**Methods** Cross-sectional study with secondary data from the 2013 Brazilian National Health Survey, with a representative sample of the Brazilian population, including 60 202 individuals. Descriptive statistics were used to present the social and demographic variables and the occurrence of the outcome. Chi-square was performed to test differences between groups.

**Results** A prevalence of MSD was 2.2 times higher in females compared to males (prevalence of 3.3% and 1.5%, respectively). The prevalence of occupational accidents was 47% lower among women compared to men (prevalence of 1.4% and 3.1%, respectively).

**Discussion** Although MSD and work accidents have a seemingly low prevalence in relative values, absolute numbers of cases are worrying, showing a non-favourable picture for working population health. These inequalities on health outcomes occurrences can be partially explained by the unequal way that men and women are inserted in Brazilian working market.

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**CAUSE-SPECIFIC SICKNESS ABSENCE BY OCCUPATION**

Therese N Hanvold*, 1Karina Corbett, 1Petter Kristensen, 1Ingrid S Mehlum. National Institute of Occupational Health, Oslo, Norway; 1Institute of Health and Society, University of Oslo, Norway

10.1136/oemed-2018-ICOHabstracts.375

**Introduction** To identify workers facing particular challenges related to occupational exposure and health is valuable, as work environment plays an important role in terms of sickness absence (SA) and return to work. Assessing vulnerable occupational groups related to SA may facilitate decision makers in terms of allocating resources and interventions. The aim of this paper was to assess cause-specific SA rates by occupational groups related to physical and mental disorders, personal care workers had the highest rate, compared to female corporate managers. For female workers in sales and services occupations had an 83% increased rate, compared to male corporate managers, while skeletal SA. Male metal and machinery workers had a 91% increased rate, compared to female corporate managers, while workers in sales and service occupations and metal and machinery workers had the highest annual rates of musculoskeletal SA.

**Methods** The source population was a Norwegian birth cohort estimated annually during 2005–2019. Individual records on physician-diagnosed SA spells lasting >16 calendar days were obtained from the Norwegian event database FD-Trygd. The incidence rate of SA was estimated using person-time at risk, defined as the sum of person-time spent in the working population at a given period. Person-time accumulated during employment and is based on information from the population registry and the Norwegian register of income and wealth. The incidence rate was calculated as the number of new cases of SA per 1000 person-time at risk. The aim was to estimate the rate of SA for each of the 31 occupations. The source population was a Norwegian birth cohort estimated annually during 2005–2019. Individual records on physician-diagnosed SA spells lasting >16 calendar days were obtained from the Norwegian event database FD-Trygd. The incidence rate of SA was estimated using person-time at risk, defined as the sum of person-time spent in the working population at a given period. Person-time accumulated during employment and is based on information from the population registry and the Norwegian register of income and wealth. The incidence rate was calculated as the number of new cases of SA per 1000 person-time at risk. The aim was to estimate the rate of SA for each of the 31 occupations.

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**MINI BREAK INTERVENTION IN PREVENTING ASTHENOPA among drawing workers using STANDARD AND WIDESCREEN SIZE VDT AT CONSTRUCTION COMPANY IN JAKARTA**

B Hidayat*, T Rahayu, A Kekalih. University of Indonesia, Indonesia

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**Introduction** Asthenopia has the effect of decreasing work productivity and health condition. Although the computer has not been proven to make permanent damage to the eyes but temporary discomfort due to tired eyes can reduce productivity. The impact is on lost working hours and reduced job satisfaction. In Indonesia, In a diagnostic test of tired eye screening tool for office workers in north Jakarta, asthenopia prevalence was found was 80%. Asthenopia among drawing workers is becoming my attention because there are significant number of drawing workers as office workers in Jakarta, Indonesia and limited data regarding their health effect from their work.

**Methods** This is an experimental study with cross over design. The number of subjects who participated in this study were 66 participants. Intervention of no mini break and mini break were given to workers who used VDT size 4:3 and VDT size 16:9. Data was revealed from the difference of NPC before and after 4 hours of VDT exposure and 4 hours of exposure with a 15 min mini break after 2 hours of work to both groups (sub group of VDT 4:3 and VDT 16:9) using RAF (Royal Air Force) ruler.

**Results** The users of VDT size 4:3 have difference of NPC 2.89±1,11 cm in no mini break intervention and 1.42±1,01 cm in mini break intervention. The users of VDT size 16:9 have difference NPC 3.02±1,04 cm in no mini break intervention and 1.41±1,10 cm in mini break intervention. The difference of convergence power between no mini break and mini break intervention for VDT size 4:3 (p=0.000) and size 16:9 users (p=0.000) was statistically significant. There was no significant difference statistically in convergence power in no mini break intervention between VDT size 4:3 and size 16:9 users (p=0.6251) and neither in mini break intervention between VDT size 4:3 and size 16:9 users (p=0.9694).

**Conclusion** The convergence power is different significantly between working without mini break and with mini break in both of VDT users size 4:3 and 16:9. There is no difference significantly between VDT users size 4:3 and 16:9 in no mini break intervention as well as mini break intervention. This is probably because the measurement is only based on NPC and experimental limitations. It takes other parameters to measure asthenopia due to VDT usage as asthenopia is a sign of computer vision syndrome.

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**TOTAL BURDEN OF PRESENTEEISM, ABSENTEEISM AND MEDICAL/PHARMACEUTICAL COST BY HEALTH RISKS**

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**Introduction** The burden of presenteeism and absenteeism has been increasing in recent years, and medical and pharmaceutical costs are also rising due to health risks. This study aimed to evaluate the total burden of presenteeism, absenteeism, and medical/pharmaceutical costs by health risks.

**Methods** Cross-sectional study with secondary data from the 2013 Brazilian National Health Survey, with a representative sample of the Brazilian population, including 60 202 individuals. Descriptive statistics were used to present the social and demographic variables and the occurrence of the outcome. Chi-square was performed to test differences between groups.

**Results** A prevalence of MSD was 2.2 times higher in females compared to males (prevalence of 3.3% and 1.5%, respectively). The prevalence of occupational accidents was 47% lower among women compared to men (prevalence of 1.4% and 3.1%, respectively).

**Discussion** Although MSD and work accidents have a seemingly low prevalence in relative values, absolute numbers of cases are worrying, showing a non-favourable picture for working population health. These inequalities on health outcomes occurrences can be partially explained by the unequal way that men and women are inserted in Brazilian working market.

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