Work organisation, including precarious work/Working conditions

P-323 INVESTIGATING RELATIONSHIP OF HEALTH PROBLEMS REPORTED BY INDIAN OFFICE WORKERS WITH WORKPLACE HABITS AND OFFICE INDOOR ENVIRONMENTAL CONDITIONS

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Introduction Office going population spends a significant part of their lives inside offices. The type of indoor environment that the office buildings provide and workplace habits like prolonged sitting, have a direct effect on workers’ health. This poster will present health problems reported by workers in 30 Indian offices and will relate these health problems with the workplace habits and the indoor environmental quality (IEQ) inside the offices. The presented findings are part of a research that was conducted to evaluate the IEQ of Indian workplaces and its association with workers’ health.

Material and Methods Workers’ health and workplace habits data was collected through an anonymous survey conducted online. These 30 offices had a combined occupancy of about 30,000 and around 1,500 workers participated in the survey. Workers were questioned about their workplace habits and health problems. Office IEQ data (indoor air quality, outdoor views, lighting, thermal comfort, acoustics) was gathered through onsite measurements and site inspection.

Results 66% respondents reported musculoskeletal problems with pain in the neck and shoulder being the most reported issue (32%). Prolonged sitting and infrequent breaks were found to have a direct association with the musculoskeletal problems. 37% reported facing sleep-related problems. Lack of access to outdoor views was linked with higher number of sleep-related problems. 60% reported eye-related issues (eye strain-27% and dry eyes- 11%). Longer working hours and lack of access to outdoor views were linked with higher reports of eye problems. 45% reported health issues which could be linked to unhealthy indoor air quality. Only 1 out of the 30 offices had the indoor air quality in compliance with the Indian Society of Heating, Refrigerating and Air Conditioning Engineers’ IEQ Standard, 2019.

Conclusions The study found that workplace habits and poor IEQ conditions in offices have a negative impact on office workers’ health.

COVID 19

P-330 STUDY TO ASSESS CHALLENGES FACED IN BIOMEDICAL WASTE MANAGEMENT BY WASTE HANDLERS DURING COVID 19 PANDEMIC IN A TERTIARY CARE HOSPITAL

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Introduction Coronavirus disease 2019 (COVID 19) saw an overhaul in the biomedical waste management (BMWM) practices. Waste handlers were at the brunt of these changes. If the challenges pertaining to BMWM at the ground level are better understood, more effective measures to overcome them can be formulated.

Methodology This qualitative research using in-depth interviews was done on 17 participants during August to November 2021 in a tertiary care institute in Mumbai. Thematic analysis was conducted on the qualitative data obtained.

Results Three major themes were generated from the transcripts. They are-challenges and concerns faced by BMW handlers, enablers/motivators, opportunities and future practices. Various challenges faced by waste handlers were- difficulties in segregation and transport of BMW, exhaustion from PPE usage and fear of acquiring and spreading COVID 19 from work, stigma faced from public, and handling COVID 19 deaths. Support from family and colleagues, incentives and a positive change in public perception enabled them to work.

Conclusions It is of utmost importance to address challenges faced by waste handlers in BMWM. This will improve hygiene, workplace safety and reduce transmission of diseases. Onus should also be on periodic training in BMWM.

Musculoskeletal disorders

P-331 OCCUPATIONAL PROBLEM IDENTIFICATION ON ARTISANS OF JODHPUR WOODEN HANDICRAFT AND DESIGN INTERVENTION

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Introduction Jodhpur is highly famous state of India for its handicrafts. Commercialization of this handicraft sector with increased demand resulted, prolonged working hours and working beyond physical capacity. Thus, increasing incidents of occupational hazards among the artisans. Modifying the workstation and tools to better assist the artisans have found to reduce the occupational risks among the artisans. This study aims to evaluate the musculoskeletal risks and to develop a workstation for reducing the risks.

Methods 80 artisans were considered for the study randomly from different handicraft export houses of Jodhpur and Barmer Rajasthan. Questionnaire, environmental effects, and illumination were performed to identify occupational health issues affecting physical abilities of artisans. Further, design methodologies such as concept generation, selection and design development were performed to provide an effective solution.

Results The questionnaire revealed that most of the artisans faced severe discomfort in their wrist, upper back, and lower back as a result of repetitive and bad working postures due to poorly developed makeshift workstation. Artisans also reported health issues such itching and redness eyes, nasal blockage, runny nose, and cough. Along with strain in eyes due to working in low illumination, causing long term eye problems. Among the different concepts, the features provided by the final concepts successfully addressed most of the risk such as, unnecessary repetitive actions and postural load.

Conclusion It can be concluded that a design intervention is needed to address the different occupational risks involved due to postural load. The final developed concept successfully