

“Participation”, “Error Culture”, “Social Climate/Organisational Climate” and “Prevention as an Integral Part of all Tasks”. The campaign is scheduled to start in 2017 for duration of 10 years.

86 THE EFFECTS OF EXERCISE PROGRAMS IN THE REDUCTION OF WORKPLACE INJURIES AMONGST THE STAFFING COHORT OF RESIDENTIAL AGED CARE SERVICES

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Background Staffing wellness and physical capacity to undertake care tasks are essential to ensuring a resident/consumer focussed approach to care delivery. The Salvation Army Aged Care Plus implemented a staff exercise program with the intention of improving workplace culture and wellness amongst our staff. The program involves two streams of the workforce – direct care givers and administration/office based staff.

Description of Problem The workforce in our organisation identified a higher than average injury rate than industry norm. Our staff were experiencing higher injury rates as a result of undertaking manual handling activities. The most common approach is to ‘fix the person’, a reactive measure applied once an injury has occurred. This is considered a medical management approach whereby the employer reacts to an injury and the treatment required, and then manages the return to work process. An alternative strategy to reduce or prevent work related musculoskeletal pain and disorders may be achieved by increasing an employee’s physical capacity through exercise training interventions.

Results The positive effects of the program are a decrease in Lost Time Injury Frequency Rate and a decrease in Injury Notifications of staff resulting from manual handling injuries

Results for staff have shown increase in satisfaction which is directly related to improvements in wellness and increased dexterity. Happy and Healthy staff who sustain less physical injury as a result of manual handling tasks in the aged care work environment result in improved manual handling techniques utilised in physical care for residents. This program has significantly reduced staff injury and resulted in an increased retention of staff and greater continuity of care for residents.

Conclusions The implementation of the program has had a significant effect on qualitative measures such as satisfaction and resulted in measured reduction of lost time injuries and frequency rates. The anecdotal experience indicates the program has been successful in enhancing a safety management approach in a health care environment.

87 INTER-ORGANISATIONAL COMPLEXITY AND SAFETY CULTURE IN NUCLEAR INDUSTRY PROJECTS

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Background Typically, safety culture models aim at grasping a culture of a coherent unit, and it is vague how to apply them in large-scale project networks that consist of multiple varied agents with somewhat conflicting objectives. Recent studies in the nuclear industry identified a set of practical and theoretical

challenges for applying the concept of safety culture in a dynamic network of subcontractors involved in the construction of a new nuclear power plant (Macchi *et al.*, 2013; Oedewald and Gotcheva, 2015). The present work focuses on exploring the links between inter-organisational complexity and safety culture with the understanding that projects are complex systems composed of numerous, heterogeneous and interdependent agents.

Methods Complex nuclear industry projects provide a relevant context for studying inter-organisational aspects and their relations to safety culture, since they involve multiple different companies and coordination across organisational boundaries is required to achieve the project objectives safely and efficiently. The method is literature review and case studies carried out in the nuclear industry in Finland.

Results The study results in characterisation of inter-organisational dynamics and sources of complexity in nuclear industry projects, and discusses implications for safety culture. Some key aspects refer to fragmentation due to many different stakeholders with own practices and value frameworks, local interactions between agents from various national cultures and subcultures, uncertainty, increased diversity and interdependency.

Conclusions The study advances the current understanding of inter-organisational complexity and its implications for safety culture in nuclear industry projects.

88 TEAMING UP FOR SAFETY – USING RISK ASSESSMENT TOOLS

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Background Public health work in Norway is mainly focused on lifestyle diseases, diabetes and cardiovascular diseases and the prevention of these. Much less interest is put into injury prevention and safety promotion, although life lost due to injuries is a major cause of death up to 45 years of age, and caring for injuries is a costly part of the national health service. We need to increase awareness about the scope of injuries, causes of injuries and the potential for injury prevention and safety promotion.

Objective The objective is saving lives and protecting people from injuries, by spreading information, and inviting groups to take part in risk assessment work. We want to put safety and injury prevention on the radar of organisations, NGOs, institutions, societies, teams, families, neighbours and individuals. By increasing knowledge and awareness we hope to change attitude and practice.

By sharing facts, information and best practice – easily accessible on a website – we want to increase knowledge and give insight about injuries and safety promotion. We will supply tools, checklists and suggestion on how to carry out safety checks in private homes, playgrounds, outdoor areas around elderly centres etc.

The program can be used by Safe Communities to invite new groups to take part in the local safety scheme. But organisations in all parts of Norway will be invited to take part and get involved in local risk assessment. We hope that the project can be a way to promote interest in injury prevention and safety promotion on a community level.

Results The project is developed in 2015 and will be tested by communities and organisations early 2016. The initial phase; dialogue with stakeholders, developing web site, basic information

etc has gained a lot of interest. By September 2016 we will have experiences to share.

Conclusions The project gives us ne possibilities to increase awareness and involve new groups in community safety.

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SUPPORTING A JOINT JOURNEY TOWARDS ZERO: CASE FINNISH ZERO ACCIDENT FORUM

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Background Developing proactive safety culture in today's dynamic and turbulent business environment calls for inspiring approaches and effective safety practices. The Zero Accident Vision (ZAV) is based on the belief that all accidents are preventable. It should not be understood as a target or a numeric goal but more widely as a journey where genuine commitment plays an important role. In Finland the Zero Accident Forum was founded in 2003 to support workplaces in promoting safety and health. In November 2015 it had 337 member organisations.

Description of the problem In 2015 the Forum started to develop its activity to the next level to better respond to the members' needs. A new web portal is being developed to support more effective communication and learning. A question was raised whether the designed portal and its contents are what the members really wanted. To tackle this problem an agile development method was chosen as a method to get the member workplaces' needs and ideas integrated in the new portal.

Results To have a reliable estimation of the effects of the new portal we will measure appropriate variables; the occupational accident frequency and the workplaces' satisfaction with the service. During last review 2008–2012, the member workplace accident frequency had decreased by 46% while at national level the decreased was 7%. The updated review will show how the members have succeeded in accident prevention. Also a usability and satisfaction survey will be conducted in spring 2016. The results will show how well the customer needs were taken into account.

Conclusions The new portal will support the Forum's main function: networking between workplaces and learning together. In the presentation we will illustrate the benefits the new web portal brings to communication, learning and benchmarking within the network. By presenting the results we want to inspire other stakeholders to take an initiative and steps forward in building and developing learning networks in the field of OHS.

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ASSOCIATION OF POST-TRAUMATIC STRESS DISORDER WITH WORK PERFORMANCE AMONGST EMERGENCY MEDICAL SERVICE PERSONNEL, KARACHI, PAKISTAN

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Background Emergency medical service (EMS) personnel are exposed to various stressors in their day to day functioning. They are exposed to various kinds of stressors which includes but not limited to handling dead children, medical emergencies, severe injuries, acts of violence, organisational problems etc. Their daily exposure to diverse critical and traumatic incidents can lead to

stress reactions like Post-Traumatic Stress Disorder (PTSD). Consequences of PTSD in terms of work loss can be catastrophic because of its compound effect on families, which affect them economically, psychologically as well as socially. Therefore, it is critical to assess the association between PTSD and Work performance in Emergency Medical Service (EMS) if exist any.

Methods This prospective observational study was carried out at AMAN EMS in Karachi, Pakistan. EMS personnel were screened for potential PTSD using impact of event scale-revised (IES-R). Work performance was assessed on basis of five variables; number of late arrivals to work, number of days absent, number of days sick, adherence to protocol and patient satisfaction survey over the period of 3 months. In order to model outcomes like number of late arrivals to work, days absent and days late; negative binomial regression was used. Whereas logistic regression was applied for adherence to protocol and linear for patient satisfaction scores

Results Out of 536 EMS personnel, 525 were found to be eligible, of them 518 consented. However data on 507 were included because 7 left the job during study period. The mean scores of PTSD was found to be 24.0 ± 12.2 . However, weak and insignificant association was found between PTSD and work performance measures: number of late arrivals (RR_{adj} 0.99; 95% CI: 0.98–1.00), days absent (RR_{adj} 0.98; 95% CI: 0.96–0.99), days sick (Rr_{adj} 0.99; 95% CI: 0.98 to 1.00), adherence to protocol (OR_{adj} 1.01; 95% CI: 0.99 to 1.04) and patient satisfaction (0.001% score; 95% CI: –0.03% to 0.03%).

Conclusion Higher score of PTSD were found among EMS personnel signifying their exposure to range of stressful incidents from handling violence to trauma and other medical emergencies. No association was found between PTSD and Work performance in the selected EMS population in Karachi Pakistan. Further studies are needed to explore the phenomenon of resiliency in this population.

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NATIONAL ACTION PLAN ON WORKERS' HEALTH IN THE RUSSIAN FEDERATION

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Background Resolution WHA 60.26 "Workers' Health: Global Plan of Action" urges countries to develop national action plans on workers' health according to the WHO global plan of action on workers' health 2008–2017.

Description of the problem The Russian Federation (RF) has developed strategic and operational plans for workers' health at the federal and sub-national level. Such plan should include: national profiles; priorities for action; objectives and targets; actions; mechanisms for implementation; human and financial resources; monitoring, evaluation and updating; reporting and accountability.

Results The action plan of occupational health is developed in accordance to policy of WHO collaborating centres for occupational health network The purpose of activity is to review the lessons learned from the previous plans and strategies on workers' health in RF, to develop a national profile of the situation on workers' health and to set up a planning process for updating the national action plan on workers' health in collaboration with WHO and other countries. FSBSI "Research Institute of