masquée est plus prévalente chez les hommes (RC ajusté = 2.38, 95% IC (1.86-3.05)), et est positivement associée à l'âge, l'IMC et la consommation d'alcool. Les hypertendus masqués sont également plus susceptibles d'avoir une demande psychologique et une autonomie décisionnelle élevées (groupe actif) (RC ajusté = 1.58, 95% IC (1.10-2.26)).

Conclusion: L'étude a permis d'identifier des individus à risque de présenter de l'hypertension artérielle masquée en milieu de travail. Elle s'inscrit dans une perspective de prévention des facteurs de risques associés aux maladies cardio-vasculaires chez les travailleurs.

Poster Session

Psychosocial Factors-MSD, Physical Problems and Work Accidents

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The Back Disability Risk Questionnaire: Predicting Persistent Pain and Dysfunction

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There is a clear indication that occupational and psychosocial factors influence the risk of prolonged work absence and disability after the onset of low back pain (LBP); however, optimal methods for patient screening and early intervention are unclear. The Back Disability Risk Questionnaire (BDRQ) is a 16-item self-report questionnaire that was developed to screen for psychosocial and occupational factors affecting the severity and duration of back disability. The objectives of this study were: (1) to assess the validity of the 16-item BDRQ for predicting persistent pain and dysfunction 3 months after acute onset of low back pain; and (2) to compare BDRQ prediction results with the initial observations and judgments of clinicians. Working adults ($n = 519$, 67% male) seeking an initial medical consultation for acute, work-related LBP (≤ 14 days) completed the BDRQ while waiting to see a health care provider at a community-based occupational health clinic in the USA. Pain rating, functional limitation (Roland-Morris Disability Questionnaire), and work status were assessed in a telephone interview 3 months later. In three multivariate logistic regression analyses, the presence of persistent pain, functional limitation, or impaired work status (31.4%) was predicted by 6 BDRQ questions: type of injury (falls), any work absence preceding medical evaluation, less job tenure, prior back surgery, worries about re-injury, poor expectation for early return-to-work, and stress. Classification accuracy was 76.3%. In comparison, initial clinician impressions of symptom severity and disability risk showed no multivariate associations with outcomes. The results suggest the BDRQ may provide important prognostic information not typically observed in a routine medical evaluation for acute LBP, but more screening questions may be necessary to improve classification accuracy and to provide specific recommendations for early workplace or clinical intervention.

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Psychosocial Risk Factors: Obstacles to Recovery or Opportunities for Intervention?

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Kendall et al (1997) coined the term “Yellow flags” to encompass the psychological and social/environmental risk factors for prolonged disability and failure to return to work as a consequence of musculoskeletal symptoms.

In September 2007, at the Decade of the Flags Think Tank and Conference at Keele University, UK, three separate working groups reviewed evidence primarily on the current status and utility of clinical Yellow flags (primarily focused on the psychosocial aspects of pain and function), of Blue flags (focused on beliefs about work) and Black flags (concerned with working conditions and organizational influences on return-to-work).

A series of papers have been developed and an associated monograph containing specific recommendations for action has been produced. This has been targeted at health-care providers, occupational health, employers, insurers and policy makers. It includes recommendations for screening and the development of targeted evidence-based intervention strategies including patient counseling and education, work simulation, improved communication between providers and employers, and improving the pathway back into full-time sustained work. Future research priorities also are identified. Recommendations include developing a competent information/communication system, provision of modified work, addressing competencies in managing RTW and developing a supportive climate towards RTW among injured workers with top-down involvement of senior management.

In our view the suggested shift from identifying risk factors for poor prognosis to the targeting of modifiable risk factors as opportunities for change offers a real opportunity of a new approach to the management of work disability. The presentation will include the most recent research findings on Flags, a series of practical recommendations, and a series of research priorities.

Musculoskeletal Symptoms among Office Workers - Prevalence and Predicting Factors

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Aims: The study focused on musculoskeletal symptoms in the upper extremities and neck at visual display terminals (VDT). Prevalence and symptom-predicting factors including psychosocial factors at work were to be described.

Methods: In a cross-sectional study, 1,065 employees working at VDT more than one hour per day completed a standardized questionnaire (females: 36%, average age: 40 years old, average daily VDT work: 5,1 hours per day). The questionnaire was based on the Nordic Questionnaire and parts of the Copenhagen Psychosocial Questionnaire (COPSOQ). Besides, workplace conditions were documented in a standardized checklist.

Results: The 12-month prevalence of symptoms was 55% for the neck and 38% for the shoulder region. The area of the hand joints and wrists (21%) as well as the elbows and lower arms (15%) was coined much more slightly. Among the multitude of possible influencing factors, only a high lack of job satisfaction, long-standing and uninterrupted VDT work, and limitations to take breaks significantly increased the 12-month prevalence of certain symptoms. Women indicated pain in the neck and shoulders more frequently than men. Furthermore, there was a correlation between age and symptoms of the shoulders and elbow/forearm.

Conclusions: Interestingly enough, there was – besides job satisfaction - no apparent relationship between psychosocial aspects of the job on the one hand and physical symptoms on the other hand. With regards to musculoskeletal disorders, symptoms of the neck and shoulder region should be the focus of preventive activities at VDT workplaces. Besides ergonomic measures, organization of work must allow regular breaks to avoid unmoved sitting position over long periods. Through this, other associated symptoms (e.g. dry or burning eyes, headache) might be prevented as well.

This study was funded by the German Federal Institute for Occupational Safety and Health (BAuA).

Safety Climate in the Portuguese Construction Industry: A Case Study

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Studies concerning safety climate in the construction industry show the existence of a relationship between a safety climate and accidents (a more positive safety climate is linked to less accidents) and the existence of differences in safety perceptions between work groups (sub-safety climates). In these studies the safety climate has been investigated within companies or within groups, but never simultaneously. Moreover, until now, the safety climate in the construction industry in Portugal was not studied.

We present here a case study focusing on the safety climate in the Portuguese construction industry, carried out within the scope of Project HERC (Meliá, 2005). This study's objective was to analyze to what extent there are differences between (1) a company headquarters and construction sites; (2) construction sites and group/companies that are present at a construction site. Its goal was also to test if safety perceptions were shared by the group members (e.g. within companies, within construction sites), suggesting the existence of a consensus (RWG) on climate or sub-climates.

The safety climate was evaluated using a reduced version of the Safety Climate questionnaire that is a part of the HERC Inventory. The data was gathered in one construction company (headquarters and 5 construction sites, including almost all the sub-contractors and independent workers) and with a total of 230 workers.

The results reveal some differences between the headquarters and the construction sites, and between construction sites and sub-contracted companies, suggesting the prevalence of safety sub-climates. On the other hand, results also suggest that not all the groups share safety perceptions. The implications of this research will be discussed.

The Relationship Between Job Stress and Common Cold

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Objectives: This study was conducted to investigate the relationship between job stress and common cold, which is one of the most common infectious diseases.

Methods: A KOSS (Korean Occupational Stress Scale)-based questionnaire survey was conducted targeting 6,699 workers, of which 4,637 questionnaires were returned and 237 data were excluded for showing poor response and having pulmonary disease other than common cold. Consequently, 4,400(65.7%) returned questionnaires were regarded as being reliable data for analyses. Multiple logistic regression analysis, which is adjusted for daily life stress, confounding variables and both, was used to evaluate the relationship between job stress and common cold.

Results: After adjustment for confounding variables and daily life stress, all the subscales of job stress contributed to an increased risk of common cold.

Conclusions: These results indicate that job stress may play a significant role in increasing the risk of common cold, and that further preventive efforts and studies are needed to reduce job stress and address infectious diseases caused by job stress among Korean employees.

Poster Session

Psychosocial Risk Factors and Women Work

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Female Workers' Health and Safety in Social Sector

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Objectives: Recently, the Korean government has introduced many policies to increase jobs in social sectors, in order to solve socio-economic polarization, poverty and unemployment. These jobs usually consist of care work. Most workers are females. However, there are no data about their working conditions. This study was conducted to give basic information about female workers' health and safety in social sectors, through studying household workers at Seoul.

Methods: The study subjects were 321 workers doing household work (e.g. illness care, support in housework, and social or friendship services) for aged or disabled persons in livelihood protections. At first, we conducted interviews with 12 workers (3.8%). Then, we surveyed socio-demographic conditions, load of personal housework, job stress, work-life balance, labor condition, job satisfaction, emotional work, sexual harassment experience, and work-related injury and musculoskeletal symptoms. In addition, we evaluated some tasks with ergonomic tools. The response rate to the questionnaire was 96.0%.

Results: The average age is 52.2 (SD=4.5) years old. All workers are females. The average monthly salary is 781.8 dollars and household income is 2,310.6 dollars. In some cases, their salary is the only income of the family. The average housework time, except for working time, is 205.1 minutes and 92.5% of the workers are the primary person doing the housework in the family. 50.0% (161 persons) experienced work-related injury but only 31 persons (19.4%) were compensated by Seoul city government or the national compensation system. 40% experienced sexual harassment by persons they took care of. Physical environment and job insecurity are major job stressors. Musculoskeletal symptom prevalence with symptom severity being more than 'moderate' is 50.5%.

Conclusion: Working conditions of female workers in social sectors are poor. Injury and sexual harassment frequency are very high. New policies are necessary not only to increase the number of jobs but also to consider the quality of labor.

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Scientific Activity and Work Ability among Croatian Physicians

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Description of the problem: Healthcare workers' work ability might be sustained by intellectual demands. In Croatia, which is a transitional country, scientific activity among health care workers is not encouraged. Hence, it might be associated with their work ability.

Objectives: To determine the relationship between clinical settings, scientific activity and work ability among healthcare workers.

Methodology: Data were gathered from 395 physicians registered at 4 Croatian University hospitals, in a cross-sectional design. Work ability was assessed using the Work Ability Index (WAI) Questionnaire. A WAI score over 37 correlates with satisfactory work ability. Scientific activity was defined as holding an academic degree (M.Sc, PhD, Assistant Professor, Associate Professor and Full Professor) and publishing scientific articles. Differences were analyzed by t-test, ANCOVA (age was used as covariate) and 2-test.

Results: Clinical setting and scientific activity were analyzed for the possible association with work ability. In general, physicians in Croatia have excellent WAI scores (39.6 ± 6.1). Significantly more males than females were dealing with science (45.2% vs. 29.8%, 2-test; $p=0.002$). Physicians who were not involved in scientific activity (250, 63.3%) had significantly greater WAI scores than those who were (40.29 ± 5.92 vs. 39.39 ± 6.19 ; t-test; $p=0.003$). Among those who were scientifically active, there was a gradual increase in WAI score with higher academic title. There were more scientifically active physicians at non-surgical departments than at surgical ones (43.6% vs. 32.2%, 2-test; $p=0.02$).

Conclusion: Although the physicians' work ability is excellent, scientifically inactive physicians have better work ability than their colleagues who are involved in scientific activity. Since science requires investing time and effort over regular working hours, especially in the beginning of a scientific career, it might hamper physicians' work ability. Support for young scientists is thus needed.

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Socio-Demographic Variables and Work Ability among Croatian Healthcare Workers

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Description of the problem: Increasingly, healthcare workers present psychological work-related complaints, endangering their work ability and causing considerable economic losses. Work ability shows a general decreasing trend over years, but it changes differently according to working conditions and personal health status. The relation between socio-demographic factors and work ability of healthcare workers has not yet been studied in countries in transition.

Objectives: To determine the relation between socio-demographic variables and work ability among healthcare workers.

Methodology: Data were gathered from 1487 healthcare workers (395 physicians; 1092 nurses) registered at 4 Croatian University hospitals in a cross-sectional design. Work ability was assessed using the Work Ability Index (WAI) Questionnaire. The differences were analyzed by t-test, ANCOVA and 2-test. A WAI score over 37 correlated with satisfactory work ability.

Results: Marital status, gender, number of children and occupation were analyzed for possible association with work ability. Analysis of marital status revealed that 67.3% of physicians and 62.7% of nurses were married. Significantly more physicians lived in a partnership than alone: 69.5% and 30.5% respectively (2-test; $p=0.003$). The same trend was present among nurses, yet the difference was insignificant. Furthermore, WAI scores were significantly higher among nurses who lived alone (39.63 ± 5.79) than among those who lived in a partnership (37.46 ± 6.38); t-test; $p<0.001$. Physicians living alone had higher WAI scores than their colleagues living in a partnership, but the difference was insignificant. Males had significantly higher WAI scores than females, both among physicians (40.23 ± 5.50 vs. 39.08 ± 6.49 ; $p=0.026$) and among nurses (40.65 ± 5.74 ; 37.98 ± 6.27 ; $p<0.001$). Additionally, all healthcare workers without children had greater WAI scores than those having children (39.68 ± 5.86 vs. 37.84 ± 6.38 ; t-test; $p<0.001$). Physicians had significantly greater WAI scores than nurses (39.59 ± 6.08 vs. 38.17 ± 6.26 ; ANCOVA; $p<0.001$).

Conclusion: Since partnership and children impede the work ability of healthcare workers, they need support either from the society or from their hospital.

Job Stress and Intentions to Leave in Newly Graduated Nurses

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Purpose: The early retirement of newly graduated nurses is a critical issue in Japan. This study aimed to examine the effect of job stressors and readiness on intentions to leave in newly graduated nurses in Japan.

Methods: From June to August 2007, anonymous self-administered questionnaires were distributed to all newly graduated nurses in nine advanced treatment hospitals in Japan. The questionnaire consisted of items concerning socio-demographic status, hospital characteristics, employment characteristics, work hour characteristics, Job contents Questionnaire 22-item (JCQ-22) as work-related stressors, a scale of intentions to leave, a novel 22-item readiness scale, physical and psychological health status, as well as individual characteristics. The response rate was 73% (n=411). After excluding the questionnaires with missing values, 377 questionnaires were analyzed. To investigate the factors associated with intentions to leave among the newly graduated nurses, hierarchical multiple regression analysis was performed, with intentions to leave as the dependent variable, and JCQ-22, readiness scale, and physical and psychological health status as independent variables.

Results: Hierarchical multiple regression analysis showed that the model explained 54% of the variance in intentions to leave. "Orientation for becoming nurse" readiness sub-scale affected intentions to leave most among newly graduated nurses. Physical and psychological health status, which was influenced by job demands and "interpersonal skill building" readiness sub-scale, and supervisors' support also determined intentions to leave independently.

Conclusions: This study suggests that physical and psychological health and supervisors' support were important factors for intentions to leave on newly graduated nurses in Japan as well as their readiness. Since high turnover of nurses in hospitals is costly in terms of organizational outcomes, research on intentions to leave in newly graduated nurses in Japan would be useful to take measures for shortage of nurses in organizations.

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