

determine associations between the preferred feeding choices and the factors affecting the decisions.

Results: The findings revealed good knowledge (60%) of the infant feeding options among the respondents. About 42.9% of the women felt the counsellors were not convinced to certain limit which method was best, hence they not confidently guide them on the correct options. The adoption of infant feeding options as recommended by WHO was not optimal. Reasons included deterrents like financial limitations in 36.9% of respondents which was statistically significant at the bivariate ($p < 0.001$) and multivariate ($p = 0.013$, odds ratio = 32.779) levels. This showed that respondents with financial constraints were 32 times less likely to practice the ideal feeding options than women who are not financially constrained. Also, sociocultural norms and beliefs in 40%, and the knowledge of risks associated with some feeding practices (38.5%) statistically significant ($p = 0.022$ and 0.023 at bivariate and multivariate levels respectively). In the course of feeding their children, the respondents had challenges of insufficient breast milk, stigma and discrimination, among others.

Conclusion: High proportions of respondents know the recommended infant feeding options, though the adoption of, and adherence to the ideal methods is not practiced. Sociocultural norms, fear of stigma, discrimination, and financial constraints affect their ability to do so. It is recommended that effective counselling services should be made available to HIV positive women in the hospital by trained hospital personnel to guide such women on making correct choices.

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Seroepidemiological study to assess visceral leishmaniasis in Armenia, 2015



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Purpose: Leishmaniasis is a vector-borne disease caused by protozoan parasites of the *Leishmania* genus which is transmitted by *Phlebotomine* sandflies. The first case of visceral leishmaniasis (VL) in Armenia was registered in 1913. From 1926–1969, 919 cases of VL were reported at different altitudes with the main focus being Yerevan where more than 80% of the cases were situated. A 1970 survey of dogs showed an infection rate of 7.3%. No VL cases were reported between 1969 and 1999. However, since 1999, 99 indigenous human cases of VL have been reported, mainly in Yerevan and in the Syunik, Lori and Tavush regions. The incidence rate is 0.03–0.6 per 100000. As most VL cases are asymptomatic, the objective of the study was to identify the real prevalence of VL in Armenia.

Methods & Materials: A systematic random sampling, pulled from the medical facilities' registry of children less than six years of age, was conducted. Dogs living within a 1500 meter radius of a human case residence were sampled. Leishmanial antibodies were tasted using immune-chromatographic rapid tests rK 39. A standardized questionnaire was developed that contained 28 questions on demographic, epidemiological and clinical characteristics and on knowledge, attitude and practice questions regarding leishmaniasis and its prevention.

Results: Four of the 1238 children tested were positive (0.3%) including 2/91 in Syunik (2.2%) 1/100 in Tavush (1.0%) and 1/200 in Lori (0.5%). In these regions, 146 dogs were tested with eight positives (5.5%): four in Syunik (9.3%), two in Tavush (8.0%), one in Lori (5.6%), and one dog out of 50 tested in Yerevan (2%). The vast majority of parents (93.5%) had not heard of leishmaniasis. The highest levels of disease awareness were observed in Syunik (21%) and the lowest levels in Lori (2%).

Conclusion: Visceral leishmaniasis is a re-emerging problem in Armenia, with a high epidemic potential because of its canine reservoir. It is recommended that intersectional collaboration be strengthened including dog registration and vaccination against leishmaniasis, vector-control and host-reservoir treatment programs. Programs that raise public awareness are required.

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First report of G12P[8] group A Rotavirus introduction in northern Italy, 2016



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Purpose: As the regional reference laboratory for Lombardy (a region of Northern Italy) we participate to the RotaNet-Italy Study Group, in the framework of the EuroRotaNet surveillance network. In this study, group A rotaviruses (RVA) from cases of acute gastroenteritis (AGE) were investigated with the aim of evaluating the co-circulation of different strains and the emergence of uncommon or unusual rotavirus genotypes. Although most of RVA infections are supported by common genotypes G1–G4, and G9 associated with either P[8] or P[4], an unexpected spreading of uncommon genotypes could occur, suggesting gene reassortment events between strains of different origin.

Methods & Materials: During the first part of 2015–2016 rotavirus season, 38 positive-RVA stool samples were collected from as many children (median age: 27 months; IQR: 38.9 months) with AGE admitted to 'ASST-CREMONA' hospital in Cremona, a city of Lombardy region accounting for nearly 71,000 inhabitants. Molecular characterization of RVA, based on EuroRotaNet methods and algorithms, was performed by the regional reference laboratory located at the University of Milan in collaboration with the Istituto Superiore di Sanità, which coordinates the project at national level.

Results: A single rotavirus infection was recorded in 97.4% (38/39) of AGE and a double rotavirus infection was detected in one out 38 children (2.6%). According to G/P-type RVA characterization, the most predominant combination was the uncommon G12P[8] strain, being present in 39.5% (15/38) of children. G1P[8] was detected in 26.3% (10/38) of samples and G9P[8] and G4P[8] were identified at the same extent (6/38:15.8%); one (1/38:2.6%) RVA was G2P[4] and no G3P[8] combination was detected during the study period.

Conclusion: This study reports for the first time a predominant and overwhelming introduction of the uncommon genotype G12P[8] RVA in children hospitalized for AGE in a small area of Northern Italy. Continuation of RVA monitoring activities by the RotaNet-Italy can help defining a baseline of circulating RVA

genotypes before mass vaccination and assess possible genotype replacement once rotavirus vaccination will be introduced.

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Horizon scanning through media mining to identify medical products of human prigin - associated infectious risks: A pilot NOTIFY Project study



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Purpose: Accomplishments in medical science have led to the therapeutic use of a wide range of medical products of human origin (MPHO) that, however, have a shared exposure to risks, such as donor to recipient transmission of pathogens. The goal of the NOTIFY Project is to promote and maximize the use of vigilance and surveillance (V&S) from procurement to clinical application of MPHO at a global level.

We have performed a systematic review of informal and formal reports resulting from media mining in order to identify common and (re)emerging infections that feature possible threats to MPHO safety, initiate a core global network of public health specialists in MPHO-associated risk and keep the NOTIFY Library of adverse occurrences in transplantation, transfusion and assisted reproduction updated.

Methods & Materials: A 24/7 horizon scanning strategy for infectious risk associated with MPHO was designed in collaboration with the department of Global Preparedness, Surveillance and Response of WHO using the Hazard Detection and Risk Assessment System (HDRAS), that integrates a large number of distributed electronic resources. To make our search more specific, we have included the NOTIFY Library's MPHO and pathogen comprehensive taxonomy as additional screening parameters. Once the results started to appear, we were able to rate the significant items (TR topic related: RE relevant, HR highly relevant).

Results: A total number of 136 notifications were captured during the one month study period. Specifically, 39 notifications were MPHO-related (TR, 28.7%), 27 of which MPHO-safety related (RE) and 12 MPHO-derived infection transmissions (HR). The mean number of notifications per day was 4.6 (min 0, max 12). Outcomes have been discussed with US-CDC and E-CDC on weekly basis teleconferences.

Conclusion: A real time horizon scanning strategy through media mining could be a new V&S tool to support MPHO safety and contribute to the improvement of individual and public health. The initial results of this innovative approach justify further assessment over a longer period to search for possible refinements of its use and explore potentials in collaboration with national authorities in charge of MPHO safety at a global level.

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Infections and antimicrobial use in Hungarian long-term care facilities in 2015: A questionnaire-based survey to evaluate initiatives and future developments



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Purpose: Due to the aging population of Europe there is a growing need for long-term care facilities (LTCF). Elderly are at higher risk of impaired immune system due to multiple underlying, chronic diseases, malnutrition, dehydration, and/or use of immunosuppressant medication. Therefore, healthcare-associated infections (HAI) and antimicrobial use can be significant among residents in these settings. This can contribute to the growing problem of antimicrobial resistance in LTCFs, including multidrug-resistant organisms. Due to the lack of national data, our purpose was to establish baseline rates and to identify priorities for improvement.

Methods & Materials: All LTCFs were invited to participate in our questionnaire-based survey between January and December 2015. The assessment covered infection prevention-related topics including: facility demographics, infection prevention practices (e.g. presence of written guidelines, hand hygiene), the most common types of infections and antimicrobial use. Descriptive statistics were used to present the data.

Results: A total of 546 LTCFs (43% of all authorized facilities in the country) participated in the survey covering 40,562 beds. The median number of available beds per facility was 74 (range: 10–720). A minority of LTCFs (2%) had assigned an infection control practitioner. Overall, there was a high availability of protocols for hand hygiene, for prevention and management of MRSA infection/colonization and for the prevention of bloodborne pathogen transmission. 70% of LTCFs reported that their residents acquired infections in the preceding year. The most common were respiratory (88%), urinary (76%) and skin/soft tissue (28%) infections. 66% of LTCFs used antimicrobials. Most frequently used antibacterials were beta-lactams, penicillins (ATC J01C) (34%), quinolones (ATC J01 M) (29%), and macrolides, lincosamides and streptogramins (ATC J01F) (13%).

Conclusion: Our results indicate that HAIs and antimicrobial use constitute a relevant public health problem in LTCFs in Hungary. We have an urgent need for a national recommendation for good practice in LTCFs in order to prevent HAIs and inappropriate antimicrobial therapy leading to the risk of multidrug resistant pathogen development. In addition, limitation of antibiotic use and continuing education of prescribers on antimicrobial treatment are essential.

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