

Youth Are Our Future Assets in Emergency and Disaster Management

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Crises and disasters cannot be avoided, but their consequences can be mitigated by planning, exercises and preparedness [1-3]. Although major events affect whole society, their impact on vulnerable groups is more evident. Children and youth belong to this category and need to be considered for special planning and education [4-6]. Numerous studies have shown the importance of early engagement of young people in planning and preparedness efforts for disasters. However, most studies evaluating youth's emergency and crisis preparedness are descriptive and end up as a case description in handbooks, recommendations, and lectures [7-9].

In light of the recent tragedies which involved school children globally together with other natural and man-made disasters around the world, it seems that the current educational approach is not enough and additional education in emergency and disaster management is undeniably necessary [5, 7, 10-12]. Young people not only need to understand the nature of society's response to disasters or terrorist attacks, but also how to react to reduce the risks for a disastrous event. In this perspective, theoretical knowledge is not enough and practical approach should also be included [12, 13]. Young people should be educated in a way that offers them adjusted knowledge and

develops their capacity for crisis management and preparedness and ensure their readiness for future emergencies. Although youth are considered as a risk group in a disaster due to the fact that they may not know how to deal with it [6, 7, 14], an educational initiative may make them an important resource for the future emergency preparedness.

Earlier Experiences

Young people who participated in various risk management and risk reduction programs have demonstrated better knowledge and understandings on security issues and measures. They have also actively promoted a better preparedness in their surroundings and home environment [15]. Studies show that young people participating in various activities before, during and after a disaster or a major incident, have a better ability to handle the situation practically and mentally. In order to handle a disaster situation five different interventions/actions should be promoted; 1) a sense of security, 2) peace, 3) a sense of self- and group effectiveness, 4) solidarity, and 5) hope [16]. These measures are considered necessary in order to experience a sense of protection, support and resilience, which together are necessary to get greater resilience [17].

How Can a Youth Education Look Like?

There are different ways to teach disaster and crisis management to adults and there is no evidence that educating youth may differ [13]. The most common methods of transferring knowledge to young people in crisis and disaster can be described in four different strategies;

Promotion: Focuses on achieving uniform, and large-scale impact through the standardization of messages such as publications (billboards, posters), presentations (slides and presentations), games and competitions, audio-visual materials, web pages and social media. Novelty and high visibility is required. The message lives on by volunteers (scouts, college students, etc.), who continue to deliver key messages through live interactions such as at school visits, etc. [14].

"Learning by doing": Focuses on engaging young people in discovering the problems and ways to solve them by using a scenario play (game). This type of Problem-Based Learning (PBL), utilizes a scenario that can be adapted to the age and ability. Mistakes are allowed and review of the results provides some improvements, which can be carried out in a second scenario play. Some research-based tools such as risk and vulnerability analysis and capacity assessment, planning, and implementation measures are used [13].

Informal education: Focuses on short lectures/ meetings to stimulate thinking and engage youth in discovering the problems and find appropriate measures in order to obtain a wider perspective. This is the most flexible training for schools with regard to the setting, audience and time frame. Tools such as publications, modules and presentations, tutorials, role play, sounds and videos, etc. can be used [18].

Formal education: Focuses on introduction and integration of disaster management and risk reduction into school curricula. The responsibility for the issue (school safety in this context) and curricula belongs exclusively to the education authorities, who may need local, regional and national support for longterm planning and capacity building [18].

What Are the Educational Programs that Can Match Our Needs?

Summing up the information gained from earlier experiences and methods available for youth education, it is obvious that a blended learning is needed in which various teaching methods is used. However, the focus must be put on the practical part of the education. There are few studies reported in the literature about simulation training in youth and children's. However, simulation training is widely used in adult education and has proven to be the method of choice in many occasions. Today, there are validated and evidence-based teaching and simulation model, which is practical and offer an opportunity for good learning [19, 20]. They deliver standardization, opportunities for "learning by doing", and an informal education.

To use this type of simulation in youth, the focus must be put on the general understanding of the major incident and not the details of each patients. Modules and organizations should have simple structures and scenarios must be adjusted to the youth life. Few short lectures to clarify the roles of involved organizations should proceed a scenario, which is adjusted to the youth reality and is played by them divided into groups representing involved professionals e.g. medical personnel, police, etc. The exercise focuses on situation awareness and the activation of the school's emergency and safety plans. In addition, students have the opportunity to use some practical measures such as radio communication, triage, etc. Short evaluation will be conducted after each exercise and students have the possibility to talk about their experiences and comprehension of the situation. There should be supporting people in place to handle any normal or abnormal reactions from the young people. Cooperation of different authorities are needed in constructing the ideal training model for youth.

A simulation exercise could expose young people to various scenarios and create a sense of security and safety in an environment, which allows multiple mistakes [13]. The most important factor in this context is that the training should be included in the school's safety procedures and that it gives a sense of having a mission and responsibility to each student. This would minimize the propensity of young people to act according to their own needs in a disaster. Having a role or an assignment in a familiar event that they feel confident about, may also affect young people's experience positively. Roles and missions, promotes increased understanding of various official missions and thus may also increase the attractiveness of recruitment for these professionals. A good and interesting education, offers a great potential to build relationships between young people and authorities, instead of promoting an increased contempt which in turn creates alienation in society.

School Perspective

Schools are entrusted and share responsibility with the guardians to form future citizens. For youth and schools 'authority, a safe and secure environment is a prerequisite for effective learning and teaching. To ensure the safety of young people, the basic knowledge in disaster and emergency management for teachers and staff together with active engagement of the high reliability organizations e.g. police, are necessary. However, a complete security and safety can only be achieved if the school and the youth can gain some expertise on the management of emergency situations [7, 9, 10].

Such an exercise can provide a new structure of cooperation and togetherness in schools, which

can be used in all issues and not just an isolated phenomenon such as disaster. A further development in a school is to create a special group of young people, student health services, teachers and principals, to continuously practice and develop their shares of responsibilities in various issue. It will also create opportunities of mentorship for students and closeness to other students in the school. A simulation exercise also promotes rapprochement between staff and young people, creating an opportunity to speak and provide information and warn for an imminent attack of a higher degree.

Conclusion

In conclusion, there is a need for new educational initiative in the field of emergency and disaster management for children and youth. Such education aims to increase emergency preparedness in schools, enhance individual skills, increase the understanding about the involved authorities' actions and responsibilities, provide support and opportunities for young people to take responsibility in emergency situations, increase the opportunities for the recruitment to these professionals, increase equality and reduce exclusion in some areas and increase understanding of the psychological effects of an event and the need for follow-up. The quality of such education should also be evaluated by measuring the knowledge before and after (questionnaire), the educational advantage of the model (questionnaire), the skills depending on the target group and goals (practical and observational), the increased degree and feeling of responsibility among young people (questionnaire and interviews) and the psychological consequences after an event (questionnaire).

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References

- Boscarino JA, Adams RE, Figley CR, Galea S, Foa EB. Fear of terrorism and preparedness in New York City 2 years after the attacks: implications for disaster planning and research. *J Public Health Manag Pract*. 2006;12(6):505-13.
- 2. Khorram-Manesh A, Lupesco O, Friedl T, Arnim G, Kaptan K, Djalali AR, et al. Education in Disaster Management: What Do We Offer and What Do We Need? Proposing a New Global Program. *Disaster Med Public Health Prep.* 2016:1-20.
- 3. Sinclair M. Education in emergencies. Commenwealth Education Partnership. 2007;52-6.
- Maguire B, Hagan P. Disasters and communities: understanding social resilience. Australian Journal of Emergency Management, The. 2007;22(2):16.
- Ronan KR, Johnston DM. Hazards education for youth: a quasiexperimental investigation. *Risk Anal.* 2003;23(5):1009-20.
- Ronan KR, Alisic E, Towers B, Johnson VA, Johnston DM. Disaster preparedness for children and families: a critical review. *Curr Psychiatry Rep.* 2015;17(7):58.
- Mitchell T, Haynes K, Hall N, Choong W, Oven K. The roles of children and youth in communicating disaster risk. *Children Youth and Environments*. 2008;18(1):254-79.

- 8. Johnson VA, Ronan KR, Johnston DM, Peace R. Evaluations of disaster education programs for children: A methodological review. *International journal of disaster risk reduction*. 2014;9:107-23.
- 9. Haynes K, Tanner TM. Empowering young people and strengthening resilience: Youth-centred participatory video as a tool for climate change adaptation and disaster risk reduction. *Children's Geographies*. 2015;**13**(3):357-71.
- **10.** Mutch C. The role of schools in disaster preparedness, response and recovery: what can we learn from the literature? *Pastoral Care in Education*. 2014;**32**(1):5-22.
- Flannery DJ, Modzeleski W, Kretschmar JM. Violence and school shootings. *Curr Psychiatry Rep.* 2013;15(1):331
- **12.** Borum R, Cornell DG, Modzeleski W, Jimerson SR. What can be done about school shootings? A review of the evidence. *Educational Researcher*. 2010;**39**(1):27-37.
- 13. Khorram-Manesh A. Training in Disaster Medicine and Emergencies; a Short Review. *Austin Journal of Emergency and Critical Care Medicine*. 2015;2(4):1024.
- In: Secretary-General's Envoy on Youth. YouthNow: Driving Global Momentum for Youth Development & Inclusion. [September 2016].

Available from: http://www.un.org/ youthenvoy/wpay/

- 15. Finnis KK, Johnston DM, Ronan KR, White JD. Hazard perceptions and preparedness of Taranaki youth. *Disaster Prevention and Management: An International Journal.* 2010;**19**(2):175-84.
- 16. Hobfoll SE, Watson P, Bell CC, Bryant RA, Brymer MJ, Friedman MJ, et al. Five essential elements of immediate and mid-term mass trauma intervention: empirical evidence. *Psychiatry*. 2007;70(4):283-315; discussion 6-69.
- Masten AS. Ordinary magic. Resilience processes in development. *Am Psychol.* 2001;56(3):227-38.
- Scribner S, Cole M. Cognitive Consequences of Formal and Informal Education: New accommodations are needed between school-based learning and learning experiences of everyday life. *Science*. 1973;182(4112):553-9.
- **19.** In: FEMA. Youth emergency preparedness curriculum-ready Kids. [October 2016]. Available from: https://www.fema.gov/media-library/assets/documents/34411.
- 20. Khorram-Manesh A, Berlin J, Carlström E. Two validate ways of improving the ability of decisionmaking in emergencies; results from a literature review. *Bull Emerg Trauma*. 2016;4(4):186-96.