Field Report

Psychological first aid through the 'SIX Cs model' — an intervention with migrants on the move

Einav Levy^{1,2,3}, Moshe Farchi^{3,4,5}, Yori Gidron^{5,6,7} & Eitan Shahar^{5,8}

¹PhD Candidate, MPH, Department of Pharmacology and Pharmacokinetics, The Free University of Brussels (VUB), Brussels Belgium, ²The Israeli School of Humanitarian Action, Tel Aviv, ³Tel-Hai College, Qiryat Shemona, ⁴PhD, The Israeli School of Humanitarian Action, Tel Aviv, ⁵NATAN (NGO), Tel Aviv, ⁶Professor, The Israeli School of Humanitarian Action, Tel Aviv, Israel, ³SCALab, Lille3 University, Lille, France, ²PhD, Department of Social Work, Ben Gurion University, Beer Sheva, Israel

Abstract

Thousands of migrants passed through the Balkans whilst migrating from the Middle East to Europe between 2015 and 2016. Humanitarian actions were conducted throughout this route as agencies and governments provided support. The Camp of Preševo, on the Southern border of Serbia, was established by the local authorities as a registration camp to monitor the migration and deliver aid. Part of this aid was psychosocial. Past studies show a relatively high prevalence of stress symptoms among forced migrants, presumably due to exposure to war-related atrocities and experience of forced migration. NATAN, an Israeli non-governmental organisation, is a volunteer-based organisation that delivered psychosocial support to the migrants using the 'SIX Cs model'. This model focuses on cognitive and behavioural components and is based on the neuropsychology of resilience. It has advantages that were relevant to the context of the camp, namely culturally adaptive, easy to administer, short and adjustable to varied contexts. Moreover, the model gives tools, which could be used later by the migrants in the absence of a therapist. This report describes the SIX Cs model and the implementation of its intervention in the Preševo camp.

Keywords: intervention, migration, psychosocial, refugees, stress, SIX Cs model

INTRODUCTION

The on going crisis in the Middle East has caused mass migration through Turkey and Greece, followed by the countries of former Yugoslavia and terminating in Central or West Europe. According to the United Nations High Commission for Refugees (UNHCR), between December 2015 and February 2016, 172,365 migrants had passed through a route, which was defined as the 'Balkan Route' (UNHCR, 2017). This phenomenon of forced migration results in a variety of health consequences including psychopathology. Past studies show high rates of psychopathology including post traumatic stress disorder (PTSD) among samples of refugees and forced migrants. For instance, a study among Syrian refugees in Turkey found a prevalence of 33.5% of PTSD (Alpak et al., 2015). In another study of 781 Syrian refugees, 83.4% had probable PTSD and 37.4% had probable depression (Acarturk, Cetinkaya, Senay, Gulen, Aker, & Hinton, 2017). High rates of psychopathology were also observed in other settings and age groups of refugees. In a study conducted on 38 Yazidi children, all of them had psychiatric problems, of which 71% had sleeping problems, 36.8% had depression and 10.5% had PTSD (Ceri, Özlü-Erkilic, Özer,

Access this article online

Quick Response Code:

Website:
www.interventionjournal.org

DOI:
10.4103/INTV.INTV_51_18

Yalcin, Popow, & Akkaya-Kalayci, 2016). Another study conducted on Yazidi children found that 36.4% of them suffered from PTSD, 32.7% from depression and 7.3% from anxiety (Nasıroğlu & Çeri, 2016). In a further study of 847 Somali refugees residing in southeast Ethiopia, 38.3% were found to be depressed (Feyera, Mihretie, Bedaso, Gedle, & Kumera, 2015). All the above studies were conducted among refugees and forced migrants who were mostly close to their country of origin.

In contrast, Kaltenbach, Härdtner, Hermenau, Schauer, and Elbert (2017) developed the 15-item Refugee Health Screener tool and found that 52% of the migrants who arrived in Germany during 2015 to 2016 had a current mental health problem. The discrepancy in the observed rates of psychopathology could stem from differences in

Address for correspondence: Einav Levy, Department of Pharmacology and Pharmacokinetics, The Free University of Brussels (VUB), Laarbeeklaan 103, 1090 Brussels, Belgium.

E-mail: levygaea@gmail.com

Submitted: 24 June 2018 Revised: 29 October 2018 Accepted: 24 December 2018 Published: 3 May 2019

This is an open access journal, and articles are distributed under the terms of the Creative Commons Attribution-NonCommercial-ShareAlike 4.0 License, which allows others to remix, tweak, and build upon the work non-commercially, as long as appropriate credit is given and the new creations are licensed under the identical terms.

For reprints contact: WKHLRPMedknow_reprints@wolterskluwer.com

How to cite this article: Levy, E., Farchi, M., Gidron, Y., & Shahar, E. (2019). Psychological first aid through the 'SIX Cs model' – an intervention with migrants on the move. *Intervention*, 18(1), 71-77.

sampling methods, timing since relocation of the migrants, types of assessment tools and location and resources available in place of residence. A review of 181 surveys, conducted in 2009, identified an approximate 30% prevalence of PTSD among 81,866 refugees and other conflict-related populations (Steel, Chey, Silove, Marnane, Bryant, & van Ommeren, 2009).

Significant challenges for humanitarian agencies in the context of supporting populations on the move included the number of beneficiaries and the limited time and resources allocated per person. Moreover, the priority of migrants on the move to their next destination, even at the cost of their health and wellbeing, results in reduced possibilities of providing them adequate mental health support. Such challenges required new thinking.

Further research showed that there are several factors associated with mental health and PTSD among refugees and forced migrants. These factors are related to the migration and life conditions these migrants face. A study on Rohingya adults residing in a refugee camp found high levels of daily environmental stressors associated with the general life in the camp, problems of food, lack of freedom of movement and concerns regarding safety. Moreover, this research indicates that daily stressors are important factors in mental health outcomes of populations affected by collective violence and statelessness (Riley, Varner, Ventevogel, Taimur Hasan, & Welton-Mitchell, 2017). Other factors related to forced migration, such as prolonged detention, insecure residency status, restricted access to services and uncertainty about and little control over one's future, all add to the effects of past traumas and later risk of developing symptoms of PTSD and depression (Bosworth, 2016; Fazel & Silove, 2006; Li, Liddell, & Nickerson, 2016; Silove, Ventevogel, & Rees, 2017).

PSYCHOLOGICAL CHARACTERISTICS OF MIGRANTS ON THE MOVE

There is a very little, if any, research on the psychological aspects of migrants on the move because of obvious ethical and logistical constraints. Thus, we will refer to other relevant research. Forced migrants often experience lifethreatening events in their country of origin and during their migration. Furthermore, they are often in constant uncertainty and lack of control concerning their next stop, the duration of their migration and available basic resources on the way (water, food, shelter, heating, etc.). In addition, migrants on the move might experience severe loss of social and material resources (family, friends, community, residence, etc.). Such loss of resources is a crucial predictor of mental health and PTSD (Littleton, Kumpula, & Orcutt, 2011), as hypothesised by the conservation of resources (COR) model (Hobfoll, 1989).

In the first 48 hours after potential traumatic events, the acute stress reaction (ASR) accrues. The ASR includes emotional (fear, sadness), cognitive (confusion, disorientation), behavioural (blow ups, withdrawal) and physiological symptoms (insomnia, rapid heart rate). A majority of people show ASR symptoms following stressful events.

For instance, 70% of survivors developed ASR symptoms after an earthquake (Bergiannaki, Psarros, Varsou, Paparrigopoulos, & Soldatos, 2003). A review by Bar-Shai and Klein (2015) shows that ASR is a PTSD risk factor.

In the context of migrants on the move, the ASR might be complex and chronic because of repeated exposure to new severe stressors (for example, separation from family, physical violence and environmental risks). Indeed, Hecker, Ainamani, Hermenau, Haefele and Elbert (2017) used the term 'constant traumatic stress', which may be more suitable to migrants on the move.

PSYCHOLOGICAL FIRST AID

In accordance with the World Health Organization (WHO) (2013, p. 20), the definition of psychological first aid (PFA) is 'humane, supportive and practical assistance to fellow human beings who recently suffered exposure to serious stressors'.

Various forms of PFA interventions exist, most, if not all, of which have not been empirically tested (Ruzek, Brymer, Jacobs, Layne, Vernberg, & Watson, 2007; Vernberg et al., 2008; Allen et al., 2010; Farchi, Cohen, & Mosek, 2014). Moreover, a systematic review of PFA showed a lack of evidence for developed guidelines (Dieltjens, Moonens, Van Praet, De Buck, & Vandekerckhove, 2014), which are nevertheless relied upon by authorities. One common technique used for psychological needs is psychological debriefing. One model of this technique, of a number of versions, is where groups of people (or individuals) are invited to describe the event. Then they receive psychoeducation on legitimising and normalising their response, through which they receive support and empathy and are encouraged to express their feelings about the experienced event. However, four meta-analyses found that psychological debriefing does not prevent long-term psychopathologies such as PTSD if not used for the right purpose and with specified populations (Rose, Bisson, Churchill, & Wessely, 2002; van Emmerik, Kamphuis, Hulsbosch, & Emmelkamp, 2002). Several studies even found debriefing increased the risk of PTSD (Mayou, Ehlers, & Hobbs, 2000). Importantly, implementing PFA in its usual format of interactive conversations in order to obtain insight or restructure traumatic memories, as done in the 'memory structuring interventions' (Gidron & Farchi, 2016; Gidron, Davidson, & Bata, 1999), is unsuitable for helping people on the move. Thus, helping masses of people on the move requires new thinking and renewed forms of PFA. An intervention method focusing on PFA and which could be used is psychological inoculation. This technique focuses on reducing cognitive barriers to active coping, which could increase resilience (Farchi & Gidron, 2010).

Initially, PFA was not developed for people on the move. Nevertheless, brief standardised and validated interventions, provided to refugee populations, using cognitive behavioural therapies, stress management techniques, cognitive reconstructing behavioural and activation strategies, were found relatively effective (Dawson et al., 2015; Silove et al., 2017). The models of these interventions

carry strengths such as adaptiveness to local cultures, feasibility of rapid training to local personnel and skills transfer to community leaders that allows regaining resilience and self-efficacy (Hinton, Pich, Hofmann, & Otto, 2013; Murray et al., 2014; Nickerson, Bryant, Silove, & Steel, 2011; Silove et al., 2017). WHO launched Problem Management Plus (PM+) as a brief intervention using cognitive behavioural therapy (Dawson et al., 2015). However, it is infeasible to provide such interventions to migrants on the move, because of severe time limits, lack of privacy and the large numbers of people at need. For this, other, more adaptive interventions are needed.

The 'SIX Cs model'

A model that follows the principles described above of being brief, adaptable and empowering beneficiaries and personnel is the 'SIX Cs model' (Farchi, Levy, Gershon, Hirsch-Gornemann, Whiteson, & Gidron, 2018; Hantman & Farchi, 2015). The SIX Cs model is a method of empowering people during acute stressful situations. It is derived from several lines of research and models in stress, and is based on the neurobiology of stress and resilience. First, it is based on the work of Bandura (1993) showing how self-efficacy, the belief that a person can perform and achieve an outcome despite existing barriers, predicts adaptation. People with high self-efficacy indeed adapt better to stressful situations and have less PTSD (e.g. Bosmans, van der Knaap, & van der Velden, 2016; Romppel et al., 2013). Self-efficacy can be increased by providing people mastery and control (Ozer & Bandura, 1990). Another theoretical framework reflecting resilience is that of sense of coherence (SOC) (Antonovsky, 1993). High SOC reflects the ability to understand and predict events in one's life (comprehensibility), meet one's daily demands and challenges (manageability) and perceive one's efforts as worthwhile (meaningfulness). High SOC is a strong predictor of better adaptation and even moderates the effects of negative events on mental and physical outcomes (Lutgendorf & Costanzo, 2003; Wolff & Ratner, 1999).

The SIX Cs model also draws on neurobiological studies on stress and adaptation. One crucial study found higher psychological and increased prefrontal cortical activity during stress (Taylor, Burklund, Eisenberger, Lehman, Hilmert, & Lieberman, 2008). This pattern is central to preventing stress responses to trauma because the ability to process traumatic events is situated in more frontal rather than limbic regions and characterises survivors of traumatic events without PTSD (Bremner, 1999; Shin et al., 2004). Thus, people need to learn to shift trauma processing from limbic and affective manners to more frontal and cognitive manners (Gidron et al., 1999). Based on these theories, constructs and findings, the SIX Cs intervention model was developed (Hantman & Farchi, 2015).

The intervention can be given by non-professional but trained staff, making it feasible for helping masses of people in need. In this method, people in need are spoken to by using *cognitive communication*, with the counsellor framing their event within a chronological *continuity*,

while remaining *committed* to them, and providing the people with *challenge* and *control*.

Cognitive communication is achieved by talking to survivors about factual topics rather than inquiring about emotions. Chronological continuity is provided by explaining to people the order of their experienced events (for example, 'You were at home, you are now in the street and soon medical help shall arrive'). Chronologically organising a memory of a traumatic event is related to symptom reduction (Foa, Molnar, & Cashman, 1995). (It may not be best to have a lay person conduct this phase because of the high risk of re-traumatising through the recollection of events, unless the refugee already has good skills in reducing the severity of those symptoms, e.g. relaxation skills, etc.) The counsellor repeats his or her commitment to remaining near people and that he or she will provide them help. Finally, control and challenge are achieved by empowering people through giving them small tasks to do within their limitations of time and physical abilities, rather than pitying them. Although some of the past interventions using PFA view individuals in dire contexts possibly as victims who require empathy and support, the SIX Cs intervention tries to shift perceptions of those people as active coping individuals [Figure 1].

The case of Preševo

The camp of Preševo, in Southern Serbia, was established as a registration and transfer camp during late 2015, to monitor and address the needs resulting from the mass movement of the migrants. This camp was constructed and established by the Serbian government, with the support of the UNHCR. Migrants stayed at the camp for several hours up to a full day.

NATAN, an Israeli non-governmental organisation (NGO), and HUMEDICA, a German NGO, established a clinic in the camp, staffed by Israeli and German personnel. The Israeli team mainly consisted of medical staff and social workers, at least one of whom spoke Arabic. For the Farsi language, the team was supported by the translators and mediators from the Department of Languages, University of Belgrade.

The SIX Cs model was implemented in the challenging context of Preševo during three phases. Generally, the elements of Control and Challenge were implemented both at the individual and group levels.

The core effort was to increase the migrants' sense of independence and self-efficacy through capacity building in which the migrants could implement the model by themselves. This was done during the three phases they went through upon arriving at the camp.

In the first phase, the migrants waited in lines for security check and clearance. This phase could last up to five hours. In the second phase, migrants waited for registration or for receiving further information, clothes or medical support. This phase could last between four hours to more than a day. In the third phase, the migrants waited for a bus to Croatia, their next destination. Each

Levy et al.: The SIX Cs model - PFA among migrants on the move

ASR	SIX Cs	Outcome	
Symptom	Intervention		
Loneliness	Commitment for the	Person's	
	person's safety	collaboration &	
		cooperation	
		with the helper	
Helplessness	Challenge & Control:	Increased sense of	1
	Ask to choose from	control	
	simple available	Increased sense of	
	action options	effective coping	
Non controlled	<u>C</u> ognitive	Motivation &	1
emotional	C ommunication	ability to act	
reactions		effectively	
		Ability to take and	
		prioritise decisions and	
		regulate emotions	
Confusion	Continuity:	Reduction of	
	Chronological	flashback/intrusive	
	synchronisation of the	thoughts, understanding	
	event: emphasise the	that the immediate	
	event ending	threat is over	

Figure 1: Processes of the SIX Cs model (Farchi et al., 2018)

phase addressed individuals and groups of migrants whichever was applicable.

During the first phase, the element of cognitive communication was implemented through information and orientation, which was given to the migrants by a staff member. Individuals from the lines, who appeared to be more functional and communicative, were asked to organise the people in groups of 30. This gave these individuals a challenge and reduced the chaos in the line, which seemed to increase the group's level of control.

The component of control was implemented by stimulating the migrants' ability to take independent decisions through inquiring what they would like to do during their time within the camp. These decisions could be either heading to the clinic, collecting clothes or receiving food. Distributing small dictionaries, with basic terms in Arabic or other dialects translated to the local language, reflected another aspect of the Cognitive element of the programme.

Social workers from the staff then tried to identify people in need by detecting and observing symptoms of anxiety such as tremor. The social workers focused on cognitive communication and continuity by providing facts about the location, time and near future events. This information was also meant to reduce anxiety, uncertainty and mistrust. Commitment was manifested by showing the staff's willingness to support and serve people's needs as much as possible.

The second phase included an explicit statement by the staff members, which reflected their commitment to stay with the migrants until the next phase of getting on the buses to Croatia. This statement was given to several groups and individuals.

In this phase, the work with the migrants included conversations about the need to keep the family structure in tact and how to explain things to their children to reduce their anxiety. Other ideas were also discussed with the migrants on the ways of maintaining the functioning of the family throughout the rest of the migration. These discussions reflected the cognitive and control elements of the SIX Cs model. This also served to empower parents.

The third phase included further information about what would happen after getting on the buses and about the rest of the travel to the next stop. The social workers avoided promising or sharing information about the next registration camp due to lack of clear information about this camp and to avoid disinformation. These aspects reflected the continuity element from the SIX Cs model.

The staff members recommended to the adult migrants various practices concerning how they could go through their journeys with a better understanding of their next phase. Furthermore, the adults were advised about the need to encourage the children to be more involved and participatory whilst travelling. Children were encouraged to choose games, for example, and roles during the travel and to take an active part in tasks in the course of the journey. These activations aimed to increase the involvement of the children in the process rather than being passive. The activation of the children related to the cognitive and the challenge elements in the SIX Cs model. Parents and carers were also advised to inform the children about the next stop, subject to the information they previously received from the authorised agencies. In this way, parents used the element of continuity to their children.

DISCUSSION, LIMITATIONS AND FUTURE DIRECTIONS

The SIX Cs model, described above, is based on behavioural and cognitive theories and models, as well as on neurobiological findings, all addressing stress and resilience (see, for example, Antonovsky, 1993; Ozer & Bandura, 1990; Bosmans et al., 2016; Taylor et al., 2008). Alongside this vast scientific and evidence-based background, this intervention model has characteristics that are relevant to migrants on the move, especially migrants who have been exposed to war-related atrocities. Owing to the limited ability of aid provision to restore the loss of material resources of thousands of migrants, the SIX Cs method tries to restore lost psychological resources, by providing people senses of control and challenge as described above. This, in line with the COR (Hobfoll, 1989; Hobfoll, Tracy, & Galea, 2006), suggests the importance of retaining and preserving resources. In the COR model, loss of personal resources, such as self-efficacy and social resources, such as community breakdown, predicts risk of poor mental health. Other models of PFA exist with the same intention of addressing urgent needs, including stress-related issues among forced migrants. However, other PFA interventions tend to see individuals in dire contexts possibly as victims and thus emphasise provision of empathy and support. In contrast, the SIX Cs intervention tries to shift perceptions of those people as active coping individuals.

Because of the simplicity of the SIX Cs model, the core elements can be used by beneficiaries without therapists. Beneficiaries can apply it in a variety of contexts of emergencies, to promote resiliency and self-efficacy. It can also be used as a tool for increasing both personal and community functional independency.

The main difference between SIX Cs and other models is that the SIX Cs intervention focuses more on activation rather than addressing the symptoms. In comparison to the WHO protocol of PFA (2013), for example, it is evident that there are two main shared elements. These elements are the help given to beneficiaries to cope with problems and the information given to them. A comparison of the PM+ elements with the SIX Cs shows that the main similarity is the principle of encouraging and promoting activation effective in reducing depression (Cuijpers, van Straten, & Warmerdam, 2007).

The fact that there are shared common elements between the models described here emphasises and reflects the importance of the activation. The differences between these tools and models of intervention arise in relation to the relevant contexts in which they are used. The choice of which intervention to use relates to the current need and goal.

Expanding the toolkit for humanitarian personnel in dealing with stress-related issues is crucial in the varying contexts beneficiaries face. The relative ease of administering the SIX Cs method, with a rapid

training of local staff and not requiring professional mental health personnel, all make this model a practical one in such settings.

However, the current intervention was not part of a formal research project and did not include assessment of its effectiveness; thus, the intervention staff did not collect data on the exact number of individuals who were supported. This was impossible due to ethical and logistical constraints. Furthermore, the constantly changing and dynamic circumstances which meant that the intervention was being adjusted to the situation all the time, limited its standardisation. This made it even more difficult to evaluate it using standard tools. Another constraint was a shortage of trained staff who were busy responding to the constant needs of migrants in the camp. This made it impossible for trained staff to travel to the next camp, located ten hours away, in order to train others staff in the next camp.

Finally, PFA alone, including the SIX Cs model, is not the main tool to restore the mental health of people caught up in humanitarian disasters. The SIX Cs does not replace long-term interventions among forced migrant populations. In this article, we did not measure effectiveness or compare the SIX Cs to other versions of PFA. However, because it reduces the ASR (Farchi et al., 2018), which predicts poor mental health (Koren, Arnon, & Klein, 1999), this method may reduce the need for additional psychological interventions. Future studies should look into standardisation and assessment of the effectiveness of the method in such settings and others, keeping in mind ethical and logistical restrictions. This could be performed by simple visual analogue stress scales (Lesage, Berjot, & Deschamps, 2012) and using a matchedcontrol design.

Financial support and sponsorship

Nil.

Conflicts of interest

There are no conflicts of interest.

REFERENCES

Acarturk, C., Cetinkaya, M., Senay, I., Gulen, B., Aker, T., & Hinton, D. (2017). Prevalence and predictors of posttraumatic stress and depression symptoms among Syrian refugees in a refugee camp. *The Journal of Nervous and Mental Disease*, 206(1), 40-45.

Allen, B., Brymer, M. J., Steinberg, A. M., Vernberg, E. M., Jacobs, A., Speier, A. H., & Pynoos, R. S. (2010). Perceptions of psychological first aid among providers responding to Hurricanes Gustav and Ike. *Journal of Traumatic Stress*, 2(4), 509-513.

Alpak, G., Unal, A., Bulbul, F., Sagaltici, E., Bez, Y., Altindag A., & Savas, H. A. (2015). Post-traumatic stress disorder among Syrian refugees in Turkey: A cross-sectional study. *Inter*national Journal of Psychiatry in Clinical Practice, 19(1), 45-50.

Antonovsky, A. (1993). The structure and properties of the sense of coherence scale. *Social science & medicine*, 36(6), 725-733.

Bandura, A. (1993). Perceived self-efficacy in cognitive development and functioning. *Educational Psychologist*, 28 (2), 117-148.

- Bar-Shai, M, & Klein, E. (2015). Vulnerability to PTSD: Psychosocial and demographic risk and resilience factors. In Future Directions in Post-Traumatic Stress Disorder. (pp. 3-30); Boston, MA: Springer.
- Bergiannaki, J. D., Psarros, C., Varsou, E., Paparrigopoulos, T., & Soldatos, C. R. (2003). Protracted acute stress reaction following an earthquake. Acta Psychiatrica Scandinavica, 107(1), 18-24.
- Bosmans, M. W., van der Knaap, L. M., & van der Velden, P. G. (2016). The predictive value of trauma-related coping self-efficacy for posttraumatic stress symptoms: Differences between treatment-seeking and non-treatment-seeking victims. *Psychological Trauma: Theory, Research, Practice, and Policy*, 8(2), 241.
- Bosworth, M. (2016). 'Mental health in immigration detention: A literature review'. Review into the Welfare in Detention of Vulnerable Persons, Cm 9186. London: HSMO. Criminal Justice, Borders and Citizenship Research Paper No. 2732892.
- Bremner, J. D. (1999). Does stress damage the brain? *Biological Psychiatry*, 45(7), 797-805.
- Ceri, V., Özlü-Erkilic, Z., Özer, Ü., Yalcin, M., Popow, C., & Akkaya-Kalayci, T. (2016). Psychiatric symptoms and disorders among Yazidi children and adolescents immediately after forced migration following ISIS attacks. *Neuropsychiatrie*, 3(3), 145.
- Cuijpers, P., van Straten, A., & Warmerdam, L. (2007). Behavioral activation treatments of depression: A meta-analysis. *Clinical Psychology Review*, 27(3), 318-326.
- Dawson, K. S., Bryant, R. A., Harper, M., KuoweiTay, A., Rahman, A., Schafer, A., & van Ommeren, M. (2015). Problem Management Plus (PM+): A WHO transdiagnostic psychological intervention for common mental health problems. World Psychiatry, 14(3), 354-357.
- Dieltjens, T., Moonens, I., Van Praet, K., De Buck, E., & Vandekerck-hove, P. (2014). A systematic literature search on psychological first aid: Lack of evidence to develop guidelines. *PLoS One*, 9(12), e114714.
- Farchi, M., & Gidron, Y. (2010). The effects of "psychological inoculation" versus ventilation on the mental resilience of Israeli citizens under continuous war stress. *The Journal of Nervous and Mental Disease*, 198(5), 382-384.
- Farchi, M., Cohen, A., & Mosek, A. (2014). Developing specific self-efficacy and resilience as first responders among students of social work and stress and trauma studies. *Journal of Teaching in Social Work*, 34(2), 129-146.
- Farchi, M., Levy, T. B., Gershon, B. B., Hirsch-Gornemann, M. B., Whiteson, A., & Gidron, Y. (2018). The SIX Cs model for Immediate Cognitive Psychological First Aid: From helplessness to active efficient coping. *International Journal of Emergency Mental Health* and Human Resilience, 20(2), 1-12.
- Fazel, M., & Silove, D. (2006). Detention of refugees: Australia has given up mandatory detention because it damages detainees' mental health. *British Medical Journal*, 332(7536), 251.
- Feyera, F., Mihretie, G., Bedaso, A., Gedle, D., & Kumera, G. (2015). Prevalence of depression and associated factors among Somali refugee at Melkadida camp, southeast Ethiopia: A cross-sectional study. BMC Psychiatry, 15(1), 171.
- Foa, E. B., Molnar, C., & Cashman, L. (1995). Change in rape narratives during exposure therapy for posttraumatic stress disorder. *Journal of Traumatic Stress*, 8(4), 675-690.
- Gidron, Y., & Farchi, M. (2016). Effects of a neuroscientifically-based intervention on acute stress and PTSD: Report of four studies. *European Journal of Public Health*, 26(suppl 1), ckw173.046.
- Gidron, Y., Davidson, K., & Bata, I. (1999). The short-term effects of a hostility-reduction intervention on male coronary heart disease patients. *Health Psychology*, 18(4), 416.
- Hantamn, S., & Farchi, M. (2015). Chapter 33: From helplessness to active coping in Israel: Psychological first aid. In E. M. Schott, & E. L. Weiss (Eds.), *Transformative social work practice*. Los Angeles: Sage Publications.
- Hecker, T., Ainamani, H. E., Hermenau, K., Haefele, E., & Elbert, T. (2017). Exploring the potential distinction between continuous traumatic stress and posttraumatic stress in an east African refugee sample. Clinical Psychological Science, 5(6), 964-973.
- Hinton, D. E., Pich, V., Hofmann, S. G., & Otto, M. W. (2013).Acceptance and mindfulness techniques as applied to refugee and ethnic minority populations with PTSD: Examples from

- "culturally adapted CBT". Cognitive and Behavioral Practice, 20(1),33-46.
- Hobfoll, S. E. (1989). Conservation of resources: A new attempt at conceptualizing stress. American Psychologist, 44(3), 513.
- Hobfoll, S. E., Tracy, M., & Galea, S. (2006). The impact of resource loss and traumatic growth on probable PTSD and depression following terrorist attacks. *Journal of Traumatic Stress*, 19(6), 867-878.
- Kaltenbach, E., Härdtner, E., Hermenau, K., Schauer, M., & Elbert, T. (2017). Efficient identification of mental health problems in refugees in Germany: The Refugee Health Screener. *European Journal of Psychotraumatology*, 8(suppl 2), 1389205.
- Koren, D., Arnon, I., & Klein, E. (1999). Acute stress response and posttraumatic stress disorder in traffic accident victims: A one-year prospective, follow-up study. American Journal of Psychiatry, 156(3), 367-373.
- Lesage, F. X., Berjot, S., & Deschamps, F. (2012). Clinical stress assessment using a visual analogue scale. *Occupational Medicine*, 6 (8), 600-605.
- Li, S. S., Liddell, B. J., & Nickerson, A. (2016). The relationship between post-migration stress and psychological disorders in refugees and asylum seekers. *Current Psychiatry Reports*, 18(9), 82.
- Littleton, H., Kumpula, M., & Orcutt, H. (2011). Posttraumatic symptoms following a campus shooting: The role of psychosocial resource loss. *Violence and Victims*, 26(4), 461.
- Lutgendorf, S. K., & Costanzo, E. S. (2003). Psychoneuroimmunology and health psychology: An integrative model. *Brain, Behavior, and Immunity*, 17(4), 225-232.
- Mayou, R. A., Ehlers, A., & Hobbs, M. (2000). Psychological debriefing for road traffic accident victims: Three-year follow-up of a randomized controlled trial. *The British Journal of Psychiatry*, 176 (6), 589-593.
- Murray, L. K., Dorsey, S., Haroz, E., Lee, C., Alsiary, M. M. Haydary, A., & Bolton, P. (2014). A common elements treatment approach for adult mental health problems in low- and middleincome countries. *Cognitive and Behavioral Practice*, 21(2), 111-123
- Nasıroğlu, S., & Çeri, V. (2016). Posttraumatic stress and depression in Yazidi refugees. Neuropsychiatric Disease and Treatment, 12, 2941.
- Nickerson, A., Bryant, R. A., Silove, D., & Steel, Z. (2011). A critical review of psychological treatments of posttraumatic stress disorder in refugees. Clinical Psychology Review, 31(3), 399-417.
- Ozer, E. M., & Bandura, A. (1990). Mechanisms governing empowerment effects: A self-efficacy analysis. *Journal of Personality and Social Psychology*, 58(3), 472.
- Riley, A., Varner, A., Ventevogel, P., Taimur Hasan, M. M., & Welton-Mitchell, C. (2017). Daily stressors, trauma exposure, and mental health among stateless Rohingya refugees in Bangladesh. *Transcultural Psychiatry*, 54(3), 304-331.
- Romppel, M., Herrmann-Lingen, C., Wachter, R., Edelmann, F., Düngen, H. D., Pieske, B., & Grande, G. (2013). A short form of the General Self-Efficacy Scale (GSE-6): Development, psychometric properties and validity in an intercultural non-clinical sample and a sample of patients at risk for heart failure. *Psycho-Social-Medicine*, 10, Doc01.
- Rose, S. C., Bisson, J., Churchill, R., & Wessely, S. (2002). Psychological debriefing for preventing post traumatic stress disorder (PTSD). Cochrane Database of Systematic Reviews, CD000560.
- Ruzek, J. I., Brymer, M. J., Jacobs, A. K., Layne, C. M., Vernberg, E. M., & Watson, P. J. (2007). Psychological first aid. *Journal of Mental Health Counseling*, 2(1), 17-49.
- Shin, L. M., Shin, P. S., Heckers, S., Krangel, T. S., Macklin, M. L., Orr, S. P., & Levering, J. (2004). Hippocampal function in posttraumatic stress disorder. *Hippocampus*, 14(3), 292-300.
- Silove, D., Ventevogel, P., & Rees, S. (2017). The contemporary refugee crisis: An overview of mental health challenges. World Psychiatry, 1(2), 130-139.
- Steel, Z., Chey, T., Silove, D., Marnane, C., Bryant, R. A., & van Ommeren, M. (2009). Association of torture and other potentially traumatic events with mental health outcomes among populations exposed to mass conflict and displacement: A systematic review and meta-analysis. *Journal of the American Medical Association*, 302(5), 537-549.

- Taylor, S. E., Burklund, L. J., Eisenberger, N. I., Lehman, B. J., Hilmert, C. J., & Lieberman, M. D. (2008). Neural bases of moderation of cortisol stress responses by psychosocial resources. *Journal of Per*sonality and Social Psychology, 95(1), 197.
- UNHCR. (2017). Ireland: United Nation High Commission for Refugees 2001–2012 [Internet]. Available at https://data2.unhcr.org/ar/documents/download/57696. [Cited 26 Jan 2019].
- van Emmerik, A. A., Kamphuis, J. H., Hulsbosch, A. M., & Emmelkamp, P. M. (2002). Single session debriefing after psychological trauma: A meta-analysis. *The Lancet*, *360*(9335), 766-771.
- Vernberg, E. M., Steinberg, A. M., Jacobs, A. K., Brymer, M. J., Watson, P. J., Osofsky, J. D., & Ruzek, J.I. (2008). Innovations in disaster mental health: Psychological first aid. *Professional Psychology: Research and Practice*, 39(4), 381.
- Wolff, A. C., & Ratner, P. A. (1999). Stress, social support, and sense of coherence. Western Journal of Nursing Research, 21(2), 182-197.
- World Health Organization, War Trauma Foundation, & World Vision International. (2013). Psychological first aid: Facilitator's manual for orienting field workers. World Health Organization. Available at http://www.who.int/iris/handle/10665/102380.