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Introduction: This presentation will present the result of a study protocol on the prospective cohort study Are You All Right? (AYA) investigating exposure to traumatic events at work on mental health problems and absenteeism among Danish police officers. The study also investigates potential risk and protective factors at work.
Method and analysis: The AYA-study represents a cohort of the entire permanent staff employed in the Danish National Police Force in the period of 2021-2023 entailing approximately 11.000 individuals. Prospective survey data are collected over a three-year period beginning in the spring of 2021. Electronic surveys are sent out at baseline with 1, 2- and 3-years follow-up. Further, short surveys are sent out every third month covering exposure to traumatic events and current mental health status. The survey data are paired with workplace register data on sickness absence.
Results: The ongoing and comprehensive data collection provides valuable knowledge about the impact of work-related traumatic events on mental health and sickness absence among police officers. We investigate the development of mental health problems over time, which is important, because we study the prolonged effects of repeated exposure to traumatic events.
Conclusions: The AYA-study is an important step in securing knowledge that is crucial for the clinical understanding of mental health problems in police officers and the improvement of prevention initiatives.

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Employees with low socioeconomic position as partners in workplace health promotion, an innovative intervention and evaluation

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Introduction: The aim of this study was to evaluate the perceived changes of an innovative WHP intervention and evaluation. In this study, there was close collaboration between the researchers and employees with low SEP. The central themes for and relevant changes of the intervention were defined together with employees with low SEP.
Methods: The intervention consisted of a series of structured stakeholder dialogues in which dilemmas around the – by employees defined - health themes were discussed. The intervention was implemented in a harbor service provider with approximately 400 employees. Over a two-year period, 57 participants engaged in eight dialogues of one hour. 15 interviews and six participant observations took place for the evaluation of the intervention.
Results: Together with employees, high workload and mental health were defined as central themes for the dialogue intervention in the male-dominated workplace. The dialogue intervention contributed to changes, on different levels: individual, team, and organization. Overall, the stakeholder dialogues advanced the understanding of factors contributing to high work load and mental health. In reply to this, several actions were taken on a organizational level.
Conclusions: Approaching employees as partners in WHP allows to understand the health issues that are important in the daily reality of employees with low SEP. Through this understanding, WHP can become more suitable and relevant for employees with low SEP.

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A Generic Model for Promoting Mental Health with Collaboration by Occupational Healthcare and Workplaces in 2021 – 2022

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Project background: In Finland, mental disorders are the leading cause of work disability (34% of sickness absence days (Kela 2020), 53% of granted disability benefits (ETK 2020).
Aim: The aim of the two-year (2021 – 2022) project is to develop collaboration between workplace and occupational health service (OHS) providers. The new operating model can be used to influence proactively, systematically and effectively on the psychosocial burden of the workplaces and to prevent mental health-related incapacity.
Methods: This abstract is based on the plans execute fieldwork and workshops. The project includes following steps: mapping the background, setting the goal in collaboration with the piloting workplaces, developing and piloting the generic model, monitoring and evaluating the implementation. Model for collaboration. In accordance of the generic model, in cooperation between different actors in the workplace and OHS, it is possible to:

1) assess the need for work ability support and the risks and resources of the work environment
2) set the development goals required by the situation and determine OHS needs
3) to choose the measures for supporting work ability and affecting the work environment
4) agree on the responsibilities of the various actors and the coordination of measures and the overall process
5) take the necessary measures
6) take care of monitoring and evaluating the effectiveness of the measures.

Outlook: This project creates a generic model for collaboration among the workplace and OHS in support of mental work ability and mental health.

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Health Equity and the Future of Occupational Safety and Health: Towards a Biopsychosocial Approach

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Introduction: Occupational safety and health (OSH) has evolved into a largely technical field focused on identifying and eliminating physical, chemical, and biological hazards found in the workplace.

Central to this approach has been an understanding of cause and effect rooted in the biomedical model of health. Changes to work, the workforce, and our understanding of the relationship between work and health highlight the need to expand and complement this reductionist model by finding ways of accounting for the social, political, and economic interactions that contribute to or detract from worker wellbeing.
Material and Methods: For the past five years the NIOSH Occupational Health Equity (OHE) program has turned its analytical gaze on OSH institutions and research practices to identify effective ways of integrating a biosocial approach to OSH.
Results: This resulted in a three-pronged OHE strategic plan to 1) promote health equity focused research, 2) ensure that NIOSH research is inclusive of the diversity in the workforce, and 3) promote the recognition of work as a fundamental determinant of health inequities. Implementation of this strategic plan has allowed NIOSH to better account for the social structures that circumscribe OSH as field and how these social structures contribute to the inequitable distribution of work-related benefits and risks across the population.
Conclusions: This presentation discusses health equity as a central component of the shift to a biopsychosocial approach and the implications and opportunities this paradigm shift offers OSH professionals, researchers, and institutions.

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Occupational Health Risk Assessment (OHRA) Tool – A way to determine exposure estimation and risk management

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Introduction: OHRA is a tool for controlling the health risks associated with occupational health hazards. This helps us for the identification of an acceptable level of health risk, provides strategy for exposure evaluation and formulating levels of controls.
Material and Methods: OHRA includes two components qualitative evaluation based on estimating potential risk evaluation, followed by quantitative exposure evaluation. Methods for conducting qualitative risk assessment are first, determine risk level against defined criteria (Exposure control, exposure duration, airborne potential, and frequency of activity during task) along with the health effect rating based on the CMR & Toxic hazard classification established by GHS/ACGIH.
Results and Conclusions: The assessment result of the OHRA is scientifically robust and data obtained is highly reliable for qualitatively assessing the risk for chemicals. This model used for estimating exposure risk and decision for sampling. Some physical properties and information of the activity and provides a broad scope of estimated exposure of substances. However, determining exposure levels, ideally quantitative assessment method (personal breathing zone exposure) is primary for final risks for chemicals. due to implementation of OHRA, Approximate 30% reduction of chemical sampling during annual monitoring program. OHRA can serve as a screening approach for determining potential exposure risk for controlling chemical and occupational hazards. Quantitative approach can be applied in combination with qualitative risk for risk management.

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Developing strategies in Occupational Health for effective protection of work force form health hazards at workplace

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Introduction: With new developments in this era of Industry 4.0, we at IndianOil are geared up for digitalization of our Occupational Health Services and further align ourselves with the new business requirements. IndianOil being a petrochemical industry involving hazardous operations and generates quantum of Occupational Health & Industrial Hygiene data.
Materials and methods: Embracing the new age of digital technology, IndianOil reviewed the Occupational Health Management System existing in all Refinery Units for capture of employee medical records, OH & industrial hygiene data & its analysis. Existing functional modules of OHS Data Management System in Refinery Units were integrated with the central server. Areas of concern of individual units were taken care of, for improvement in the IndianOil Integrated OHS management System.
Result: Digitalization of Occupational Health Services data assured real time HSE data capture, real time monitoring of Occupational Health activities and its dependable analytics & reporting. In Indian Oil Corporation, the concept of health protection of employees from existing and upcoming health hazards has undergone a radical change after digitalization.
Discussion: Digitalization of OH records enabled us for an online world of streamlined OH Services in IndianOil with proactive rather than reactive approach to mitigate health hazards at workplace. OHCs in Units which have developed data generating and storage systems, suitable to their own needs of reporting of the monthly/yearly health status of employees and activities, are now more action oriented rather than informative in nature.

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Reduction of Volatile Organic Compounds by Implementing Best Engineering Practices at Chemical Analysis Laboratory

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Introduction: At chemical analysis laboratory, chronic exposure of VOCs above threshold value lead to adverse health impact to the workers. Some of compounds like benzene, 1-3 Butadiene are human carcinogens. So measurement of exposure level and implementation of control measures are very important.
Materials & Methods:
Study Design – Cross Sectional
Data Collection – To assess risk of chemical exposure, six personal breathing zone exposure samples were collected for benzene and VOCs for specific activities (e.g. bottle washing, sampling, chemical draining etc.) at different interval. Personal sampler (Make-SKC) was used to collect organic vapor from environment at a flow rate of less than 50 ml/min for the duration of about 7-8 hours. Charcoal-tube was used for sampling and samples were sent to third party for laboratory analysis. Direct reading instrument VOC meter also used for source identification and measurement of specific