Introduction Hypertension a leading cause for cerebro-cardiovascular diseases. However, a positive lifestyle could potential modify the risk of hypertension. Despite, reports on the positive association between sedentary work life and hypertension/prehypertension, studies involving blue collar workers are scarce. Current multi-cantered study investigated the cross sectional prevalence of prehypertension and hypertension among a group of blue collar (construction) workers.

Methods Present cross sectional quantitative multi-centre study (Ahmedabad & Bengaluru) was executed after later to receiving Institute human ethics committee approval. Details on basis demographics and substance use was collected from all consenting construction labourers employed at construction sites. Blood pressure and Body Mass Index (BMI) were measured using standard protocols. R software was used to collect, record and clean the data.

Results A total of 1253 construction workers with mean (SD) age of 28.6 (9.6) years and 92% males consented to participate. About 46.7% and 30% respectively reported of tobacco and alcohol usage. The prevalence of pre-hypertension and hypertension was estimated as 39.3% and 11.1% respectively. Factors such as age, substance use, average work hours per day and BMI significantly increased the risk for hypertension.

Conclusion Interestingly the prevalence of prehypertension among these blue collar workers was high, despite the labour intensive nature of work and relatively young age. Current observations suggest the need for further investigations, strengthen the ongoing screening and intervention programs by the public health policy makers.

Exposure assessment

O-50 EXPOSOME PROJECT FOR HEALTH AND OCCUPATIONAL RESEARCH (EPHOR) MEGA COHORT

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Introduction The EPHOR project is constructing a mega cohort for pooled analysis of data from multiple European cohort studies of occupation and health. The objective is to provide new evidence of the impact of occupational exposures on the risk of major non-communicable diseases, through systematic and agnostic analyses across the life-course.

Materials and Methods Cohorts are registered in an online inventory. Cohort data and occupational information are being harmonised and documented in an online variable catalogue, and will be linked with a newly developed European Job-Exposure Matrix (EuroJEM) characterising multiple: chemical and particle, ergonomic, physical, and psychosocial exposures and precariousness. Cohort information on working time will also be harmonised. Knowledge gaps on occupational exposures in relation to major non-communicable diseases were identified. Both meta-analysis and decentralized analysis approaches will be used, as appropriate. Ethics approval is provided by all relevant committees.

Results Currently 29 European cohorts covering a broad range of countries as well as multi-country studies are participating, containing more than 20 million participants. Cohort designs range from smaller scale studies including hundreds to thousands of workers with detailed exposure and/or outcome characterisation, to large-scale general population cohorts including multiple millions of participants with occupational information captured using registry-based methods. Cohorts were largely established and followed-up during the 2000s through the current time, though some were established earlier. Occupational information primarily entails the working lifetime or follow-up period. Outcome information includes disease incidence, disability, and mortality. In some studies, information about genetics, epigenetics, other biomarkers and clinical/functional evaluations is available. Analysis will address knowledge gaps of cancer, respiratory, cardiovascular/metabolic, and neurodegenerative diseases, mental and musculoskeletal disorders, and work participation.

Conclusions We expect the mega cohort will be a useful long-term resource to study relationships of occupations, work-related exposures and health in Europe to inform policy and prevention.

Pesticides

O-51 OCCUPATIONAL EXPOSURE TO TRIAZOLE FUNGICIDES AND RISK OF PROSTATE CANCER IN THE AGRICULTURE AND CANCER (AGRICAN) COHORT

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Introduction Prostate cancer incidence ranks 2nd among men worldwide. Farming and pesticide use are associated with