Understanding Psychological Responses to Trauma among Refugees: the Importance of Measurement Validity in Cross-cultural Settings

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Abstract

Refugees from the current conflict in Syria have been exposed to a variety of stressors known to increase the risk of mental distress. These may include witnessing atrocities as well as dealing with the challenges of surviving in the displacement context. As a vast array of organisations rush to address mental health outcomes among Syrians, the scientific and conceptual validity of psychological tools used to assess and treat mental health difficulties becomes of paramount importance. Many psychological tools for assessing trauma have been validated in western contexts, but not among Syrians. This paper outlines three errors of reasoning which undermine the validity of psychological methods in cross-cultural contexts, including assuming that western psychiatric categories are universal constructs which can be applied in any context and failing to take contextual factors into account. Qualitative research may help us to better understand culturally specific conceptions of mental health. It is only once we have a solid understanding of how mental distress is understood and expressed among Syrian refugees that we can support effective interventions to alleviate it. The strengthening of indigenous health systems can help promote culturally appropriate mental health care.

Keywords: Syria, Refugee, Psychosocial, Cultural, Assessment, Validity.

Introduction

The current conflict in Syria has led to the deaths of over 200,000 people (IAS, 2014). There are currently approximately 3.7 million registered refugees in surrounding countries (UNHCR, 2015). Many Syrians have been subjected to human rights violations as a result of the conflict (Hassan et al., 2014; Ouyang, 2013). Displaced Syrian's face these challenges in the context of living conditions in which it may be difficult to satisfy their basic needs, and where they are isolated from support structures (Taleb et al., 2015).

In this context, a myriad of international actors are seeking to address the psychological needs of Syrians. However, in a rapidly changing environment, how can we be sure that the tools we use to measure and alleviate distress are appropriate? In order to do no harm, we must work to validate our tools. While there is pressure to act immediately in a crisis, ensuring the efficacy of action must remain paramount.

The following is a discussion of factors which affect the validity of psychological

measurement tools in humanitarian settings. This discussion is part of an ongoing PhD research program exploring factors affecting uptake and implementation of mental health services among Syrian refugees living in Jordan and Turkey. Our preliminary qualitative research has explored community readiness to address mental health difficulties, cultural factors which influence care seeking behaviour and culturally specific explanatory models used to understand mental health problems among Syrians living in Jordan. The next phase of our research will build on these foundational concepts with a Train the Trainer approach to build the capacity of a Syrian founded mental health organisation serving the refugee community in Turkey.

Scientific Validity

Most of the tools used to measure psychological disorders have been developed among western populations (Kleinman, 1988). In fact, most of the categories employed to understand what constitutes normal and abnormal behaviour may represent culture bound constructs which cannot be meaningfully applied in diverse cultural settings (Summerfield, 1999). This calls into question both the conceptual framework and scientific validity of research into psychological health among refugees.

In the field of clinical psychology, establishing the validity of psychological categories and how we measure them can be a complicated process. Firstly, we must define what constitutes psychological disorder. Most experiences associated with psychological disorder exist on a continuum within a population. If we take the example of depression, most people experience sadness at some time in their life. However, some people experience such intense feelings of sadness that they find it difficult to cope. They can no longer go to work or participate

in healthy relationships. It is a clinician's job to determine whether a given individual's level of sadness is so severe that it may be the product of a pathological process, understand what this process might be and help the overcome Traditionally. person it. psychologists define have to sought psychological measuring pathology by reported experiences and behaviour within a given population, in order to determine what may be considered *normal*. Experiences which fall at the extreme ends of a given continuum are then defined as abnormal. As such, the definition of pathology in the field of psychology is a normative exercise, reflecting the values of the culture in which it operates (De Vos, 2011). The category of psychological disorder labels individuals as falling within or without a range which has been classified as normal (Plante, 2013).

The purpose of defining and measuring normality is so that we can learn more about the underlying processes which contribute to Through the generation of psychological measures, psychologists can discover what kinds of processes are related to psychological disorder. For example, repetitive negative thinking is often associated with depression (Papageorgiou and Wells, 2004), a process for which we now have efficacious. evidence-based treatments (Kenny and Williams, 2007), thereby helping people to overcome depression. The ability of this scientific research to uncover useful constructs relies on the use of valid measures to identify relationships between variables.

Establishing the validity of measures is integral to interpreting empirical data in any discipline. For example, if a biochemist wanted to measure the amount of a certain protein within a sample of tissue, she would require a special tool. She could chose to label the protein with a fluorescent tag which

would light up, enabling her to identify and count the protein. She would first need to ensure that this given tag accurately identifies the protein she is measuring. That is, that her measure is valid. In her field, her data would not be accepted as indicating the presence of the protein unless she used a validated measure. Similarly, in order to be confident that measurement in the field of psychology is accurate, validated measures are required. However, in the case of cross-cultural research, validated measures may not be readily available (Hassan et al., 2014).

Psychological Consequences of War and Displacement

War and displacement can lead to a complex array of negative psychological outcomes (Mollica, 2008) yet mental health among refugees is not clearly understood (Nickerson et al., 2011b; Tol et al., 2011) as psychological research into the effects of trauma is primarily focused on non-refugee western populations (Murray et al., 2010). Estimates of the prevalence of psychological disorder in humanitarian settings have ranged between 0-99% (Steel, 2009). Accurate measurement of prevalence has been hampered methodological constraints including sample size, sampling procedure (Silove, 1999), and heterogeneous refugee populations (Murray et al., 2010) as well as difficulties in conducting research in crisis situations. Research comparing displaced, war-affected to non-refugees populations indicates elevated levels of psychopathology (Porter and Haslam, 2005), yet there is no psychological treatment for refugees which is firmly supported by a strong evidence base (Crumlish and O'Rourke, 2010; Palic and Elklit, 2011). Research has tended to focus on posttraumatic stress disorder (PTSD). PTSD is a reaction to traumatic experiences characterised by intrusive symptoms, such as re-experiencing the event or nightmares;

avoidance of trauma reminders; cognitive and mood alterations, such as memory disturbance, anger, guilt and estrangement; and physiological arousal (APA, 2013).

Trauma leads to a wide variety of sequelae, including effects on brain development (Bellis et al., 2002); cognitive function (Koenen et al., 2003); depression (Cardozo et al., 2004); uncontrollable anger (Brooks et al., 2011); and guilt (Gorman, 2001). In the case of individuals who have experienced ongoing and extreme rights abuses, PTSD may not adequately capture the experience survivors (Gorst-Unsworth et al., 1993); Herman, 1992). In addition, there is limited research which explores individuals' capacities for resilience during the refugee experience (Hijazi et al., 2014). Conflict related trauma occurs in a context of disruptions to a variety of social, personal, cultural and political systems which normally promote health. frameworks Clinical for understanding refugee mental health need to take into account impacts on cognitive, interpersonal, social and existential functioning (Nickerson et al., 2011a). A greater focus on a wider range of adaptive functions following trauma may help to ensure that research and treatment accurately address the subjective experience of survivors (Silove, 1999).

Logical Fallacies in the International Application of Western Psychiatric Categories in Diverse Settings

When epidemiologists measure the prevalence of categories like PTSD in humanitarian settings, the interpretation of findings is constrained by the validity of the measures used. In order to arrive at the conclusion that these individuals suffer from the same discrete disease entity as that described in western populations, a number of logical fallacies may have been committed.

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Fallacy 1

Arthur Kleinman (1988) identified the category fallacy, the assumption that the identification of symptoms in a different cultural context carries the same significance as they do in western culture. For example, hopelessness in an affluent society in which people have the opportunity to exercise their rights, may be a sign of psychological disorder. However, in a context of continuing loss where "powerlessness is not a cognitive distortion but an accurate mapping of one's place in an oppressive social system" (Kleinman, 1988, pg. 15), hopelessness may be a normal reaction.

Kleinman argued that culturally specific norms inform the way that emotional, cognitive and behavioural phenomena are interpreted, contributing to understandings of what constitutes normal and abnormal within a given society. Each society has its own understanding of the factors which cause distress and psychological pathology. These are explanatory models. These conceptions will, in turn, determine the ways in which distress is expressed. Therefore, each culture will have specific idioms of distress, of which western psychiatric categories are an example.

Since distress may be expressed in a different different cultural manner in psychological measures which have been validated in one context, may not be valid in another, as items lack cultural relevance and do not include local idioms of distress (Velde et al., 2009). For example, the Beck Depression Inventory (BDI) is a measure of depression which has been validated in numerous western samples (Beck et al., 1988). However, when Nicolas and Whitt (2012) compared qualitative responses of Haitian women to scores on the BDI, they found that these women did not identify with the symptoms on this checklist. That is, the

identified symptoms did not carry meaning as expressions of distress within their cultural framework.

Fallacy 2

The assumption that the identification of symptoms associated with PTSD means that individuals have PTSD, may be an example of the fallacy *affirming the consequent*. This error in reasoning takes the form:

If you have PTSD, then you have these symptoms.

You have these symptoms. Therefore you have PTSD.

Although having PTSD entails having particular symptoms, those symptoms may be the result of causal conditions other than PTSD. For example, recurrent memories and re-experiencing of traumatic incidents may be normative responses in the immediate aftermath of a traumatic event and may in fact be adaptive, as they aid in processing the experience (Gorman, 2001).

Researchers who go into diverse cultural settings and use measurement scales to identify cases of PTSD may be committing this fallacy. The scientifically valid procedure is to first assess the scale for criterion validity in the local context. Criterion validity is established by examining the relationship between scores on the checklist and some external criterion (Van Ommeren, 2003). For example, diagnostic cut-offs for a given checklist are established by comparing scores on the checklist to diagnosis following an indepth clinical assessment.

Establishing criterion validity in a given community is vital to understanding the contextual factors associated with the identification of a given set of symptoms, and whether or not these symptoms constitute an

abnormal reaction within that society. The blanket use of unvalidated symptom checklists in humanitarian settings may pathologise reactions to stress, for how are we to determine what a *normal* reaction to an extreme situation is (Eisenbruch, 1991)?

Fallacy 3

Another logical problem arises when the identification of symptoms associated with PTSD is taken as evidence to support the conclusion that PTSD is a cross-cultural phenomenon. This may take the form of begging the question, a form of logical fallacy in which truth of the conclusion is assumed in the premise. That is, the person making the argument has assumed that the conclusion they are attempting to prove is self-evident, using it as an axiom to support their argument (Garner, 2001). It is a form of circular reasoning (not to be confused with its incorrect usage to mean "raises question"). In this case, researchers who employ western derived measurement instruments to measure PTSD symptoms in diverse cultures and take this as evidence that PSTD is a universal phenomenon, have actually assumed this by applying western categories as if there were self-evident (Summerfield, 1999).

Ethnographic Research can help validate Assessment Tools

It is circular to apply culture-bound western psychiatric categories (Kirmayer, 2006) as first principles in cross-cultural research. Ethnographic and qualitative research can help us to understand what constitute concepts of "mental" and "health" in local taxonomies. Through this process we can validate the basic assumptions upon which assessment instruments are based (Kleinman, 1988). It is only once we have taken these

initial steps that the prevalence of mental disorder in a given context can be established.

A psychiatric ethnography would hope to make clear local conceptions of health and disease from the perspective of daily practices and coping strategies. Bolton and Tang (2004) seek to do this by applying ethnographic methods in a rapid assessment participatory model for use in humanitarian settings. They trained local health workers in ethnographic techniques as a primary step to epidemiology and intervention planning. Participants' unconstrained listing of concerns generated a prioritised list of local problems identified most the pressing psychosocial issues to be discussed in indepth key informant interviews. outcomes of this qualitative analysis were used to develop a modification to the Hopkins Symptom Checklist (HSCL) which could measure the prevalence of locally described idioms of distress consistent with In a large randomly selected depression. sample they further found that scores on this checklist were associated with both locally defined measures of functional impairment and western defined criteria for depression (Bolton and Ndogoni, 2000).

The Importance of Identifying Distress

Despite the theoretical limitations raised above, many clinicians seek to apply psychiatric theory in diverse cultures with the aim of achieving practical outcomes (Kirmayer, 2006). The link between traumatic events, such as torture, mental health disorder, such as PTSD or depression has been demonstrated across a wide range of countries (Steel et al., 2009). Whether or not these categories are always valid, they may often indicate an increased level of distress. Many survivors of trauma do not require

psychological treatment, however it is imperative that treatments are available for people who do (Garcia-Moreno and van Ommeren, 2012). Hopefully, work which seeks to gain a deeper understanding of local healing norms (for example the work of Al-Krenawi and Graham (2000), Hinton et al. (2009), Mollica et al. (1993)) can assist in identifying individuals in need of assistance.

Some argue that, while valid, these theoretical issues have led to polarisations which risk obscuring practical realities for the severely mentally ill (Kirmayer, 2006; Silove et al., 2000). However mental disorder is classified, the fact remains that across cultures, a subset of people suffer marked functional and social impairment as a result of mental health difficulties (Kleinman, 1988), most notably among those with severe problems such as psychosis, neurological disorder and epilepsy (Silove et al., 2000). The mentally ill are at increased risk in crisis situations. example, when a psychiatric hospital in Aleppo, Syria, was bombed in 2012, patients had to flee and were left without support. There is evidence that some of these patients were subsequently killed by sniper fire while wandering the streets (Abou-Saleh and Mobayed, 2013).

Identifying Distress Among Syrians

In order to appropriately diagnose and treat mental health issues among Syrian refugees, it is necessary to understand how they perceive and describe mental health problems (Tol et al., 2011). There are, however, no standard clinical instruments for assessing trauma which have been validated in Syrian populations (Hassan et al., 2014). In fact, psychiatric services have historically not been widely available in Syria. For example, in 2012 there were <0.5 psychiatrists, 0 psychologists and 0.5 psychiatric nurses per 100,000 population in Syria (Okasha et al.,

2012). Prior to 2011, available services were generally residential and restricted to major cities (1,200 beds) (Abou-Saleh and Mobayed, 2013). In addition, public health systems have come under attack in Syria and are no longer fully functional (Kherallah et al., 2015).

In addition to having limited practical access to treatment options, stigma may prevent individuals from seeking help. There is limited research on the impact of stigma among Syrians in particular, however, a review of 22 publications of psychological interventions adapted for Arabic speaking patients reported that a high number of papers identified fear of stigma as a barrier to care (Gearing et al., 2013). Arabic speaking people interviewed in Sydney reported that heritable disease having a (such schizophrenia) considered mav be appropriate grounds for divorce and 51% said that isolating people with mental health disorders was considered normal (Youssef and Deane, 2006). Fear of social consequences may lead to disclosure of somatic symptoms only (Weiss et al., 2001) and patients may be unlikely to attend dedicated mental health clinics for fear that they will be observed. Provision of mental health services in the primary health care context may help to overcome this (Nasir and Al-Qutob, 2005).

While it is important to ensure that professional help is available to those who would like it, Syrians may have alternative ways of coping with distress with which they identify more strongly. For example, Syrian refugees in southern Turkey reported reasons for not seeking care, including only needing God, preferring to speak to family or friends and stating that their emotional reaction to the circumstance is normal, so they do not require specialised treatment (Jefee-Bahloul et al., 2014). It is possible that members of the

Syrian refugee community are best placed to understand the mental health needs of their compatriots. In which case, interventions which work to strengthen indigenous coping systems may be an effective means to overcome validity concerns in translating cultural conceptions of distress.

Rebuilding Community Structures

Silove and colleagues (Silove, 1999) identify how the breakdown of systems of social networks, justice and other support structures post-conflict settings undermine community structures which might otherwise provide support to individuals. **Programs** which help to rebuild these structures can promote healing at the community and individual level. For example, greater trust in the community and a sense of community cohesion has been associated with better social support and reductions in mental health difficulties, in a longitudinal study of displaced children in Burundi, indicating that programs which build a sense of community may help children to marshal social resources in order to improve health (Hall et al., 2014).

Situations of dependency associated with living in refugee camps, or lack of recognition of previous roles and qualifications in resettlement countries leads to major disruptions to individuals' identity (Silove, 1999). Involvement in meaningful action leading to recognition as a valuable member of the community has been identified by refugees as contributing to recovery from PTSD following conflict and displacement (Ajdukovic et al., 2013).

Conclusions

For humanitarian organisations, mental health practitioners and scientific researchers working in conflict and post-conflict settings, questions of validity cannot be overlooked

when applying empirically based methods to provide care to individuals who have experienced considerable adversity. However, there are limited opportunities to validity in the context humanitarian crises. One solution to this problem may be to employ measurement methods which have been validated in different contexts, and hope that they produce meaningful data. An arguably superior solution is to take advantage of the skill and understanding of people within the local community. The detailed cultural knowledge of these individuals enables them to make valid assessments of distress, whether conducting clinical assessments or research. While some members of refugee communities will be in need of assistance in coping with the experiences of war and displacement, others are likely to be resilient. These individuals may be in a position to play a leadership role in rebuilding community support systems. humanitarian All organisations are in a position to support these leaders to facilitate the generation of culturally appropriate psychosocial programs. Respecting their knowledge engenders respect and human dignity.

References

Abou-Saleh, M. & Mobayed, M. (2013) Mental Health in Syria, *International Psychiatry*, 10, 3, 58-60.

Ajdukovic, D., Ajdukovic, D., Bogic, M., Franciskovic, T., Galeazzi, G. M., Kucukalic, A., Lecic-Tosevski, D., Schützwohl, M. & Priebe, S. (2013) Recovery from Posttraumatic Stress Symptoms: A Qualitative Study of Attributions in Survivors of War, *PLoS ONE*, 8, 8.

Al-Krenawi, A. & Graham, J. R. (2000) Culturally Sensitive Social work Practice With Arab Clients in Mental Health Settings, *Health & Social Work*, 25, 1, 9-22.

APA (2013) The Diagnostic and Statistical Manual of Mental Disorders: DSM 5, bookpointUS.

- Beck, A. T., Steer, R. A. & Carbin, M. G. (1988) Psychometric properties of the Beck Depression Inventory: Twenty-five years of evaluation, *Clinical Psychology Review*, 8, 1, 77-100.
- Bellis, M. D. D., Keshavan, M. S., Shifflett, H., Iyengar, S., Beers, S. R., Hall, J. & Moritz, G. (2002) Brain Structures in Pediatric Maltreatment-Related Posttraumatic Stress Disorder: A Sociodemographically Matched Study, Biological Psychiatry, 52(11), 1066-1078.
- Bolton, P. & Ndogoni, L., (2000) Cross-Cultural Assessment Of Trauma-Related Mental Illness, *CERTI*, 71-71.
- Bolton, P. & Tang, A. M. (2004) Using ethnographic methods in the selection of post-disaster, mental health interventions, *Prehospital and disaster medicine: the official journal of the National Association of EMS Physicians and the World Association for Emergency and Disaster Medicine in association with the Acute Care Foundation*, 19, March, 97-101.
- Brooks, R., Silove, D., Steel, Z., Steel, C. B. & Rees, S. (2011) Explosive anger in postconflict Timor Leste: interaction of socio-economic disadvantage and past human rights-related trauma, *Journal of affective disorders*, 131, 1-3, 268-76.
- Cardozo, B. L., Bilukha, O. O., Crawford, C. a. G., Shaikh, I., Wolfe, M. I., Gerber, M. L. & Anderson, M. (2004) Mental health, social functioning, and disability in postwar Afghanistan, *JAMA*, 292, 5, 575-84.
- Crumlish, N. & O'Rourke, K. (2010) A systematic review of treatments for post-traumatic stress disorder among refugees and asylum-seekers, *The Journal of Nervous and Mental Disease*, 198, 4, 237-251.
- De Vos, J. (2011) The psychologization of humanitarian aid: skimming the battlefield and the disaster zone, *History of the Human Sciences*, 24, 103-122.
- Eisenbruch, M. (1991) From post-traumatic stress disorder to cultural bereavement: Diagnosis of Southeast Asian refugees, *Social Science & amp; Medicine*, 33, 6, 673-680.
- Garcia-Moreno, C. & van Ommeren, M. (2012) Mental health and psychosocial support for conflict-related sexual violence: 10 myths, World Health Organisation, 2.

- Garner, B. A. (2001) A Dictionary of Modern Legal Usage, Oxford University Press.
- Gearing, R. E., Schwalbe, C. S., MacKenzie, M. J., Brewer, K. B., Ibrahim, R. W., Olimat, H. S., Al-Makhamreh, S. S., Mian, I. & Al-Krenawi, A. (2013) Adaptation and translation of mental health interventions in Middle Eastern Arab countries: a systematic review of barriers to and strategies for effective treatment implementation, *The International journal of social psychiatry*, 59, 7, 671-81.
- Gorman, W. (2001) Refugee Survivors of Torture: Trauma and Treatment, *Professional Psychology:* Research and Practice, 32, 5, 443-451.
- Gorst-Unsworth, C., Van Velsen, C. & Turner, S. (1993) Prospective Pilot Study of Survivors of Torture and Organized Violence: Examining the Existential Dilemma, *The Journal of Nervous and Mental Disease*, 181, 4, 263-264.
- Hall, B., Tol, W., Jordans, M., Bass, J. & de Jong, J. (2014) Understanding resilience in armed conflict: Social resources and mental health of children in Burundi, *Social Science and Medicine*, 114, 121-128.
- Hassan, G., Quosh, C., Mekki-berrada, A., Youssef, A., Coutts, A. & Kirmayer, L. (2014) Culture and Mental Health of Syrians A primer for mental health professionals working with Syrian refugees and displaced people, UNHCR.
- Herman, J. L. (1997) Trauma and Recovery, BasicBooks.
- Herman, J. L. (1992) Complex PTSD: A syndrome in survivors of prolonged and repeated trauma, *Journal of Traumatic Stress*, 5, 3, 377-391.
- Hijazi, A. M., Lumley, M. A., Ziadni, M. S., Haddad, L., Rapport, L. J. & Arnetz, B. B. (2014) Brief Narrative Exposure Therapy for Posttraumatic Stress in Iraqi Refugees: A Preliminary Randomized Clinical Trial, *Journal of Traumatic Stress*, 27(3), 314-322.
- Hinton, D. E., Hofmann, S. G., Pollack, M. H. & Otto, M. W. (2009) Mechanisms of Efficacy of CBT for Cambodian Refugees with PTSD: Improvement in Emotion Regulation and Orthostatic Blood Pressure Response, CNS Neuroscience & Therapeutics, 15, 3, 255-263.
- IAS (2014), I am Syria, www.iamsyria.org/daily-death-count.html.

- Jefee-Bahloul, H., Moustafa, M. K., Shebl, F. M. & Barkil-Oteo, A. (2014) Pilot assessment and survey of syrian refugees' psychological stress and openness to referral for telepsychiatry (PASSPORT Study), Telemedicine journal and ehealth: the official journal of the American Telemedicine Association, 20, 10, 977-9.
- Kenny, M. a. & Williams, J. M. G. (2007) Treatment-resistant depressed patients show a good response to Mindfulness-based Cognitive Therapy, *Behaviour research and therapy*, 45, 617-625.
- Kherallah, M., Alahfez, T., Sahloul, Z., Eddin, K. D. & Jamil, G. (2015) Health care in Syria before and during the crisis, *Avicenna Journal of Medicine*, 2(3), 51.
- Kirmayer, L. J. (2006) Beyond the 'new crosscultural psychiatry': cultural biology, discursive psychology and the ironies of globalization, *Transcultural Psychiatry*, 43, March, 126-144.
- Kleinman, A. (1988). Rethinking psychiatry: From cultural category to personal experience. Simon and Schuster.
- Koenen, K. C., Moffitt, T. E., Caspi, A., Taylor, A. & Purcell, S. (2003) Domestic violence is associated with environmental suppression of IQ in young children, 15, 297-311, *Development and psychopathology*, 15(02), 297-311.
- Mollica, R. F. (2008) Healing Invisible Wounds: Paths to Hope and Recovery in a Violent World, Vanderbilt University Press.
- Mollica, R. F., Donelan, K., Tor, S., Lavelle, J., Elias, C., Frankel, M. & Blendon, R. J. (1993) The effect of trauma and confinement on functional health and mental health status of Cambodians living in Thailand-Cambodia border camps, *JAMA*: the journal of the American Medical Association, 270, 581-586.
- Murray, K. E., Davidson, G. R. & Schweitzer, R. D. (2010) Review of refugee mental health interventions following resettlement: best practices and recommendations, *American Journal of Orthopsychiatry*, 80, 4, 576-85.
- Nasir, L. S. & Al-Qutob, R. (2005) Barriers to the diagnosis and treatment of depression in Jordan. A nationwide qualitative study, *The Journal of the American Board of Family Practice*, 18, 2, 125-131.
- Nickerson, A., Bryant, R. A., Brooks, R., Steel, Z., Silove, D. & Chen, J. (2011a) The familial influence of loss and trauma on refugee mental

- health: a multilevel path analysis, *Journal of Traumatic Stress*, 24, 1, 25-33.
- Nickerson, A., Bryant, R. A., Silove, D. & Steel, Z. (2011b) A critical review of psychological treatments of posttraumatic stress disorder in refugees, *Clinical Psychology Review*, 31, 3, 399-417.
- Nicolas, G. & Whitt, C. L. (2012) "Conducting qualitative research with a Black immigrant sample: Understanding depression among Haitian immigrant women.", in Nagata, D., Kohn-wood, L. & Suzuki, L. A. (eds.) *Qualitative Strategies for Ethnocultural Research*, American Psychological Association, Washington, 199-217.
- Okasha, A., Karam, E. & Okasha, T. (2012) Mental health services in the Arab world, *World Psychiatry*, 11, 1, 52-54.
- Ouyang, H. (2013) Syrian refugees and sexual violence, *The Lancet*, 381, 9884, 2165-2166.
- Palic, S. & Elklit, A. (2011) Psychosocial treatment of posttraumatic stress disorder in adult refugees: A systematic review of prospective treatment outcome studies and a critique, *Journal of Affective Disorders*, 131, 1-3, 8-23.
- Papageorgiou, C. & Wells, A. (2004) Depressive rumination, *Nature, Theory and Treatment*.
- Plante, T. (2013) Abnormal Psychology Across the Ages, ABC-CLIO.
- Porter, M. & Haslam, N. (2005) Predisplacement and postdisplacement factors associated with mental health of refugees and internally displaced persons: a meta-analysis, *JAMA*, 294, 5, 602-12.
- Silove, D. (1999) The Psychosocial Effects of Torture, Mass Human Rights Violations, and Refugee Trauma: Toward an Integrated Conceptual Framework, *The Journal of Nervous and Mental Disease*, 187, 4, 200-207.
- Silove, D., Ekblad, S. & Mollica, R. (2000) The rights of the severely mentally ill in post-conflict societies, *Lancet*, 355, 1548-1549.
- Steel, Z., Chey, T., Marnane, C., Bryant, R. A. & Ommeren, M. V. (2009) Association of Torture and Other Potentially Traumatic Event 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.
- Steel Z, C. T. S. D. M. C. B. R. A. v. O. M. (2009) Association of torture and other potentially traumatic events with mental health outcomes

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- among populations exposed to mass conflict and displacement: A systematic review and metaanalysis, *JAMA: The Journal of the American Medical Association*, 302, 5, 537-549.
- Summerfield, D. (1999) A critique of seven assumptions behind psychological trauma programmes in war-affected areas, *Social Science* & Medicine, 48(10), 1449-1462.
- Taleb, Z. B., Bahelah, R., Fouad, F. M., Coutts, A., Wilcox, M. & Maziak, W. (2015) Syria: health in a country undergoing tragic transition, *International journal of public health*, 60 Suppl 1, 63-72.
- Tol, W. A., Patel, V., Tomlinson, M., Baingana, F., Galappatti, A., Panter-Brick, C., Silove, D., Sondorp, E., Wessells, M. & van Ommeren, M. (2011) Research Priorities for Mental Health and Psychosocial Support in Humanitarian Settings, *PLoS Med*, 8, 9, e1001096.

- UNHCR (2015) Syria Regional Response Plan, UNHCR.
- Van Ommeren, M. (2003) Validity issues in transcultural epidemiology, *British Journal of Psychiatry*, 182, 376-378.
- Velde, J. V. D., Williamson, D. L. & Ogilvie, L. D. (2009) Participatory Action Research: Practical Strategies for Actively Engaging and Maintaining Participation in Immigrant and Refugee Communities, *Qualitative Health Research*, 19(9), 1293-1302...
- Weiss, M. G., Jadhav, S., Raguram, R., Vounatsou, P. & Littlewood, R. (2001) Psychiatric stigma across cultures: Local validation in Bangalore and London, Anthropology & Medicine, 8, 1, 71-87.
- Youssef, J. & Deane, F. P. (2006) Factors influencing mental-health help-seeking in Arabic-speaking communities in Sydney, Australia, *Mental Health, Religion & Culture*, 9, 1, 43-66.

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