EUROPEAN GRANT PROJECTS | RESULTS | RESEARCH & DEVELOPMENT | SCIENCE

Healthcare facilities as a soft target

Jitka Kosáčková¹ Renata Havránková^{2, 3} Leoš Navrátil⁴

¹ Czech Technical University in Prague, Faculty of Biomedical Engineering, Department of Health Care and Population Protection; Sportovců 2311, 272 01 Kladno; jitka.kosackova@gmail.com

² Czech Technical University in Prague, Faculty of Biomedical Engineering, Department of Health Care and Population Protection; Sportovců 2311, 272 01 Kladno; renata.havrankova@fbmi.cvut.cz

³ University of South Bohemia in České Budějovice, Faculty of Health and Social Sciences, Institute of Radiology, Toxicology and Civil Protection; J. Boreckého 1167/27, 370 11 České Budějovice; havranko@zsf.jcu.cz

⁴ Czech Technical University in Prague, Faculty of Biomedical Engineering, Department of Health Care and Population Protection; Sportovců 2311, 272 01 Kladno; leos.navratil@fbmi.cvut.cz

Grant: SGS21/180/OHK4/3T/17

Name of the Grant: Protection of soft targets in the health sector Category: AQ - Safety and health protection, safety in operating machinery

© GRANT Journal, MAGNANIMITAS Assn.

Abstract Protection of healthcare facilities, that are publicly accessible places with a large number of people and the low level of security against violent attacks, is a highly topical issue. These places and objects are mainly characterized by a permanent or temporary concentration of people. In addition to physical attacks, which can happen both with or without a weapon, arson, assault with explosive substances or bait systems, attack on infrastructure or dangerous threatening may also occur. This might lead, except endangering or ruining the lives of employees or patients, to a property endangerment. For this reason, there has recently been a lot of emphasis on preparedness of healthcare facilities for these situations, so that employees are able to quickly and adequately respond. The article focuses on the issue of individuals' aggressive behaviour to the medical personnel. A comprehensive system for the protection of healthcare facilities should be built on a combination of physical and technological measures. By using these measures, healthcare facilities can be protected against the attacks as well as safety for their staff and patients can be ensured.

Key words aggressor, security, safety, soft target, healthcare facilities, medical facilities

1. MEDICAL FACILITIES AS A SOFT TARGET

Medical facilities are publicly accessible places with a higher incidence of individuals and a low level of security against violent attacks. Their easy accessibility allows potentially dangerous individuals to enter these spaces without proper screening. In addition to endangering or jeopardizing the lives of employees or patients, there may also be a risk to property. Therefore, there is now a great emphasis on the preparedness of medical facilities in these situations so that employees can quickly and adequately respond [1].

The topic of protecting soft targets has been addressed in the Czech Republic's Strategy against Terrorism. However, the recent development of the security situation requires a comprehensive approach to protecting soft targets. Medical facilities are constantly trying to improve the quality of healthcare provided.

The essence of effective measures to increase the security of soft targets is not based on legal institutions or their use, but on factual preventive and reactive measures of an organizational, security, rescue, or communication nature. When evaluating the threat, it is necessary to clarify what I want to protect, against whom I want to protect my values, and how these individual sources of threats attack [1].

1.1 Concept of soft target protection

Soft targets can include both enclosed spaces and open spaces that are freely accessible to the public. They are characterized by a high concentration of people moving through the area, making them an attractive target for individuals committing violent acts or terrorist attacks. In the event of an attack on a soft target, a high number of casualties can easily be inflicted, resulting in the achievement of the attacker's goals, drawing the attention of the public and media, and having a significant impact on the psyche of the population [2].

According to the Concept of Soft Target Protection for the years 2017–2020, soft targets generally include [2]:

- Bars, clubs, discos, restaurants, and hotels;
- Cinemas, theatres, concert halls, and entertainment centres;
- Community centres;
- Cultural, sports, religious, and other events;
- Religious monuments and places of worship;
- Shopping malls, markets, and commercial complexes;
- Hospitals;
- Parks and squares;
- Political assemblies, processions, and demonstrations;
- Sports halls and stadiums;
 Educational facilities, dorn
- Educational facilities, dormitories, canteens, and libraries;

EUROPEAN GRANT PROJECTS | RESULTS | RESEARCH & DEVELOPMENT | SCIENCE

- Tourist attractions and landmarks, museums, and galleries;
- Public institutions;
- Important transportation hubs, train and bus stations, airport terminals;
- Other symbolically significant places or events;
- And others.

To create protection for soft targets, it is always necessary to take into account several basic principles that should lead to the creation of comprehensive protection [2]:

- The first principle of approaching protection is the realization that the security of soft targets is the responsibility of the affected parties, not just the state. Therefore, a comprehensive protection strategy should involve the basic components of the integrated rescue system and the Ministry of the Interior of the Czech Republic, as well as other relevant ministries, central administrative authorities, local government, as well as owners or operators of soft targets.
- The second principle is a proactive approach to the protection of soft targets. This involves active involvement from both the state and the affected soft targets. It is necessary to recognize that even though violent attacks may be rare, it is necessary to prepare for them systematically and over the long-term. It is not enough to just wait and react only when such attacks occur, as they are usually very serious situations. Therefore, the initiative should come primarily from the soft target. Only cooperation between the soft target and the state can ensure a higher degree of security.
- The third principle is cooperation. Successful problem solving requires mutual knowledge and cooperation between the soft target, its employees, and the relevant security forces. Whether it is any serious violent incident with various motivations and types, usually of short duration, close cooperation is necessary. It is also important to have cooperation between the soft target and the entities in the immediate vicinity. Mutual awareness and functioning communication channels between soft targets and relevant agencies are crucial.
- The fourth and final principle is the utilization of practical experience. Investing only in material equipment and technology may not lead to increased resilience and safety of soft targets. The central problem is often disorganization and lack of coordination. Therefore, for effective protection, it is necessary to establish proper communication processes, organization and coordination of activities of personnel, their preparation, and defining work distribution in the case of emergencies, among other things.

In this context, the state is undertaking activities related to the protection of soft targets. Already at this moment, several ways are being offered to enhance the security of soft targets, and further steps are planned for the future. These include [3]:

- Ongoing methodological activities (methodological publications available for downloading on the website of the Ministry of the Interior of the Czech Republic, such as Basics of Soft Target Protection, Threat Assessment, Standardization of Security Plans), as well as seminars for professionals and the general public.
- Assistance in establishing security measures (personal consultations with members of the Czech Police or the Ministry of the Interior of the Czech Republic, establishment of a police hotline for soft targets, etc.), and training of police specialists on soft targets.
- Increasing preparedness of all components of the Integrated Rescue System for potential response in the event of a terrorist attack.

- Unified management and harmonization of procedures among all relevant stakeholders (including the introduction of SMS alerts to citizens).
- Establishment of grant programs to support the protection of soft targets (initially focusing on non-investment actions, primarily for threat assessments, development of security plans and procedures, training, drills, and exercises).
- Active information systems for soft targets through warning systems (SMS, mobile applications); similar systems have already been implemented by the Ministry of the Interior in France and Spain, and have been in operation for a long time in Israel.

1.2 Prevention of violence

Prevention of violence takes place at two levels. At the first level, the goal is to prevent or at least minimize the occurrence of violent acts. At the second level, if a violent incident occurs, it is necessary to provide support for the person who experienced it. This support should aim to minimize the harmful effects of the incident on the victim. Within this framework, it is important not to leave the victim alone immediately after the event and to provide psychological support both immediately after the incident and later, in cases of post-traumatic stress. Assistance should be provided for administrative and legal procedures related to the incident. Each event should be investigated, from which consequences should be drawn in order to improve preventive measures and learn from them for the future [4].

The aim is prevention through the identification of hazards, risk assessment, and the implementation of preventive measures, taking into account the working environment where the work is carried out. Important preventive measures in healthcare facilities include [4]:

- Staff training: Healthcare professionals should have the skills to recognize initial signs of aggression and impending violence, properly assess the situation, know how to defend themselves, communicate effectively, prevent conflicts, manage stress, and be familiar with procedures for protecting employees.
- Ensuring the environment: Sufficient lighting in entrances, staircases, and waiting areas, providing a pleasant and calming environment in waiting rooms, comfortable seating, and providing information about delays.
- Installation of security devices: Physical security measures should be considered, such as alarm systems, surveillance cameras, controlled and restricted access for the public, door locks, emergency exits, and securing tools and medications.
- Work organization: Limiting solitary work, an adequate number of staff, employee motivation, reducing stress in the workplace, adhering to meal and rest breaks, regulating queues, and providing information about delays.

2. TRAINING OF PERSONNEL AT HOSPITAL ČESKÉ BUDĚJOVICE Plc.

In 2020 and 2021, planned activities focused on enhancing the resilience of Hospital České Budějovice Plc. as a soft target were implemented. This involved the creation of documentation, training of hospital staff, and conducting drills. All of these activities contributed to ensuring greater hospital security. The resulting documents serve as a basis for hospital management and were also used for the conducted training. During the drills, knowledge and skills acquired during the training were summarized.

EUROPEAN GRANT PROJECTS | RESULTS | RESEARCH & DEVELOPMENT | SCIENCE

The aim of the training was to theoretically and practically prepare healthcare and security personnel of the hospital for the occurrence and necessary resolution of defined risk situations, including practical exercises for their appropriate handling, taking into account the individual approach of each participant. Employees were familiarized with situations that may arise within the hospital premises and facilities, along with the possible ways to address them, focusing on their own protection, escape routes, shelter options, and help to other individuals involved. They were also informed about the security perception of their own facility, its standard and extraordinary security measures, the pitfalls of noncompliance, and the knowledge of evacuation routes or parts of the facility that can be used for evacuation and barricading.

2.1 Theoretical training of personnel

The fundamental requirement for ensuring security is the knowledge, skills, and habits of employees at all levels. It was necessary to focus on providing basic knowledge to a broader group of employees and, in selected cases, provide specific training (tailored to the needs of particular facilities and positions).

In this case, the needs of employees vary to some extent, which is why different groups undergo different training formats:

- Training of management took place in the format of 2 sessions with 1 group of top management employees. The first training was focused on familiarizing themselves with the processed documents, addressing the implementation issues within the hospital's operations, and discussing the hospital's strategy in this area. The second training was focused on fundamental aspects of soft target security, security threats and risks, and principles and rules of behaviour in defined situations.
- Training of middle management took place once for 8 groups of middle management employees (chief physicians, senior and ward nurses, and other selected staff) and focused on familiarizing themselves with the processed documents, addressing the implementation issues within the hospital's operations, discussing fundamental aspects of soft target security, security threats and risks, and principles and rules of behavior in defined situations.
- Basic training was attended by 48 groups of hospital employees, 39 groups primarily consisting of healthcare professions and 9 groups primarily consisting of other professions. It focused on fundamental aspects of soft target security, security threats and risks, and principles and rules of behavior in defined situations.
- Specialized training was conducted for 1 group of selected employees whose job responsibilities are related to security and processes associated with protecting soft targets. It was designed as an advanced training and focused primarily on issues such as the use of weapons and the behavior of an armed attacker, relevant recommended responses, and security communication.

2.2 Tactical exercises with the participation of the Police of the Czech Republic

The knowledge and information acquired during the training need to be tested in practical model situations. In this case, there were four types of exercises conducted at Nemocnice České Budějovice Plc. in cooperation with the Regional Directorate of the Police of the South Bohemian Region. The first exercise took place in the outpatient department of the emergency department. The scenario of the exercise was an armed person attack. The attacker used a firearm and injured several individuals, while other patients (role players) in the waiting area attempted to escape or hide, without engaging with the attacker. The Police of the Czech Republic first neutralized the attacker and then made a search of the premises to ensure there were no other attackers or injured/hidden individuals present.

The second type of exercise was conducted in the outpatient department of the trauma surgery department. The scenario of the exercise was a knife attack, resulting in the injury of two patients in the waiting area, and an aggressive individual with a knife posing a threat to both patients and staff. Other patients managed to escape or hide in doctors' offices with medical personnel. The medical staff activated the SOS button to call for assistance. Similar to the first exercise, the attacker was neutralized by The Police of the Czech Republic, and then a search was conducted followed by the treatment of the injured individuals.

The third exercise took place in the psychiatric outpatient department, and the scenario involved an attack on the staff by an aggressive assailant. The attacker assaulted a doctor with a knife and took a nurse as a hostage. Patients and other medical personnel hid in doctors 'offices or escaped from the building. The Police of the Czech Republic conducted a search of the building and subsequently neutralized the attacker. At the end of the exercise, the action was evaluated, and the staff inquired about further possibilities for handling an attack by an aggressive assailant.

The fourth exercise took place in the paediatric outpatient department, where an aggressive patient in the waiting room posed a threat to other patients and stabbed one individual before fleeing the building. Patients in the waiting room attempted to find shelter inside the building as escaping from it was not possible. After the arrival of the Police of the Czech Republic the building was searched, but the perpetrator was not found as she had escaped from the hospital and was apprehended later.

3. OUTPUTS

One of the specific features of the hospital are the demands for potential patient evacuation. Easy accessibility to these areas can allow genuinely dangerous individuals to enter without proper control. In addition to physical attacks, which can occur both with and without weapons, there may be incidents of arson, attacks with explosive substances or devices, attacks on infrastructure, or dangerous threats [5]. In the case of an active shooter, it is crucial for the hospital staff to assess the situation. In some cases, there may be a dilemma whether to stay with the patients or not. The training of simulated scenarios during employee training shows that there is no clear rule on how the staff should behave in a given situation, especially considering the "run/hide/fight" rule. The training conducted directly within the hospital premises aims to clearly identify spaces for improvement in protecting the hospital as a soft target. An instructional video for employee training has been developed based on these training sessions.

The training was focused on how to handle similar situations and what procedures are appropriate for ensuring the safety of patients and staff. The first step is to call the Police of the Czech Republic and provide them with necessary information about the incident and the perpetrator. The present staff should try to calm down the patients and avoid further confrontations with the assailant. The next step is to secure control of entry and exit from the building. All patients and employees should be identified, and their identities should be verified. Then, a search of all rooms should be conducted to prevent the perpetrator from re-entering the building. The staff should also ensure that all doors and windows are locked and that the building is secure.

4. CONCLUSION

Serious violent attacks are highly stressful situations that need to be prepared for in advance, and the procedures should be well-known. Clearly documented procedures and well-trained staff can serve as safeguards to ensure that they know how to behave correctly in such situations, thus helping to reduce the impact of such incidents. Typically, setting up a simple security program and adhering to these procedures is sufficient.

The purpose of the training is to ensure an adequate response from the medical and security personnel of the hospital in order to eliminate potential loss of life, protect their own lives and health, manage stress, and provide assistance to others. Key to this is the establishment of a communication process and the organization of coordination among individuals present at a specific location. This primarily concerns the staff, their preparation, and assigned tasks. The patient themselves and their relatives also contribute significantly and can effectively reduce the risk of security incidents. Paying greater attention to the events happening around us is one of the fundamental prerequisites for maintaining safety. The issue of soft target protection resonated positively among employees at all levels, and they considered the training to be needed. The practical training part significantly increased employees' awareness of the issue and their ability to appropriately and effectively respond to a potential attack. The hospital's potential to enhance its resilience as a soft target through preventive measures and procedures has significantly increased. The active involvement of the Police of the Czech Republic in conducting the training exercises can be unequivocally regarded as positive.

Sources

- KALVACH, Z. et al. 2016. Základy ochrany měkkých cílů metodika. 1. verze. Praha: Ministerstvo vnitra ČR.
- Ministerstvo vnitra ČR, 2017. Koncepce ochrany měkkých cílů pro roky 2017–2020. Available: http://www.mvcr.cz/soubor/koncepce-ochrany-mekkych-cilu-pro-2017-2020-pdf.aspx>.
- MV GŘ HZS ČR. 2019. MODUL E; Vnitřní bezpečnost a veřejný pořádek a vybrané kapitoly krizového řízení. ISBN 978-80-7616-031-6.
- HÁVA, P. 2004. Násilí na pracovišti v oblasti zdravotnických a sociálních služeb v ČR: vstupní teoretická studie. Kostelec nad Černými lesy: Institut zdravotní politiky a ekonomiky, ISBN 80-6625-21-4.
- 5. Koordinační plán měkkého cíle. Nemocnice České Budějovice, a.s.