In a disability service centre, the caregivers have serviced patients turning over, hanging diaper, taking a shower, feeding on and other activities and if they proceed under unnatural postures and overloading for a long time easily causes themselves musculoskeletal (MSD) injuries. The goal of this study is to recognise and record the potential factors of MDS injuries of caregivers in disability service center.

The used methods were conducted mainly by questionnaires (Nordic Musculoskeletal Questionnaire (NMQ)), and ergonomics checklists (Musculoskeletal Disorders checklist (MSDs) and Baseline Risk Identification of Ergonomic Factors checklist (BRIEF) by observation and record to discover the other damages of such operations. Research results showed there existed a significant correlation ($p < 0.05$) between the musculoskeletal injuries with the used hand, daily average working hours, and whether rest was taken in working hours.

Poster Presentation

Cardiovascular Disease

0028 JOB STRESS AND GLYCEMIC LEVELS: THE ROLE OF GENDER AND EDUCATIONAL LEVEL IN THE BRAZILIAN LONGITUDINAL STUDY OF ADULT HEALTH (ELSA-BRASIL)

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This study intends to evaluate the association between psychosocial stress at work according to the model Demand-Control and changes in glycemic levels, investigating the role of gender and educational level.

The Brazilian Longitudinal Study of Adult Health (ELSA - Brasil) is a multicenter study whose. In this transversal cut, 11,922 active workers were selected at the baseline. Job strain was evaluated through the Brazilian version of the Swedish Demand-Control-Support Questionnaire (DCSQ). Glycemic levels were assessed through glycosylated haemoglobin (HbA1c). We calculated odds ratio (OR) with respective 95% of confidence intervals (CI) and multiplicative interactions for education level. The study was approved by the National Research Ethics Commission.

For men with low education, the low skill discretion is strongly associated with altered glycemia (OR 1.91, 95% CI 1.56–2.25). Equivalent pattern is observed among women of low education (OR 1.51, 95% CI 1.18–1.9). Likewise, low decision authority is associated with altered glycemia among men of low education (OR 1.62, 95% CI 1.29–1.95). Among women of low educational level, there is an association between low decision authority at work and intermediate glycemic levels (OR 1.19, 95% CI 1.01–1.37) and altered (OR 1.65, 95% CI 1.28–2.02).

The relationship between job strain and changes in glycemic levels was mediated by education level that stands out as a determining factor for glycemic changes at intermediate (pre-diabetes) and elevated (diabetes) levels, for both men and women.

Poster Presentation

Developing Countries

0029 TREND STUDY OF METABOLIC SYNDROME IN A WORKING POPULATION FROM A DEVELOPING NATION TO CONTROL PREVALENCE OF NON-COMMUNICABLE DISEASES

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Introduction Non-communicable diseases play a vital role in the determination of overall health status of an individual. Metabolic syndrome, as per WHO criteria is associated with obesity as a major pre-determinant risk factor and other comorbidities viz. diabetes mellitus, which increases the risk of coronary artery disease.

Aim/Objective To analyse its trend in a working population w.r.t some important defined variables, to correlate the prevalence over a few years and to justify need for control measures.

Methodology The study was conducted on executives of an automobile manufacturing unit; data was collected through health check reports; analysed by cross sectional study from last 6 years' data. Total data sample strength was 700 approx. 4 sample groups were, thus selected from 2009–10 to 2015–16. Correlation regression and ANOVA were used through SPSS v16. Study was pre-approved ethically and informed consent for the study was received.

Results The prevalence of MS, {p-hat (p)} over the years varied age group wise with p increasing in 2013–14 and 2015–16 data from 0.017 to 0.111 and 0.052 to 0.084 respectively. Correlation between BMI and SBP showed $r=0.093$ and $r^2=0.009$. Similarly, BMI vs DBP, BMI vs FBS and BMI vs TG- showed positive correlation. Comparison of BMI means through ANOVA revealed statistically significant p value while comparing data set of 2011–12 with 2013–14 and also between 2013–14 and 2015–16.

Conclusion The study justified the need for application of preventive measures in the form of health education, promotion of health awareness and regular health check-ups.

Oral Presentation

Occupational Medicine (SCOM/Modernet)

0030 OPPORTUNITIES FOR RECOVERY AT WORK AND EXCELLENT WORK ABILITY – A CROSS-SECTIONAL POPULATION STUDY AMONG YOUNG WORKERS

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Background The aim was to examine cross-sectional associations between opportunities for recovery at work and excellent work ability among young workers and specifically for young workers with high work demands.