

Building low intensity psychosocial support for Syrian refugee families in Istanbul

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Abstract

Background: The study is located in Istanbul, Turkey, where more than 750,000 Syrian refugees reside, largely in urban settings. It develops and pilot tests a novel model for helping urban refugee families in settings with limited to no access to evidence-based mental health services for refugees, by delivering a transdiagnostic family intervention for common mental disorders in health and non-health sector settings using a task-sharing approach. This case study addresses the following question: How can we address the common mental disorders of both children and parents, and support protective family resilience processes, through a low intensity trans-diagnostic family support intervention?

Discussion: The rapidly growing scale of humanitarian crises requires new response capabilities geared towards addressing populations with prolonged high vulnerability to mental health consequences and limited to no access to mental health, health, and social resources.

We faced multiple challenges in conducting this research including: 1) identifying local academic partners with research capacity, including in implementation science; 2) lack of culture of partnership between academics and humanitarian organizations; 3) getting local clinicians to embrace on a task-sharing model; 4) cultural competency of local and U.S. partners for refugee population; 5) getting local academics to focus on humanitarian emergency; 6) planning for a family intervention that would work with families with rigid gender role perspectives; 7) multiple social and economic problems that could not be solved, such as children working; 8) engagement challenges due to high demands on families. Through the research process, the research team learned lessons concerning: 1) building a coalition of academic and humanitarian organization partners; 2) investing in research capacity building of local partners; 3) working in a community-collaborative and multi-disciplinary approach to best understand and address socio-cultural, contextual, practical and scientific challenges needed to develop and implement the new family support model.

Conclusion: Conducting research in humanitarian emergency settings calls for significant attention to building a coalition of academic and humanitarian organization partners, investing in research capacity building of local partners, and working in a community-collaborative and multi-disciplinary approach.

Background

The project is located in several neighborhoods in Istanbul, Turkey, where approximately 750,000 Syrian refugees are resettled, mostly as urban refugees. It develops and pilot tests a novel model for helping urban refugee families in setting with limited to no access to evidence-based mental health services to refugees, by delivering a transdiagnostic family intervention for common mental disorders (CMD) (e.g. depression, PTSD, anxiety) in health sector and non-health sector settings using a task-sharing approach.

Humanitarian Context

The war in Syria has displaced over 5.6 million persons to neighboring low and middle-income countries (LMIC). 3.6 million Syrian refugees live in Turkey, now the world's largest refugee hosting country, and only about 2.85% live in refugee camps [1]. With limited access to housing, work, information, food, education, and health and mental health care, they are especially vulnerable [2]. Differences in language and culture make integration a challenge [3]. Syrians do low wage work with no benefits, and are accused by some locals of stealing their jobs and causing crime [4–5]. Forty percent of school-aged children are not enrolled in Turkish schools [6] with child labor being a driving factor [7].

Syrian refugees are at high risk for CMD due to war trauma compounded by displacement stressors. They experienced high rates of conflict-related violence and family loss and separation, followed by the daily stressors of displacement, such as lack of resources, discrimination, and loss of social networks, limited livelihood options, and uncertainty about their future [8–9]. Several prior studies assessed the mental health of adult Syrian refugees in Turkey and found rates of common mental disorders in adults between 23% and 42% [10–12]. Syrian refugee children have high exposure to severe traumatic events and nearly half have PTSD symptoms [13]. Most Syrian refugees show little knowledge and awareness of mental illness, self-care strategies, or clinical treatment, and express high stigma towards mental health problems [14].

The scientific and professional mental health literature on Syrian refugees has largely focused on PTSD through an individual lens. Despite the family orientation of Syrian culture, there was little evidence that family interventions were being developed or deployed for Syrians. We initially conducted longitudinal qualitative research with 30 Syrian refugee families so as to better characterize the family stressors and coping mechanisms [15]. We concluded that many families may be able to benefit from a family intervention approach and this called for developing family focused interventions conducted by community-based lay providers.

Research Study

This project uses a low intensity intervention approach to develop and test for feasibility of Family Support (FS), a novel trans-diagnostic intervention for refugee families with common mental disorders. FS is delivered in a multiple family group format by community workers at NGOs including family and community health workers. Our family model is informed by the theoretical frameworks underlying its two major intervention components. First, the conceptual framework for **Family Support (FS)** is based upon **cognitive-behavioral theory** as applied in the Problem Management Plus (PM+) intervention (defined later) via evidence-based techniques focused on stress management and behavioral activation [16]. Second, the conceptual framework for **Family Support (FS)** is also based on **family resilience theory**, which explains family protective processes that can ameliorate the negative consequences of hardships and challenges and enable healing and growth in families [17–18].

This research was designed to ask and answer several research questions, which are needed to advance the field (see Table 1). To answer these questions, we organized the research around three specific aims. Aim 1 form a Family Support Design Team (FSDT) to develop the family support (FS) intervention for

implementation in community sites using a four-session multiple family group format. Aim 2 pilots FS with families in community and clinical sites, and then through observations and qualitative interviews, assesses FS's feasibility, fidelity, the impact of context and local capacity, the experiences of intervention delivery, and practitioner and organizational perspectives on scale up. Aim 3 conducts pre, immediate post, and 3-month post assessments of the refugee families who received FS in all sites, to demonstrate the kind of pre-post changes that have been reported for comparable interventions and to determine key parameters of interest with sufficient accuracy and precision.

Table 1

Domain	Research Questions
Intervention	How can we address the CMDs of both children and parents of displaced families and support protective family processes through a low intensity trans-diagnostic family support (FS) intervention?
Uptake	How can the facilitators and community organizations best-overcome obstacles to promote engagement and retention in the FS groups?
Intervention Acceptability	Were the family members satisfied with the FS intervention content, delivery, and length? How did it fit with the sociocultural, environmental, and organizational contexts?
Intervention Feasibility	Was FS feasible as indicated by recruitment, attendance, retention, and fidelity, safety for participants and providers, and completion of outcome assessments?
Implementation	What do the families and facilitators think about offering FS to more refugee families? What are the opportunities or obstacles and how can they be best addressed to facilitate scale up?
CMD Outcomes	Were there less depression, anxiety, and traumatic stress symptoms as a function of FS at 3-month assessments? Were these symptoms less after 3-months-post compared with immediate-post assessment?
Family Outcomes	Was there improvement in family members' knowledge and attitudes regarding responses to adversity, family support, and family problem solving, and accessing external resources as a function of FS at 3-month post assessments?
Constructs & Measures	What constructs and measures are the best fits for evaluating a family support intervention in an LMIC?

The academic medical centers which we visited in Istanbul, were not experienced either in conducting NIH sponsored research, research with Syrian refugees, or working with Syrian refugees. We initially chose one academic medical center partner, but due to obstacles we encountered it was necessary to find another partner who was more experienced in working with Syrian refugees and more open to conducting research concerning refugees. We looked for professionals with both scientific and practical experience in working with refugees and were able to identify another academic medical center partner. This partnership also led us to engage a new partner, the Turkish Red Crescent, in addition to our academic

medical partner and NGO partners. This existing combination of mentioned institutions is currently enabling us to successfully implement the project.

This research should result in an adapted and pilot tested low intensity family support model and preliminary pilot data that can inform the development of a follow-up larger scale study in low resource settings. The findings will also build knowledge on implementation science for refugees in low resource setting and LMIC's. NOTE: At the time of writing, the FS intervention has been developed, the measures chosen, the facilitators trained, and we conducted run-through and practice sessions with 42 families. We are currently conducting the pilot testing and follow-up assessments with 72 families.

Discussion

Scientific Importance of the Research

There is an urgent need for research to advance evidence-based brief psychosocial interventions that can be scaled up during humanitarian crises. The World Health Organization's Department of Mental Health and Substance Abuse, led by Dr. *Mark van Ommeren*, has been developing low intensity cognitive behavior therapy (LICBT) to help address refugees' mental health needs. They developed Problem Management Plus (PM+), which is a brief, basic, one-on-one, paraprofessional-delivered version of LICBT for adults in communities affected by adversity [19–20].

PM + incorporates stress management and individual problem solving [19]. In conflict-affected Pakistan, a pilot comparing PM + to enhanced treatment as usual had high uptake, with 73% completing all sessions, and showed improvement in traumatic stress and functioning [19]. When WHO conducted a larger scale randomized controlled trial (RCT) of PM + in Pakistan, it demonstrated clinically significant reductions in anxiety and depressive symptoms at 3 months among adults impaired by psychological distress [20].

Psychosocial interventions are needed for refugee families and humanitarian responses, both because parents and children are experiencing common mental disorders (CMD), and because supporting family protective processes and learning self-care strategies can ameliorate the impact of CMD symptoms and stress caused by trauma and displacement. Syrian refugees, like many others, are strongly shaped by the family context. In a receiving country with limited resources for refugees, positive psychosocial outcomes for children and adults depend to a great extent on their families, yet refugee families find few empirically based services geared toward them [21–22]. Refugee families often demonstrate resilience and strengths, but in highly adverse circumstances these processes can be strained or overwhelmed [23], FS interventions can bolster family protective processes.

We previously developed and evaluated a multiple family support and education group model for Bosnian refugees called Coffee and Families Education and Support (CAFES), which in a US National Institute of Mental Health (NIMH)-funded RCT was shown to have high uptake and to improve mental health help seeking, with depression and family comfort talking about trauma mediating the intervention

effect [24]. Based on our community engagement and current study of Syrians, we concluded that the multiple family approaches also fits well with Syrian culture. Of note, this type of family intervention is designed to include adolescents age 12 and above, with time allotted in each session for adolescents and adults to meet in separate breakout groups [25].

The science of implementation and dissemination (SID) can help address the burden of mental health problems in refugees in LMICs by moving evidence-based interventions from more controlled to naturalistic settings. This is a pressing challenge for studying mental health interventions during humanitarian crises [26–27]. In such settings, SID research is needed to collect information on potential barriers and facilitators to real world implementation, as well as on specific implementation strategies [28]. Regarding PM+, formative research is recommended to help adapt the intervention to the local sociocultural context [29] and to develop a novel family intervention.

Our plan is to share the research findings through publication in peer-reviewed journals so as to contribute to developing the science in this area. But given the urgency and demands of the humanitarian situation, we also intend to share the research findings through several two-page practically-focused research briefs that accessible and engaging for NGO's, governments, trans-governmental organizations, and practitioners. Overall, our aim is to increase the awareness of refugee family issues, and to promote interventions that are at the very least family friendly, but also family focused which might be a more feasible approach in specific socio-cultural contexts. We believe that there is a significant shortage in this area, and we would like NGO's and governments to make this more of a focus.

Family interventions for refugees and migrants are also very relevant in low and middle-income countries that are not facing a humanitarian crisis, and in high-income countries, especially in low resource settings. Thus, we believe that developing the science in the humanitarian emergency will have significance beyond the crisis settings. For example, in the U.S. there are 10.5 million illegal migrants [30] a large number of migrant families from Mexico and from Latin America who are facing high stress due to the threat of deportation on top of the ordinary exposure to adversity. A family support intervention delivered in community-based organizations, including religious facilities or churches, could be a very good fit to address their capacities to address various stressors and risk for CMD's. The interventions are held on weekly bases and on weekends when most of the participants especially fathers don't work. The data collection started in December 2019 and will end by October 2020.

Research Methods

Aim 1 activities included convening the family support design team (FSDT) and drafting the FS manual. Aim 2 involve partnering with the 6 community and clinical sites, training the workers, having each worker administer the intervention to 72 families, and then conducting observations and qualitative interviews to assess implementation issues. Aim 3 involved conducting pre, immediate post, and 3-month post assessments of the 72 families who received the intervention. Regarding Aim 3, our primary hypothesis is that FS primary participants will report fewer symptoms of depression, anxiety, and traumatic stress from baseline to immediate post and 3-month post. Our secondary hypothesis is that FS family members will

report improved family members' knowledge and attitudes regarding responses to adversity, family support, family problem solving, and accessing external resources, and that these will explain improvements in CMD symptoms. In addition, we will also study engagement and retention of families in FS, both as outcomes and as possible determinants of the hypothesized changes. We will conduct analyses: 1) to demonstrate the feasibility of the implementation and evaluation methods; 2) to explore patterns of attendance and retention to FS groups, to inform the researchers in making modifications; 3) to demonstrate the kind of pre-post changes that have been reported for comparable interventions, for both primary participants and family members; 4) to determine key parameters of interest with sufficient accuracy and precision.

Challenges to Research

The researchers faced multiple program development challenges in conducting this research in the humanitarian crisis setting, even beyond those challenges generally encountered in LMICs or low-resource settings.

Non-Existent or Weak Partnerships

We were able to identify both academic centers and humanitarian organizations, but it was difficult to find those academic centers that had partnerships with humanitarian organizations, or vice versa. Syrian refugees were generally not a focus of interest for service or research by academic medical centers in Istanbul. It was difficult to identify local academic partners who had research capacity in mental health, including implementation science, which would be necessary for investigating family support interventions. However, we found that the Turkish Red Crescent (TRC) was interested in building mental health research and implementation science capacity in the Turkish Red Crescent, so we focused the supplement award on the TRC.

Lack of Focus on Task-Sharing

It was also challenging to find a psychiatrist who would embrace the task-sharing model, which aims to deliver interventions that do not depend upon psychiatrists as the service providers. Over 6 months, the U.S. and Kosovar investigators were able to identify a child and adolescent psychiatrist, Dr. Vahdet Görmez, who is also a certified trainer in cognitive behavioral therapy (CBT), conducted research with Syrian adolescent refugees in school setting in Istanbul [31–32] who became our primary partner. The main argument in deciding to collaborate with Dr. Görmez was his practical experience in working with Syrian refugees in school setting and his interest in refugee mental health. He was identified by conducting literature review on refugee mental health in Turkey, following which he was contacted and included in the project.

Insufficient Language and Cultural Competency

Another important challenge was that both the U.S. investigators and the local Turkish investigators faced limitations of language and cultural competency for the refugee population. Therefore, we hired two Syrian persons as the project manager and assistant who were able to help us to overcome these hurdles due to language and cultural competency, familiarity with the community and the local NGOs.

The Syrian project personnel were identified with help of Dr. Görmez who had experience in working with the staff in previous psychosocial projects. During the implementation process of the project we met many other capable persons in the Syrian community within collaborating organizations which further enabled us to overcome the language and cultural gaps.

Fit with Families

One of the major challenges that we faced was planning for a family intervention that would work with families who had cultural values and practices around gender relations that were very strict in terms of women and men interacting and sharing the same space. Another challenge was that these families faced many burdens and priorities and it was difficult to engage them due to high demands on their time. Another major challenge is that the families were still exposed to major social and economic problems that could not be solved, such as child labor. Another challenge was involving fathers in all sessions as they were either working or having other obligations. In addition, most of the families involved in the run through of FS intervention had a child working.

Refugee Policies

Just prior to the time of implementation in October 2019, the Turkish government began to more strictly enforce policies regarding the residential permits of Syrian refugees. When refugees came to Turkey, they were allowed to live in a particular region where they were registered, but could not move to another, such as Istanbul to get work. Stricter enforcement of policies includes deportation to the city where they are registered or deportation to Syria if they lack documentation, causing fear among refugees.

We tried to develop a shared understanding with the partner organizations and the refugees they served through regular consultations to come up with problem-solving strategies or solutions in the FSDT meetings and in consultation with the partner organizations. This demanded a great deal of flexibility and patience from the research team members. The research process was slowed down at several junctures in order to deal with these sorts of issues. For example, regarding settling on a format for convening both male and female family members which would be acceptable to Syrians with a range of gender-related values and practices.

Research Strategies

Addressing the unique challenges faced by the research team, required additional strategies.

Coalition Building

First, we built a coalition of academic and humanitarian organization partners and worked on strengthening relations between them. This coalition included an academic medical partner, six small NGO's working with Syrian refugees and the Turkish Red Crescent, one of the major actors in Turkey in the provision of various services to refugees.

Research Capacity Building of Local Partners

Two, we invested in building the research capacity building of the local partners, both academic and NGOs. Through the research project, we built the research capacity of several faculty members at

Medeniyet University in Istanbul. In addition, we developed and were awarded a supplement with TRC to focus on improving their research capacity.

Engaged Multiple Perspectives

Three, we utilized a family support design team to draw upon multiple perspectives and adapt existing interventions and design new components. The FSDT convened twice for three-day face-to-face meetings in Istanbul. The FSDT was co-led by Weine, Arenliu, and Gormez, and included other LMIC researchers as well as 8 additional community advocates, nurses, and physicians.

Flexible Intervention Design

We designed a flexible structure for the intervention to accommodate gender considerations including use of the Internet and mobile technology. For example, to accommodate families who preferred to sit all together rather than to mix with other families we provided sitting arrangements in which families were grouped as in a restaurant. In addition, each group had one male and female facilitator where female facilitators reinforce women participation as we were concerned that women would not speak out in mixed groups or in presence of husbands. Furthermore, we produced easily accessible videos such as stress reduction exercises to be used by members who might have not attended the session and as reminder of exercises to be done at home.

The overall aim was to write a model that was brief and simple enough to be delivered by community workers and nurses. The FSDT first met face-to-face for three days in month 2 in Istanbul, followed by regular Skype calls and ongoing e-mails, and a follow-up three-day meeting in month 6. Draft materials were prepared and distributed in advance, in English and Arabic and decisions were made by consensus after deliberation.

Expand Communication and Collaboration Between Researchers and End Users

Regarding the TRC, to address the needs we jointly identified, we collaboratively developed a plan to foster evidence-based policy and program development in mental health for refugees by expanding communication and collaboration between the researchers and end users, including the TRC and other NGOs, including practitioners, managers, and policy makers. The specific aims are to: 1) Convene a refugee mental health implementation research group composed of researchers and end users in the TRC that will collaboratively: a) conduct trainings on the state-of-the-science in implementation science research (e.g. strategies for implementation, dissemination, and evaluation of effective mental health interventions); b) disseminate research findings on proven mental health assessments and interventions; and c) build a model for best impacting the TRC organizational structure, climate, culture, and processes regarding the implementation, dissemination, and evaluation of effective and evidence based mental health interventions.

Conclusions

Through the research process, the team learned several key lessons regarding conducting research in a humanitarian crisis setting. One, it is helpful to build a coalition of academic and humanitarian

organization partners who can ensure that the research is focused on issues that matter for service providers and recipients. Two, it is helpful to invest in research capacity building of the local partners to strengthen research implementation and facilitate dissemination and scaling up. Three, utilizing a community-collaborative and multi-disciplinary approach can help to best understand and address multiple key socio-cultural, contextual, and scientific challenges needed to develop, adapt and implement the family support model. Although the pressing needs of Syrian refugees called for urgent action, it was beneficial to invest in and to allow sufficient time for these three activities.

List Of Abbreviations

(CBT) Cognitive Behavioral Therapy

(CMD) Common Mental Health Disorders

(FS) Family Support

(FSDT) Family Support Design Team

(LMICs) Low- and Middle-Income Countries

(PM+) Problem Management Plus

(RCT) Randomized Clinical Trials

(TRC) Turkish Red Crescent

(U.S) United States

(WHO) World Health Organization

Declarations

Ethics approval and consent to participate

We received Institutional Review Board approval from the University of Illinois at Chicago, IRB00000116, and Medeniyet University, IRB00011256.

Consent for publication

All parents and children consented before participating in this research.

Availability of data and materials

Not applicable

Competing interests

There are no competing interests to report.

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Authors' contributions

The author order is order based on principle of relative contribution

- SMW – has made the most significant intellectual contribution to the work in terms conceptualizing the paper and revising it.
- AA – has significantly contributed to the refining the concept and arguments and bringing relevant literature while the paper was developed and written.
- VG – has reviewed and contributed especially in the conclusion part of the paper in commenting the contextual relevance of the conclusions of the article.
- SL – Has reviewed and intervened in terms of increasing the flow and the logical consistency of the arguments.
- HD – Has similarly as SL Has reviewed and intervened in terms of increasing the flow and the logical consistency of the arguments.

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Not applicable

Authors Information

Dr. Stevan Weine - Dr. Weine is Professor of Psychiatry at the UIC College of Medicine, where he also Director of Global Medicine and Director of the Center for Global Health. For the past 25 years he has conducted a program of research focused on trauma- and migration-impacted populations. His research mission is to develop, implement, and evaluate psychosocial interventions that are feasible, acceptable, and effective with respect to the complex real-life contexts where migrants and refugees live. This work has been supported by multiple grants from the NIMH, NICHD, DHS, NIJ, and other state, federal, and private funders, all with collaboration from community partners. This work has resulted in more than 80 publications and two books: *When History is a Nightmare: Lives and Memories of Ethnic Cleansing in Bosnia-Herzegovina* (Rutgers, 1999) and *Testimony and Catastrophe: Narrating the Traumas of Political Violence* (Northwestern, 2006). He has been awarded two Career Scientist Awards: "Services Based Research with Refugee Families" from the National Institute of Mental Health and "Labor Migration and Multilevel HIV Prevention" from the National Institute of Child Health and Human Development.

Dr. Aliriza Arënliu - is associate professor at Department of Psychology at University of Prishtina. He has completed his PhD studies in psychology at Ludwig Maxmillian University in Munich, Germany. He was post-doc fellow at department of psychiatry at University of Illinois in Chicago and focused his work on migration health and mental health.

Dr. Vahdet Görmez - has completed his medical training from Istanbul University in 2002 and specialist training in the field of child and [adolescent psychiatry](#) in Oxford Deanery, UK, in 2013. He is a board member for Doctors Worldwide and has been chairing the department of child and adolescent [psychiatry](#) at Bezmialem Vakıf University till August 2014. Since 2015 he is head of child and adolescent psychiatric unit at Medeniyet University, Istanbul, Turkey. Dr. Görmez is a licensed Cognitive-Behavioral Therapy trainer.

Dr. Scott Langenecker - Dr. Langenecker is a clinical neuropsychologist, and neuroimaging specialist who focuses on the translational neuroscience of mood disorders. His goal is to contribute to work defining the neural circuits leading to the development and perseveration of depression and related mood disorders, as well as prediction of treatment response.

Current work by Dr. Langenecker, funded by two grants from the NIMH, focuses on mood disorders in the remitted state. The first study is designed to predict recurrence of depression using performance and neural circuit markers. The second study is assisting in defining key neural and performance markers of mood disorders and how they may have shared and unique features across many mood disorders. Dr. Langenecker directs an adolescent mood disorders neuropsychology clinic, specializing in adaptive transitions from adolescence to adulthood, treatment optimization, and identification of strengths and weaknesses to assist in care for mood disorders and comorbid conditions.

Dr. Hakan Demirtas - Hakan Demirtas is an Associate Professor in Division of Epidemiology and Biostatistics University of Illinois at Chicago, USA. His research interests includes Stochastic simulation, statistical computing, statistical distribution theory, random number generation, missing data, multiple imputation, incomplete multivariate data, longitudinal data, Bayesian computation.

References

1. Sagaltici E, Altindag A, Sar V. Traumatic life events and severity of posttraumatic stress disorder among Syrian refugees residing in a camp in Turkey. *J Loss Trauma*. 2019;23:1-4.
2. Assi R, Özger-İlhan S, İlhan MN. Health needs and access to health care: the case of Syrian refugees in Turkey. *Public Health*. 2019;172:146-152.
3. Merkezi OS. Effects of the Syrian refugees on Turkey. Orsam Report. 2015. http://tese.org.tr/wp-content/uploads/2015/11/Effects_Of_The_Syrian_Refugees_On_Turkey.pdf. Accessed 4 Sept 2019.
4. Alfadhli K, Cakal H, Drury J. The role of emergent shared identity in psychosocial support among refugees of conflict in developing countries. *Int Rev Soc Psych*. 2019;32:1-16.

5. Kaya A, Kircac A. Vulnerability assessment of Syrian refugees in Istanbul. Support to Life. 2016. <https://data2.unhcr.org/en/documents/download/54518>. Accessed 20 Aug 2019.
6. UNICEF. Over 40 per cent of Syrian refugee children in Turkey missing out on education, despite massive increase in enrolment rates. 2018. https://www.unicef.org/media/media_94417.html. Accessed 28 Aug 2019.
7. Çelik Ç, İçduygu A. Schools and refugee children: the case of Syrians in Turkey. *Int Migr*. 2019;57:253-67.
8. Davis C, Wanninger A. Mental health and psychosocial support consideration for Syrian refugees in Turkey: sources of distress, coping mechanisms & access to support, IMC. 2017. <https://internationalmedicalcorps.org/wp-content/uploads/2017/07/Mental-Health-and-Psychosocial-Support-Considerations-for-Syrian-Refugees-in-Turkey.pdf>. Accessed 1 Sept 2019.
9. Sirin SR, Rogers-Sirin L. The educational and mental health needs of Syrian refugee children. Washington, DC: Migration Policy Institute. 2015. <http://old.worldmep.org/wp-content/uploads/2016/02/FCD-Sirin-Rogers-FINAL-4.pdf>. Accessed 1 Sept 2019.
10. Alpak G, Unal A, Bulbul F, Sagaltici E, Bez Y, Altindag A, Dalkilic A, Savas HA. Post-traumatic stress disorder among Syrian refugees in Turkey: a cross-sectional study. *Int J Psychiatry Clin Pract*. 2015;19:45-50.
11. Quosh C, Eloul L & Ajlani R. Mental health of refugees and displaced persons in Syria and surrounding countries: a systematic review. *Intervention*. 2013;11: 276-94.
12. Acarturk C, Cetinkaya M, Senay I, Gulen B, Aker T, Hinton D. Prevalence and predictors of posttraumatic stress and depression symptoms among Syrian refugees in a refugee camp. *J Nerv Ment Dis*. 2018;206:40-45.
13. Yalim AC, Kim I. Mental health and psychosocial needs of Syrian refugees: a literature review and future directions. *Adv Soc Work*. 2018;18;833-852.
14. Sirin SR, Rogers-Sirin L. The educational and mental health needs of Syrian refugee children. Washington, DC: Migration Policy Institute. 2015. <http://old.worldmep.org/wp-content/uploads/2016/02/FCD-Sirin-Rogers-FINAL-4.pdf>. Accessed 1 Sept 2019.
15. Arenliu A, Weine S, Bertelsen, N, Saad R, Abdulaziz H. War and displacement stressors and coping mechanisms of Syrian urban refugee families living in Istanbul. *J Fam Psychol*. 2019; doi: 10.1037/fam0000603
16. Sijbrandij M, Farooq S, Bryant RA, Dawson K, Hamdani SU, Chiumento A, Minhas F, Saeed K, Rahman A, van Ommeren M. Problem Management Plus (PM+) for common mental disorders in a humanitarian setting in Pakistan; study protocol for a randomised controlled trial (RCT). *BMC Psychiatry*. 2015; doi: 10.1186/s12888-015-0602-y.
17. Walsh F. A family resilience framework: innovative practice applications. *Fam Relat* 2002;51:130-137.
18. Weine S, Kulauzovic Y, Klebic A, Besic S, Mujagic A, Muzurovic J, Spahovic D, Sclove S, Pavkovic I, Feetham S, Rolland J. Evaluating a multiple-family group access intervention for refugees with

- PTSD. *J Marital Fam Ther.* 2008;34:149-64.
19. Dawson KS, Bryant RA, Harper M, Kuowei Tay A, Rahman A, Schafer A, Van Ommeren M. Problem Management Plus (PM+): a WHO transdiagnostic psychological intervention for common mental health problems. *World Psychiatry.* 2015;14:354-357.
 20. Hamdani SU, Ahmed Z, Sijbrandij M, Nazir H, Masood A, Akhtar P, Amin H, Bryant RA, Dawson K, van Ommeren M, Rahman A. Problem Management Plus (PM+) in the management of common mental disorders in a specialized mental healthcare facility in Pakistan; study protocol for a randomized controlled trial. *Int J Ment Health Syst.* 2017; doi: 10.1186/s13033-017-0147-1
 21. Murray LK, Tol W, Jordans M, Zangana GS, Amin AM, Bolton P, Bass J, Bonilla-Escobar FJ, Thornicroft G. Dissemination and implementation of evidence based, mental health interventions in post conflict, low resource settings. *Intervention.* 2014;12 Suppl 1:94-112.
 22. Weine SM. Developing preventive mental health interventions for refugee families in resettlement. *Fam Process.* 2011;50:410-430.
 23. Walsh F. Strengthening family resilience. 3rd ed. NY:Guilford Publications; 2015.
 24. Weine S, Feetham S, Kulauzovic Y, Knafl K, Besic S, Klebic A, Mujagic A, Muzurovic J, Spahovic D, Pavkovic I. A family beliefs framework for socially and culturally specific preventive interventions with refugee youths and families. *Am J Orthopsychiatry.* 2006;76:1-9.
 25. Weine S, Arenliu A, Gormez V, Makhoulta B, Bikmazer A. Manual for low intensity cognitive behavior therapy (LICBT) to help address Syrian refugees' mental health needs. 2019 (unpublished manual).
 26. Murray LK, Tol W, Jordans M, Zangana GS, Amin AM, Bolton P, Bass J, Bonilla-Escobar FJ, Thornicroft G. Dissemination and implementation of evidence based, mental health interventions in post conflict, low resource settings. *Intervention.* 2014;12 Suppl 1:94-112.
 27. Ramaswamy R, Shidhaye R, Nanda S. Making complex interventions work in low resource settings: developing and applying a design focused implementation approach to deliver mental health through primary care in India. *Int J Ment Health Syst* 2018; doi: 10.1186/s13033-018-0181-7
 28. Curran GM, Bauer M, Mittman B, Pyne JM, Stetler C. Effectiveness-implementation hybrid designs: combining elements of clinical effectiveness and implementation research to enhance public health impact. *Med care.* 2012;50:217-226.
 29. Khan MN, Hamdani SU, Chiumento A, Dawson K, Bryant RA, Sijbrandij M, Nazir H, Akhtar P, Masood A, Wang D, Wang E. Evaluating feasibility and acceptability of a group WHO trans-diagnostic intervention for women with common mental disorders in rural Pakistan: a cluster randomised controlled feasibility trial. *Epidemiol Psychiatr Sci.* 2019;28:77-87.
 30. Pew Research Centre. Mexicans decline to less than half the U.S. unauthorized immigrant population for the first time. 2019. <https://www.pewresearch.org/fact-tank/2019/06/12/us-unauthorized-immigrant-population-2017>. Accessed 2 Sept 2019.
 31. Gormez V, Kılıç HN, Oregul AC, Demir MN, Mert EB, Makhoulta B, Kınık K, Semerci B. Evaluation of a school-based, teacher-delivered psychological intervention group program for trauma-affected Syrian refugee children in Istanbul, Turkey. *Psychiatry and Clinical Psychopharmacology.* 2017;27:125-131.

32. Gormez V, Kılıç HN, Oregul AC, Demir MN, Demirlıkan Ő, DemirbaŐ S, Babacan B, Kınık K, Semerci B. Psychopathology and associated risk factors among forcibly displaced Syrian children and adolescents. *J Immigr Minor Health*. 2018;20:529-535.