Conclusions: There are differences in the lifestyle between the two work environments. Job duties can have an influence on the daily habits and consequently on the body composition. Workplaces have great potential to change personal lifestyle choices and a preliminary assessment should be performed in order to propose a tailored intervention. Interventions to improve the lifestyle require an approach that considers not only the characteristics and habits of the workers, but also the organizational determinants that act as a barrier or facilitator for a successful implementation.

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OP10-4

Associations between physical activity level and quality of life and cognitive performance in elderly individuals with multi-year dancing activities

E. Tommasini, E. Cipriani, A. Antonietti, C. Galvani

Università Cattolica del Sacro Cuore, Italy

Purpose: It is well-acknowledged that mental and physical decline associated with aging can be prevented and/or reduced with regular physical activity (PA). Dancing combines cardiovascular, cognitive and coordinative demands, providing a popular leisure PA among elderly. This study examined the impact of multi-year (at least 10 years) amateur ballroom dancing on cognitive and motor abilities and PA level, in older adults (aged 65 to 80 years).

Methods: Nonprofessional senior dancers (SD, N20) were compared with a nonsedentary control group (CG, N18), who was equivalent in age, gender, education and lifestyle and had no record of dancing or similar activities. Participants were assessed with health related quality of life (HRQoL) and cognitive questionnaires: 36 Health Status Survey (SF-36v2), Montreal Cognitive Assessment (MoCA) and Cognitive Reserve Index questionnaire [CRIq]); they underwent Preferred Walking Speed (PWS) motor test and their PA level was assessed using a multi-sensor activity monitor (MVPA).

Results: Participants presented a good SF-36v2 physical component (PCS, 49.2 ± 7.8) and a very good mental component summary (MCS, 52.5 ± 8.1)[1], a quite good total MoCA score (24.2 ± 2.8)[2], and a "medium" total CRIq score (112.4 ± 16.7)[3]. The average PWS (1.3 ± 0.8 m/s)[4] and their daily MVPA (66.2 ± 57.2 min/day) were high. Differences neither in the three cognitive questionnaires nor in PWS and PA level were observed between groups (p = ns).

Conclusions: Ballroom dancing allows mental and physical HRQoL, normal cognitive functioning and good cognitive reserve, notable physical function and PA level, able to contrast the mental and physical decline associated with aging.

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OP10-5

Influences of physical level and chronotype on sleep during aging

L. Castelli[1], A. Mulè[1], L. Galasso[1], E. Bruno[2], S. Shokohyar[1], A. Monturuli[1], F. Esposito[1], E. Roveda[1]

[1]Università degli Studi di Milano, Dipartimento di Scienze Biomediche per la Salute, Milano, Italia;
[2]Fondazione IRCCS Istituto Nazionale dei Tumori di Milano, Department of Research, Epidemiology and Prevention Unit, Milano, Italia

Purpose: Aging is a physiological process, which can also affect sleep quality. With advancing aging, sleep quality may be also compromised by more accentuated morning preferences. Physical activity may improve sleep parameters due to its broad-spectrum action on different physiological variables. The present study evaluated the action of physical habits and chronotype on sleep parameters in elderly.

Methods: The recruitment enrolled 100 Italian elderly (70.9 ± 6.3 years) that completed the Morningness-Eveningness Questionnaire (MEQ), the International Physical Activity Questionnaire-Short Form (IPAQ-SF) and the Pittsburgh Sleep Quality Index (PSQI) for the assessment of chronotype (evening- [E-], intermediate- [N-], morning- [M-] types), physical activity and sleep quality, respectively.

Results: PSQI final score for active subjects (5.3 ± 3.1) described a better sleep quality compared to inactive subjects (6.2 ± 3.4). The worse sleep quality for inactive subjects was associated with higher use of sleep medications ($p = 0.003$) and much more sleep disturbances ($p = 0.003$) and daytime dysfunctions ($p = 0.006$). As regard chronotype, N-types sleep better compared to M-types. This trend is visible also in the female stratification, with active N-type (3.9 ± 3) collecting lower PSQI value compared to active M-types (6.2 ± 3; $p < 0.05$). Active M-type females make significantly less use of sleep medications ($f = 0.05$; $p = 0.02$) and had less sleep dysfunction ($f = 0.03$; $p = 0.03$) compared to inactive M-type females. Active N-types female reported less daytime dysfunctions ($f = 0.03$; $p = 0.03$) compared to inactive ones. Among males, active M-types reported significantly less disturbances compared to inactive M-types ($f = 0.05$; $p < 0.05$).

Conclusions: In general, inactive and M-types subjects sleep worse with respect to active and N-types, respectively. Inactive subjects had also more sleep disturbances and make greater use of sleep medications than active subjects did. An active lifestyle could be considered a useful tool to improve sleep habits and reduces sleep problems during aging.

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