

STRENGTHENING THE CAPACITIES OF OSH IN THE DEFENSE AND SECURITY TRADE UNION (SOB) IN THE REPUBLIC OF NORTH MACEDONIA

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Abstract: The main objective of this study is to present the current situation of OSH in the Defense and Security Trade Union (SOB) of the Republic of North Macedonia (RNM), and to point out serious problems that undermine the basic concept of protection of the employee at his workplace. In order to collect the necessary data, an anonymous survey was conducted and educational trainings in the field of safety at work were realized during 2020/2021 for the members of SOB, as the main target group. Also, trainings for future trainers from the ranks of presidents in SOB were conducted, which will enable a process of continuous education on OSH.

From the processing of data in individual anonymous questionnaires, it could be concluded that although only 13% of respondents had any work-related injuries (fractures, bruises, clavicle injuries and other physical injuries), as many as 53% believe that the safety of the employee, even if it is completely protected from physical injury is not enough, so that 22% of SOB members feel unsafe in their workplace.

The most important benefit was that the members of SOB started to think about the value of human life, the importance of their own safety at work, but also for the safety of colleagues, to ask questions and seek answers, but also to give suggestions for their own vision for solving of the existing problems in the field of OSH. However, the biggest benefit of the survey is that 97% of the members of the SOB are of the opinion that nothing can compensate for the loss of a lost human life.

Key words: occupational safety and health, personal protective equipment, workplace

INTRODUCTION

Occupational safety and health incidents occurring in the military context are of great concern to every society, [1]. Military activities are often considered more dangerous than civilian work, especially in crisis situations, but on the other hand, peacetime have seldom been analyzed in this respect, [2]. Incidents such as dangerous incidents, exposures, and near misses, indicate serious safety and health risks faced by military personnel. These risks, even if they do not cause immediate harm, may give rise to harm in the future, if not adequately addressed. In some cases, they may cause latent harm, [1]. While dangerous incidents and exposures cause latent harm, which due to their latency is not recognized as occupational injury or illness, near misses did not expose any person to an immediate risk or result in serious injuries, [3].

In this regard, the dangerous incidents are defined by the Australian Department of Defense as incidents that have exposed the worker or any other person to a serious risk to their health or safety, and emanating from an immediate exposure, or an uncontrolled release of a hazards such as explosions, electrical shocks, collapsed structures, or interruption of air supply, [3]. Usually, officers, cadets, conscripts, and reservists that are trained for military operations, have physically more demanding work than the other groups. In particular, because of military exercises imply high occupational risk, military trainers and trainees are considered to be high-risk groups in the military, [2].

Internationally, statistics on military occupational accidents and diseases are modest. So, the U.S. Department of Defense had reported 10067 injuries/illnesses and 4,185 lost time cases in a population of 230945 employees in 2000 year, which represents an incidence rate of 43.6 cases per 1000 persons (equal to 73 cases per 1 million work hours), [4]. Also, Swedish statistics give an incidence rate of 16.7 occupational accidents and diseases per 1000 gainfully employed persons in its armed forces (equal to 28 cases per 1 million work hours), [5]. Retrospective analyzes of operations in Iraq and Afghanistan that processed data reported by veterans showed that as many as 94% of veterans were at risk of being exposed to extreme external influences during their deployment, including dust storms, smoke from burning trash, oil fires, vehicle exhaust, chemicals and exposure to petrochemical fuels, [6].

In the past decade, according to data from relevant institutions in the Republic of North Macedonia (RNM), in an average population of 732452 employees, an average incidence rate for fatal accidents at work of 4.31, and an average injury incidence rate of 15.24, were registered, [7] (Table 1). The reported accidents and injuries in the defense sector in the same decade are shown in the table below:

Table.1 Reported accidents and injuries in the Defense sector in RNM.

| | Public administration, Police and Defense | | | | | | | | | | |
|---------------------------|--|------|------|------|------|------|------|------|------|------|------|
| | Year | | | | | | | | | | |
| | 2010 | 2011 | 2012 | 2013 | 2014 | 2015 | 2016 | 2017 | 2018 | 2019 | 2020 |
| Total number of accidents | 26 | 26 | 45 | 9 | 47 | 94 | 46 | 35 | 31 | 24 | 35 |
| Fatal accidents | 0 | 2 | 0 | 0 | 5 | 11 | 0 | 1 | 2 | 3 | 0 |

The data in the table indicate that 2015 is the year with the highest number of accidents, but also the largest number of fatal accidents at work that occurred in the Defense sector during the entire decade. The purpose of this study was to present the current situation of OSH in the SOB of the RNM, and to point out serious problems (inadequate personal protective equipment, untimely replacement, insufficient level of hygiene in the working and sanitary facilities, insufficient motivation for work, inadequate or insufficient education and professional development), which undermine the basic concept of protection of the employee at his workplace.

MATERIAL AND METHODS

Although legislative action is essential to promote better working conditions, other instruments are also required to monitor progress and to make sure that objectives have been attained. In this respect, statistical indicators have been developed to enable a more detailed analysis of the causes and circumstances of accidents at work so as to implement targeted preventive measures. [8]. While traditional safety management approaches concentrate on how accidents happen or “something went wrong”, modern safety management tools present a successful methodology designed to deal with uncertainty in high-risk work environment and focuses primarily on the working safety, which encompasses how people adjust and perform in expected or unexpected working conditions, [9].

Trainings, workshops and an anonymous survey, which were part of the implementation of a project from the ILO Program, funded by the EU [10], were used to collect data for this paper. The project involved the members of SOB, so that in the field of OSH were organized and conducted multiple trainings during 2020/2021 in: Regional Basic Organizations (RBO) Crisis Management Center, RBO Veles and Prilep, RBO Kumanovo, RBO Ilinden, RBO 8043 and RBO TRC, with a total of 97 people present (men 76, women 21). The members of the SOB were pointed out the basic rights and obligations in the field of OSH, but also all the hazards in the workplace - severe mechanical injuries, physical and mental loads, stress due to work with weapons, airborne or contact exposures to chemicals or heat arising from fires, exposure to radioactive radiation or electromagnetic waves, problems with personal protective equipment at work or lack thereof, and a number of other factors that definitely put this profile in the rank of high-risk jobs.

In this direction, the survey described a number of job risks, including:

- Injury during handling of weapons and contact with mine explosives
- outdated technology and vehicles;
- defective motor vehicles;
- hearing, vision impairment;
- mechanical injuries to the limbs;
- skin diseases and diseases of the respiratory organs;
- contact with carcinogens;

- handling hoists and cranes that are not regularly inspected and serviced;
- work at height;
- dangers when diving and hiking;
- inadequate microclimatic conditions - non-air-conditioned rooms;
- unfavorable weather conditions in the field - large temperature differences;
- dangers of detonation when destroying ammunition;
- loss of life.

For all these risks, the members of SOB offered proposed measures to reduce the risks, procurement of new and better equipment for personal protection at work, new uniforms, improvement of working conditions, renewal of the vehicle fleet, provision of necessary medicines, regular educational training and staff training, as well as increased controls on elders in order to prevent mobbing in the workplace.

RESULTS AND DISCUSSION

It could be concluded from the processing of data in individual and anonymous questionnaires, that although only 13% of respondents had any work-related injuries (fractures, bruises, collarbone injuries and other physical injuries), as many as 53% believe that the safety of the worker which even if fully protected from physical injury is not enough, so that 22% of SOB members feel unsafe in their workplace (Figure 1).

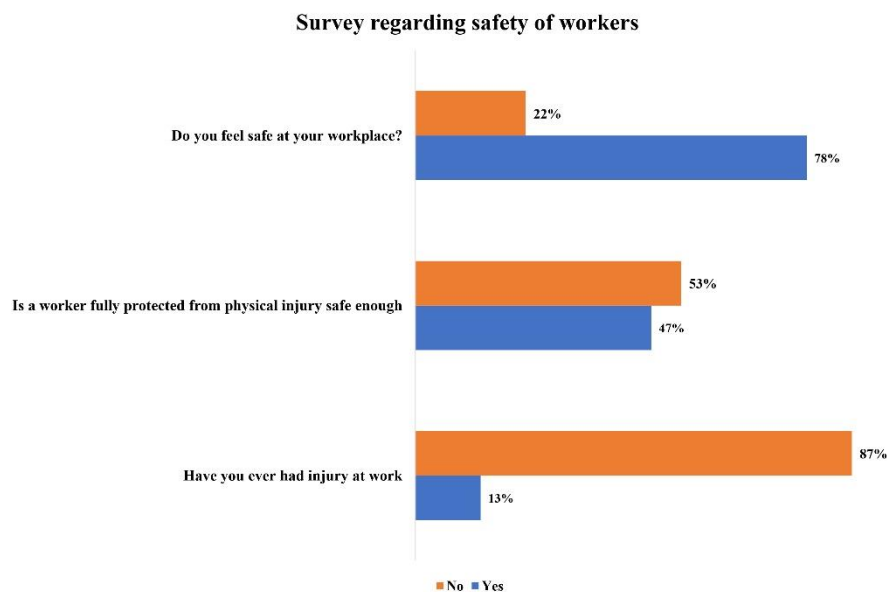


Fig. 1. Survey conducted among the members of SOB 2020/2021

Also, one of the biggest problems is the personal protective equipment (PPE) at work, for which 69% stated that it is inadequate and not in good condition, and 83% are not satisfied with the working conditions (sanitary and hygienic conditions, living quarters, diet), (Figure 2).

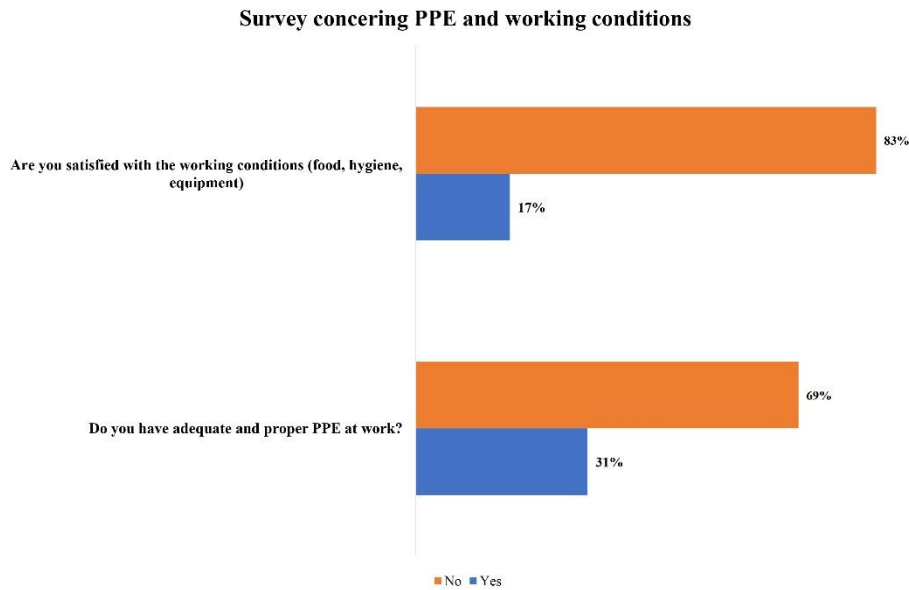


Fig. 2. Survey conducted among the members of SOB 2020/2021

When it comes to occupational hazards, about 22% of respondents are exposed to high-altitude work, 45% to extreme physical activity (Figure 3), 57% do not feel adequately protected from noise when handling weapons, and 42% are people who have experienced an explosion and fire, or were part of a fire and evacuation team.

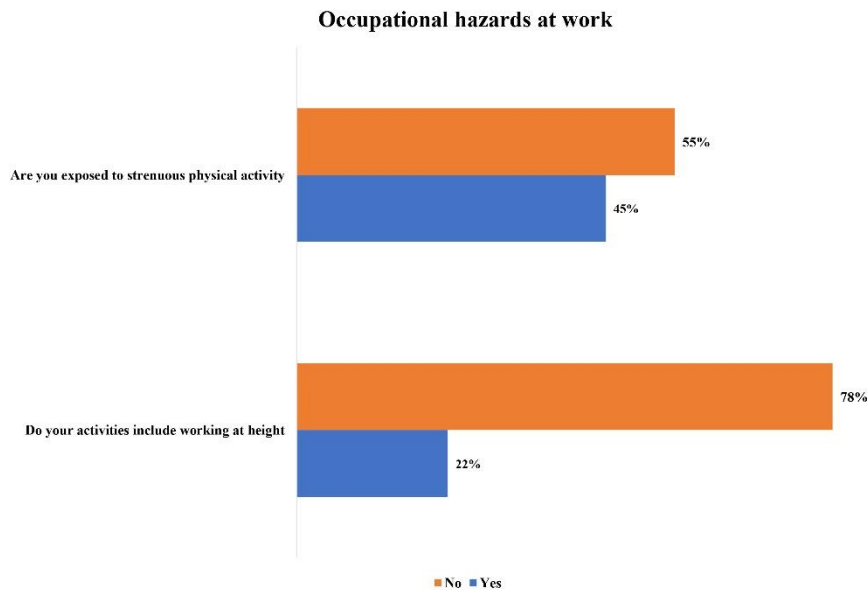
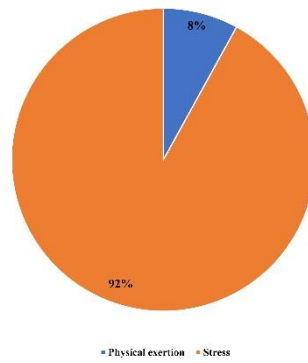


Fig. 3. Survey conducted among the members of SOB 2020/2021

A serious problem is that 92% of the respondents explained that a much bigger problem than physical exertion is the stress they are exposed to, primarily due to the handling of weapons, but also partly due to the present mobbing of superiors for which 32% reported (Figure 4).

Which poses a greater danger to your health?



Have you ever encountered mobbing in your workplace

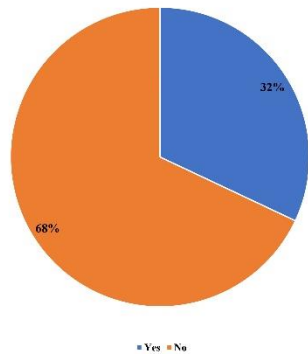


Fig. 4. Survey conducted among the members of SOB 2020/2021

There are 13% of people who come into contact with chemical hazards during operation (asbestos, tear gas, gunpowder particles, battery acid, explosives) and 28% who are exposed to some type of radiation (ultraviolet, radioactive, electromagnetic radiation) (Figure 5), while 13% have acquired an occupational disease due to exposure to the danger for a long period of time.

Survey regarding chemical and radiation exposure

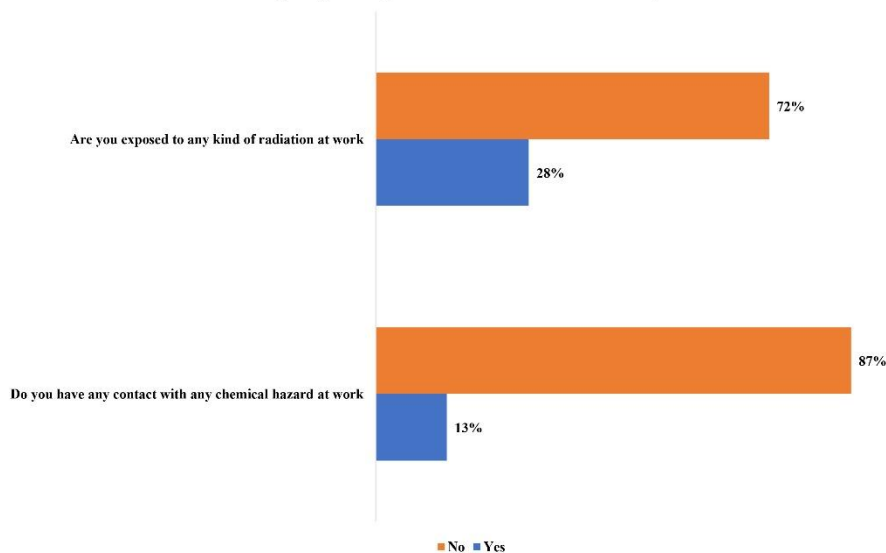


Fig. 5. Survey conducted among the members of SOB 2020/2021

However, the biggest benefit of the survey is that 97% of SOB members (Figure 6), are of the opinion that nothing can compensate for the loss of human life. Furthermore, 95% believe that there is always

an opportunity to improve safety and better care for their own health and the health of colleagues, and 85% would like to improve and upgrade their expertise for the same reason (Figure 6).

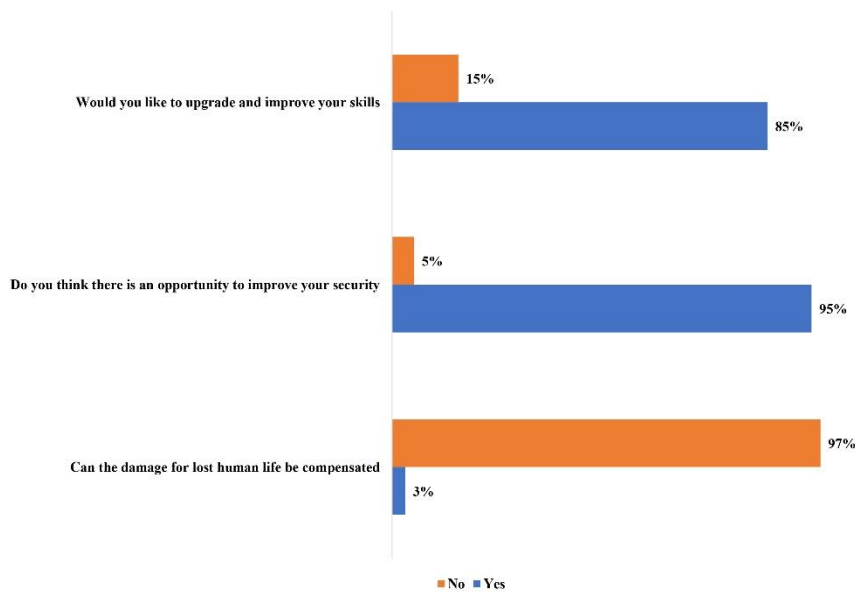


Fig. 6. Survey conducted among the members of SOB 2020/2021

The main benefit of the survey was that the main goal was achieved: workers began to think about the value of human life, the importance of their safety at work and the safety of colleagues, asked questions and sought answers, but also made suggestions for their own vision for solving existing.

CONCLUSIONS

The importance of healthy workplace and working environment is a crucial factor, so improving working conditions and providing safe and healthy working environment is an essential part of the work quality, equally prompted by humanitarian as well as economic considerations. Modern societies require a critical examination of OSH management quality and it is estimated that well planned and systematically carried out OSH measures, deliver economic returns 3-10 times greater than the monetary investment. However, OSH does not mean only protection of the employee from physical injuries and occupational diseases, but, considered as a multidisciplinary concept it should also be concentrated on the promotion of safety, health and welfare of people engaged in work or employment. So, developing a strong culture of safety and health in our country should be achieved by having engaged leadership working with a committed workforce toward the goal of zero injuries, illness and incidents.

The findings of this study can usefully inform development of risk mitigation strategies for dangerous incidents, exposures, and near misses in army personnel. The occupational requirements of military personnel during training and operations include intense combat training, vigorous manual handling, patrolling and direct combat, and these job requirements can expose personnel to extremely dangerous situations and incidents. Many of the respondents think that the safety of the employee is not enough and they feel unsafe in their workplace pointing out serious problems (inadequate personal protective equipment, untimely replacement, insufficient level of hygiene in the working and sanitary facilities, insufficient motivation for work, inadequate or insufficient education and professional development), that undermine the basic concept of protection of the employee at his workplace.

They also consider that it is necessary to procure new and better-quality equipment for personal protection at work, new uniforms, improvement of working conditions, renewal of the vehicle fleet, provision of necessary medicines, regular training and improvement of the staff, as well as intensified controls on elders in order to prevent mobbing in the workplace. A serious problem is that most of the respondents explained that the stress they are exposed to is a much bigger problem than physical exertion. However, it is clear to everyone that nothing can compensate for the loss of human life, and that education and training are of great importance to every employee.

In 2020, RNM became the 30th member of NATO, so the cooperation of the Ministry of Defense and the Army of RNM with NATO, regarding the Program for the Advancement of Defense Education, began to be implemented and is focused on the priorities in the development of military education.

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