SEX DIFFERENCES IN MANAGING ACCIDENTAL BLOOD EXPOSURE IN A TUNISIAN PUBLIC HOSPITAL

1Amira Omrane, Hamathi Chayma, Meriem Ben Hassine, Lamia Bouzgarrou, Aoualet Mahfoudh, Taoufik Khalfallah. 2Faculty of Medicine of Monastir, Tunisia

Accidental blood exposure (ABE) is major problem of occupational safety among health care workers. This work aimed to assess the gender differences among health care workers of a public hospital in the central region of Tunisia.

Methods An exhaustive retrospective study was conducted over a period of fourteen years, concerning ABE reported in the Department of Occupational Medicine of a public hospital in the central region of Tunisia (Mahdia). The data collected were related to socio-professional characteristics of victims, circumstances of the accident and immediate and follow-up care. Gender groups were compared.

Results A total of 650 ABE were reported during the study period. Victims were predominately female (sex ratio=0.47), mean aged 32.1±9.4 years and having a mean job tenure of 5.5±7.7 years. Paramedics represented 28.3%. ABE were caused by a needle stick in 82.6% of cases. Needle recapping was the direct cause in 10.6% of cases. Only 47.1% of caregivers were wearing gloves at the time of ABE. Women were more exposed to ABE with a higher risk of contamination, but with no statistically significant difference (p=0.33). Immediate care was in accordance with universal recommendations in 34.1% of cases and less adequate among women (p=0.05).

The initial serology was prescribed in 82.6% of cases, that of the 3rd month in 5% of cases and that of the 6th month in 1.2% of cases. Women were less adherent to follow-up with a statistically significant difference at six months (p=0.016). Hepatitis B vaccination schedule was correctly followed in 79% of cases. Women were more adherent than men (p=0.029). Logistic regression analysis did not reveal gender as a predictor of vaccination status (p=0.211).

Conclusion The current study has revealed a high prevalence of ABE mainly among female health care workers with unsatisfactory management, including inadequate immediate care and incomplete post-accident follow-up.

INTERRACTIONS AMONG SHIFT WORK DOMAINS AND EMPTY CALORIE FOOD/BEVERAGE CONSUMPTION

1Ting-Ti Lin, Shannon Zenk, Pamela Martyn-Nemeth, Lisa Tussing-Humphreys, Kathleen M Rospenda, Chung Park, Mary C Kapella. 1National Defense Medical Center, Taiwan

Introduction Shift work has been linked to increased consumption of empty calorie food/beverages. However, the majority of studies investigating associations between shift work and empty calorie food/beverage consumption has been focusing on the impacts of shift timing. Little is known about how other domains of shift work contribute to empty calorie food/beverage consumption.

Objectives The purpose of this study was to examine associations between shift work and empty calorie food/beverage consumption, focusing on other domains of shift work and their interactions.

Methods This was a 14-day intensive longitudinal study with ecological momentary assessment. A convenience sample of 80 Taiwanese hospital registered nurses were recruited. During the study period, employing a 21-item food checklist, participants were prompted four times daily to report their empty calorie food/beverage consumption on a smartphone. Three domains of shift work: shift timing, intensity, and speed were derived from the registry-based work schedules. Three-level mixed-effects regression models were used to test hypotheses.

Results A total of 2,444 momentary observations from 77 participants were included in the final analysis. Findings suggested that high night shift intensity was associated with an increased likelihood of sugar-sweetened beverage intake (AOR=1.64, 95% CI [1.01, 2.68]). Shift speed moderated associations between sugar-sweetened beverage consumption and work shift intensity or shift timing. However, associations between night shift intensity and empty calorie food/beverage consumption did not vary by shift speed.

Conclusions This study suggested how shift assignments might contribute to workers’ empty calorie food/beverage consumption. Therefore, it would be beneficial to rotating shift workers’ eating behaviors and overall health if the identified hazardous shift schedule can be avoided.

PROMOTING SENTINEL SURVEILLANCE PROGRAMS FOR ANTIMICROBIAL RESISTANCE IN CANADIAN SALMON AQUACULTURE, A POSSIBLE AND UNDERSTATED OCCUPATIONAL HEALTH HAZARD

1Cory Ochs, Barb Neis, Kapil Tahlan, Atanu Sarkar. 1Memorial University of Newfoundland and Labrador, Canada

Introduction Canadian salmon aquaculture is a high-risk industry with injury rates that surpass provincial averages in Atlantic Canada, yet few publications address occupational health hazards. Antimicrobial resistance (AMR) emergence is a growing public health concern, and the marine aquatic environment with its rich microbiota is particularly vulnerable to selection of AMR. Antibiotic use in the industry and other anthropogenic activities that result in the deposit of pollutants contaminated with antibiotic into the marine environment can together amplify selective pressure propagating AMR. Similar to terrestrial animal production facilities, there is concern for the development of hotspots for occupational exposures to AMR among aquaculture workers. As the fastest growing food production network globally, the aquaculture industry has been appealed by the Food and Agriculture Organization, among others, to standardize monitoring and to generate an evidence base to better understand the aetiology of AMR emergence in aquaculture settings.