THE SAFE COMMUNITY CONCEPT – A SUCCESSFUL TOOL FOR INJURY PREVENTION AND SAFETY PROMOTION

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Key words: Safe Community, injury prevention, safety promotion.

Summary

Injuries remain to be one of the leading causes of death and disability in any region of the world. International Safe Community Programme is most important programme for injury prevention and safety promotion in community. The aim of study was to introduce the concept of Safe Community as a successful tool for injury prevention and safety promotion. For this study, the scientific literature overview, document analysis, and descriptive analysis were used.

The Safe Community model is a long-term, sustainable, and coordinated program, based on partnership and collaboration, covering all genders, ages, environments, and situations. Safe Community concept targets vulnerable groups and high-risk environments. Programme documents the frequency and causes of injuries, and has evaluation mechanisms. Community itself play the leading role in Safe Community. Reduced injury rate/morbidity, disability, and mortality from injuries, and improved quality of life, are the results of comprehensive sustainable preventive work at the community level. The subcategory Safe Schools are promising preventive programmes intended to enhance child safety.

Introduction

Injuries remain to be one of the leading causes of death and disability for all sectors of the community in any region of the world [1, 2, 3]. Researches all over the world discuss, study and investigate, what works, when and for whom for the improvement of injury-related health of the communities, what activities and community-based approach could be a benefit for the elucidation of injury causation, and what effective countermeasures should be implemented for achieving population -level change [1, 4-6].

International Safe Community model is a successful tool for the injury prevention and safety promotion [7-10]. International Safe Community Programme nowadays is one of the most important, cost effective interventional programmes in the field of injury prevention and safety promotion [7-12]. This approach embodies a multi-disciplinary and multi-sectorial engagement in injury control and promotes interventions across the full primary, secondary and tertiary prevention continuum [10]. At Safe Community concept, safety activities are focused to the community, having in mind that:

- Every 6 seconds someone, somewhere in the world is suddenly and tragically killed due to injury;
- Injury takes 5.8 million lives every year, causing about 9% of global deaths;
- Every death creates a hole in the lives of family, friends and communities left behind;
- Many of these are young lives;
- Injury is the leading cause of death for people under 40 years of age;
- For every death from injury there are dozens of hospitalisations, hundreds of Emergency Department presentations and thousands of medical appointments;
- Some people suffer long term or permanent physical or psychological disability because of their injuries [13].

The safety promotion activities at the community level have valuable impact to the outcomes of health and safety promotion work. Preventive programs, such as a Safe Community program aloud to reduce injury risk exposure, to save lives, and to minimize economical and social burden to community and to society.

The aim of study was to introduce the concept of Safe Community as a successful tool for injury prevention and safety promotion.

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Materials and Methods

The scientific literature overview, document analysis, and descriptive analysis were used for the study. In addition, the materials from the international conferences, reports, documentary sources, and sources available at the internet were used.

Results

Safe Community concept. The International Safe Community concept was originally launched at the First World Conference on Accident and Injury Prevention held in Stockholm in 1989. In the Manifesto for Safe Communities, is stated that the International Safe Community movement should work with "WHO Health for all" as a vision. The program has started in World Health Organization Collaborating Centre on Community Safety Promotion at Karolinska University (Stockholm, Sweden). From 2015, the program coordination was and is continued by the International Safe Community Certifying Centre. WHO was heavily engaged in the formation of the International Safe Community movement and was a signatory to the Manifesto for Safe Communities in Stockholm, in 1989. WHO recognizes Safe Communities as an important mechanism for the coordinated implementation of evidence-based action for the prevention of violence and injuries by subnational authorities, local government and communities [7, 9, 12]. According to investigations and research, the injuries decrease by more than 25-30 % in Safe Communities. In Safe Community, the community itself plays the leading role. Creative methods of education, physical planning and environmental change joined with appropriate regulations and enforcement are an important beginning for the safety of a community. An International Safe Community uses the traditional means of control such as economic, regulations and governing by objectives and visions. All International Safe Communities serve as models for other communities [7, 8, 10, 12]. Reduced injury rate/morbidity, disability, and mortality from injuries and violence, and improved quality of life, are the results of comprehensive sustainable preventive work at the community level.

The seven indicators a community must fulfil to became an International Safe Community are [12]:

1. An infrastructure based on partnership and collaborations, governed by a cross- sector group that is responsible for safety promotion in their community;

2. Long-term, sustainable programs covering genders and all ages, environments, and situations;

3. Programs that target high-risk groups and environments, and programs that promote safety for vulnerable groups;

4. Programs that are based on the available evidence;

5. Programs that document the frequency and causes of injuries;

6. Evaluation measures to assess their programs, processes and the effects of change;

7. On going participation in national and international Safe Communities networks.

There are numerous Safe Community Support Centres to provide support in the development of the Safe Communities programs, and in providing advice and assistance for communities in their country and internationally. During the last decades there were created regional organizations for support, help and cooperation among communities. The European Safe Community Network (ESCON) is a membership network created in response to the international need to share information and resources focused on injury prevention and safe community concept. This Network includes researchers, practitioners, safety promotion officers and community groups, other agencies and institutions working with safe community model. The ESCON network is a connection to current information on injury prevention, safety promotion and practical ways to achieve and improve safe communities. There are also other Safe Community networks: Asian Network for Safe Communities, Latin-American Network for Safe Communities, and Eastern Europe Safe Community Network. Safe Community movement is drawing more and more attention globally among people working in the area of injury prevention and safety promotion. The network is expanding rapidly and today we count around 400 designated Safe Communities worldwide, and even more are under way to it.

In Safe Communities, the focus on local community involvement in preventive activities is of importance. The community people the best understand the problems, needs, lifestyle, resources, capacities of the community, and decide, how to deal with these problems [8, 14, 15]. Community should decide what environments, ages and fields are most important to work on in regards to the safety in the community. So-called slogan "listen to the community" shows that the activities in the community should be organized according to the community needs. According to Seedat et al (2012), the promotion of safety, peace and health is partially contingent on democratic citizenship expressed through active community engagement in the design, implementation, monitoring, and evaluation of promotive initiatives [15]. Community itself play the leading role in Safe Community.

In order to evaluate the program and to show the evidence-based outcomes of Safe Community activities, the participation of hospitals, institutes, and universities has a significant impact in Safe Community movement. Osorno et

al (2010) stated, that data from local hospital emergency departments provide a good basis for intervention and outcome evaluation [16]. According to Cho et al (2012), hospitals play important role in risk assessment, health education, community action, organisational development and advocacy for policy to promote safety at a multi-level in the society. This can be accomplished most efficiently through collaboration with diverse sectors within a community, including hospitals, public health professionals, policy makers, school boards, police departments, fire departments, citizens' coalitions and others. For instance, since 2002, Ajou University School of Medicine and Public Health in Suwon, Korea, has introduced a Safe Community model to many countries in Asia, including Korea, Japan, China, Vietnam, and Thailand [17]. Practical experience confirmed evidence basically by research reveals significant importance of Safe Community interventions. Academy, research institutions, medical schools, hospitals, in addition, help to promote Safe Community model and to heighten public awareness on safety issues.

Successful Safe Community programmes. There are numerous of successful working Safe Community initiatives in the various continents of the world [18-27]. A number of studies in Europe, mainly in Sweden evaluated the effect of Safe Community programs. Some of Swedish Safe Communities achieved a greater injury rate decrease in the whole population [18]. In Motala Safe Community (Sweden) a reduction of 37% in injury rate between 1983 and 2008 (an annual injury incidence decreased from 109.2 to 67.6 per 1000 population) was recorded. In Motala Municipality, community-based injury prevention work according to the Safe Community model was successful and a cost effective way for reducing injuries in the local community. Over the five years of sustainable work, the social economic costs were there by reduced by 21 million SEK (Swedish kroner) per year. Child injuries decreased by 26% in Motala and remained unchanged in the control community [19].

In the USA, the Safe Community model has been applied mostly to traffic safety. It showed a decline by 25% of fatal crashes (alcohol related - by 42%). Speeding and teenagers' drink driving declined by half. An increase by 24% of seat belt and child restrain use in the cars was presented at Safe Communities [20]. According to recent studies, six million Americans live in 25 Safe Community sites. Study in three Safe Communities confirmed that the Safe Community model might be a promising approach to reduce injuries in community settings. Using a pre-post intervention control design, there was found lower injury hospitalization rates associated with Safe Community accreditation [21].

In Australia, the consistent downward trend of injury indicators in Makay Municipality in when compared with increasing injury rates in the rest of Queensland sounds encouraging. Mackay Whitsunday Safe Community (MWSC) was established in 2000 in response to high rates of injury observed in the region. Injury control and safety promotion activities were associated with a 33% reduction in injury deaths. However, the researchers from Australia underlined "an Achilles' heel" for sustainability of the program. The productivity of MWSC was vulnerable to the changing policy priorities of external sponsoring agents and critically dependent on the advocacy skills of its leaders [22, 23].

In Asia, the Youth Park community was the first international safe community in Mainland China. In Youth Park, the safety records for traffic, homes, production, public places and "high-risk groups" have greatly improved, with the rate of injuries decreasing, and residents' awareness of safety increasing. In this Safe Community, all types of injuries decreased by 34.2% [24]. In South Korea Safe Communities, the decrease in child and senior injury death rate was stated. Especially steep significant decline in the fall mortality rates among the elderly (from 32.0 to 11.7) was showed. The study on Gangbuk-gu Safe Community showed that Safe Community program might be a helpful programme for enhancing senior safety. The qualitative outcomes, such as bringing the residents' attention to the safety, significant active participation and coordination of stakeholders, should also be considered as important factors of the community-based initiatives [25, 26]. In Iran, injury -related fatality rate significantly decreased in Kashmar Safe Community, when compared with control groups [27].

Positive outcomes of Safe Community programmes evidently confirmed effectiveness of the activities, reductive impact on fatal and non-fatal injury rates, and on awareness rising among population toward injury prevention and safety promotion. Successful projects at community level are promising for health and safety promotion in community.

Activities at Safe Communities. Community based injury prevention is focusing on activities, projects, and measures in all areas and all environments with active participation

Table 1. The areas of activities at Safe Community programmes

Typical projects	New projects
• **Child safety**	• First aid
• **Elderly safety**	• Alcohol consumption
• **Traffic safety**	• Tobacco restrictions
• **Home safety**	• Disaster preparedness
• **Leisure safety**	• Food hygiene
• **Occupational safety**	• Environmental health
• **Sport safety**	• Water supply
• **School safety**	• Healthy nutrition
• **Violence and crime prevention**	• Physical activity

of everyone in a community. Since its establishment, the typical projects were carried out at Safe Communities. Projects targeted to the main areas of injury and safety. Along with the common safety activities on injury prevention and safety promotion, nowadays the new projects are included in Safe Community programs (Table 1).

Further concerns. Safe Community ideology helps to get support from decision-makers, to create safe environment, to involve local community in safety activities, and to coordinate those activities. The most important is that this program empowers reduction of injury mortality, injury rate, and disabilities from injuries. The growing number of designated Safe Communities around the world leads to significant reduction in the numbers of injuries worldwide. The public health sector, medical experts, and safety professionals play the leading role in local community health education and safety promotion efforts. Health professionals are most often the initiators of Safe Community program in the community, and the leaders in practical activities. Mainly they accomplish research and evaluate injury prevention and safety promotion in community. Even an increase in evaluation is observed in recent years, still the assessment of the effectiveness of interventions needs to be conducted of the highest methodological standards possible [8, 15, 16, 20]. Detailed reports/publications of the programme implementation processes, in addition to high-quality evaluation of the overall programme effectiveness, is essential to build the evidence base for the Safe Community approach to injury prevention [28].

In the beginning of 21st millennium, designated international Safe Schools started their way; it was decided that Safe Schools would be the model for subdesignations. Today, there are designated safe schools in different parts of the world – in Europe (Austria, Czech Republic), Asia (the Republic of Korea, Japan, Taiwan, Hong Kong, and Thailand), New Zealand, and the USA. Safe Schools revealed to be an effective and cost benefit programme. For instance, in 2007 Safe Kids Austria/Grosse Schuetzen Kleine introduced a broad Safe Children Community program in the district of Deutschlandsberg. After 5 years, in the investigated district the child injury rate decreased by 7.2%, while in the control district the increase of 4.6% of child injury rate was revealed. In addition, the ability to save 254,000 Euro in direct medical treatment costs and 1.7 million Euro in macroeconomic costs with the safe children community project was shown (1 € of invested costs saved 2 € of medical costs and 7 € of overall economic costs [29]. Further developments of Safe School initiatives sound promising.

Recently, the cooperation between Safe Community and Healthy City movements were observed. Some communities in Denmark, South Korea, US, and Hong Kong, run these two programmes together with interaction among activities in the field of health and safety promotion.

Conclusions

The international Safe Community module is an effective program for injury prevention, and safety promotion. Safe Community program is comprehensive, sustainable health and safety promotion program with active involvement of local community. Programme covers all genders, ages, environments, and situations, and targets vulnerable groups and high-risk environments. Reduced injury rate/morbidity, disability, and mortality from injuries and violence, and improved quality of life, are the results of comprehensive sustainable preventive work at the community level. The subcategory Safe Schools are promising preventive programmes intended to enhance child safety. Nowadays the interactions among activities in the field of health and safety promotion were observed between Safe Community Programs and Healthy City projects.

References

1. Wilkins N, McClure RJ, Mack K. Injury prevention: achieving population level change. Injury Prevention 2018; 24 (S1):i1-i2. https://doi.org/10.1136/injuryprev-2017-042355
2. The top 10 causes of death. Geneva: World Health Organization, 2017.
3. Leading causes of death. Atlanta: Centers for Disease Control and Prevention, 2016.
4. Rutter H, Savona N, Glonti K. et al. The need for a complex systems model of evidence for public health. Lancet 2017; 390: 2602–2604. https://doi.org/10.1016/S0140-6736(17)31267-9
5. Galea S, Keyes K. What matters, when, for whom? Three questions to guide population health scholarship. Injury Prevention 2018; 24: i3–i6. https://doi.org/10.1136/injuryprev-2017-042415
6. Pomerantz WJ, Gittelman MA, Ho M, Hornung RW. Can the reduction of pediatric injury rates be sustained using a community-based approach? Journal of Trauma and Acute Care Surgery 2013; 75(4):S276-S280. https://doi.org/10.1097/TA.0b013e31828f9abd
7. Skjönberg G. The Safe Community movement. Achieving sustainable development goals –towards violence free community. The 6th European regional conference on Safe Communities, Skopje, Macedonia. Archives of Public Health 2018; Issue Suppl.: 20.
8. Strukcinskiene B. Safe Communities. Turkiye klinikleri Journal of Pediatric Sciences 2015; 11(4): 22-27.
9. Milankov M, Radovanovic M, Mitrovic D. Key success on participation in national and international Safe Communities

networks. Safety 2016 World conference, Tampere, Finland. Injury Prevention 2016; 22 (Suppl. 2): A83.

10. Bae J, Cho J, Cho SI, Kwak M, Lee T, Bae CA. Application and developmental strategies for community-based injury prevention programs of the International Safe Communities Movement in Korea. Journal of Korean Academy of Nursing 2015; 45(6):910-918.

https://doi.org/10.4040/jkan.2015.45.6.910

11. Dalal K. Burden of injury and violence: South East Europe needs more & Safe Communities. Achieving sustainable development goals – towards violence free community. The 6th European regional conference on Safe Communities, Skopje, Archives of Public Health, 2018; Issue Suppl.: 21.

12. International Safe Communities. Available at: https://isccc.global/. Accessed at October 24, 2018.

13. Hanson D. Call to action from chairman. International Safe Communities. Available at: https://isccc.global/. Accessed at October 24, 2018.

14. Shiraishi Y. Challenges to elderly safety in Safe Community movements in Japan. International Journal of Injury Control and Safety Promotion 2012; 19(3): 260-6.

https://doi.org/10.1080/17457300.2012.674047

15. Seedat M, McClure R, Suffla S, van Niekerk A. Developing the evidence-base for Safe Communities: a multilevel, partly randomised, controlled trial. International Journal of Injury Control and Safety Promotion 2012; 19(3): 231-41.

https://doi.org/10.1080/17457300.2012.705303

16. Osorno J, Svanstrom L, Beskow J. Community suicide prevention. Stockholm: Karolinska Institutet, 2010.

17. Cho JP, Lee AC. Roles of a hospital in community safety promotion. International Journal of Injury Control and Safety Promotion 2012; 19(3): 272-277.

https://doi.org/10.1080/17457300.2012.679003

18. Nilsen P, Ekman R, Ekman D, Ryen L, Lindqvist K. Effectiveness of community-based injury prevention long-term injury rate levels, changes, and trends for 14 Swedish WHO-designated Safe Community. Accident Analysis and Prevention 2007; 39: 267-273.

https://doi.org/10.1016/j.aap.2006.07.007

19. Lindqvist K. Motala Municipality – a sustainable Safe Community in Sweden. International Journal of Injury Control and Safety Promotion 2012; 19(3): 249-59.

https://doi.org/10.1080/17457300.2012.692692

20. Svanström L. It all started in Falköping, Sweden: Safe Communities - global thinking and local action for safety. International Journal of Injury Control and Safety Promotion 2012; 19(3): 202-8.

https://doi.org/10.1080/17457300.2012.696661

21. Sinelnikov S, Friedman LS, Chavez EA. Injuries and Safe Communities accreditation: is there a link? Accident Analysis & Prevention 2016; 91: 84-90.

https://doi.org/10.1016/j.aap.2016.02.015

22. Hanson D, McFarlane K, Vardon P, Lloyd J, Durrheim D, Speare R. Measuring the sustainability of a community safety promotion network: working from the inside out. International Journal of Injury Control and Safety Promotion 2012; 19(3): 297-305.

https://doi.org/10.1080/17457300.2012.709871

23. Hanson D, Gunning C, Rose J, McFarlane K, Franklin RC. Working from the inside out: a case study of Mackay Safe Community. Health Education & Behavior 2015; 42(1 Suppl):35S-45S.

https://doi.org/10.1177/1090198114568305

24. Ben M, Jipeng L, Yipeng L. Research on the First International Safe Community Building in Mainland China. Procedia Engineering 2012; 43: 39-46.

https://doi.org/10.1016/j.proeng.2012.08.008

25. Kim HJ, Hwang SM, Lee IY, Cho JP, Kwon MO, Jung JH, Byun JY. Implementation and Results of a Survey on Safe Community Programs in Gangbuk-gu, Korea: Focusing on Participants at a Local Public Health Center. Journal of Preventive Medicine & Public Health 2014; 47(1): 47-56.

https://doi.org/10.3961/jpmph.2014.47.1.47

26. Kang C, Shin J, Matthews B. Impact of community-based approach as policy tool: World Health Organization-designated Safe Communities of Korea and Health Action Zones of the United Kingdom. Osong Public Health and Research Perspectives 2016;7(1):36-42.

https://doi.org/10.1016/j.phrp.2015.10.005

27. Rahimi-Movaghar V. Controlled evaluation of injury in an international Safe Community: Kashmar, Iran. Public Health 2010; 124(4): 190-197.

https://doi.org/10.1016/j.puhe.2010.02.014

28. Spinks A, Turner C, Nixon J, McClure RJ. The, WHO Safe Communities' models for the prevention of injury in whole population (Review). The Cochrane Collaboration: John Wiley &Sons, Ltd, 2009.

29. Application for recertification as Safe Children Community 2017: Application of the district of Deutschlandsberg to the International Network of Safe Communities

SAUGIOS BENDRUOMENĖS PROGRAMA – SĖKMINGA SUŽALOJIMŲ PREVENCIJOS IR SAUGOS STIPRINIMO PRIEMONĖ
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Raktažodžiai: saugi bendruomenė, sužalojimų prevencija, saugos stiprinimas.

Santrauka

Sužalojimai vis dar yra viena iš pagrindinių mirties ir negalios priežasčių bet kuriame pasaulio regione. Tarptautinė Saugios bendruomenės programa yra svarbiausia sužalojimų prevencijos ir saugos skatinimo bendruomenėje programa. Tyrimo tikslas buvo supažindinti su „Saugios bendruomenės" koncepcija, kaip sėkminga traumų prevencijos ir saugos skatinimo priemone. Šiame tyrime buvo naudojama mokslinės literatūros apžvalga, dokumentų analizė ir aprašomoji analizė.

Saugios bendruomenės modelis yra ilgalaikė, tvari, koordinuojama programa, pagrįsta partneryste ir bendradarbiavimu, apimanti visas amžiaus, lyties grupes, įvairią aplinką ir situacijas. Saugios bendruomenės koncepcijoje padidintas dėmesys skiriamas pažeidžiamoms grupėms ir didelės rizikos aplinkai. Programa dokumentuoja sužalojimų dažnį ir priežastis, taip pat turi vertinimo mechanizmus. Saugiose bendruomenėse vadovaujantis vaidmuo tenka pačiai bendruomenei. Sumažėję sužalojimų skaičiaus/sergamumo, negalios ir mirtingumo nuo sužalojimų rodikliai bei geresnė gyvenimo kokybė yra kompleksinio nuoseklaus prevencinio darbo rezultatai bendruomenės lygmeniu. Subkategorija „Saugios mokyklos" yra perspektyvios prevencinės programos, padedančios stiprinti vaiko saugą.

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