Chapter 11 Risk Factors and Prevalence of Mental Illness in Refugees

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Introduction

Identifying mental illness in refugees poses multiple challenges to providers and organizations worldwide. These challenges range, from technical aspects of language barriers and accessibility, to phenomenological questions such as the definition of mental illness across cultures.

Nevertheless, most Western societies now consider refugees as a population with high prevalence of mental illness and multiple efforts are ongoing toward standardizing screening methods and identifying risk factors early in the process of resettlement.

Screening

Overseas Screening

The Secretary of Health and Human Services promulgates, under the authority of the Immigration and Nationality Act (INA) and the Public Health Service Act, regulations outlining the requirements for the medical examination of aliens seeking admission into the US [1]. The Division of Global Migration and Quarantine provides the Department of State (DOS) and the US Citizenship and Immigration Services (USCIS) with medical screening guidelines for all examining physicians. The purpose of this overseas medical examination, for the DOS and USCIS, is to

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identify applicants with inadmissible health-related conditions: any physical or mental disorder with associated harmful behavior, any drug abuse or dependence.

Any person applying for refugee status must undergo this medical examination aimed at detecting these inadmissible health related conditions. The requirements for this evaluation are included in the technical instructions for medical examination of aliens (TIs), last revised in 2010. Following this evaluation, refugees with a history of mental disorder with associated harmful behavior that may pose a threat to property or welfare of the alien or others, may be classified as follows:

- *Class A refugees* need the approved waiver for travel. An approved US health care provider is identified for the refugee. When the class A refugee arrives in the US, he or she must report promptly to the identified US health care provider.
- Class B refugees are diagnosed with a mental disorder with no current associated harm or behavior, or there is a history of harmful behavior judged not likely to recur. Refugees with a class B mental disorder do not require a waiver but it is recommended that they are evaluated by a mental health specialist soon after arrival.

Domestic Screening

The center for disease control (CDC) recommends that mental health screening be performed at the first medical evaluation that refugees undergo in the US. This screening consists of the following steps:

- 1. Review of records from overseas.
- 2. History and physical examination related to mental health.
- 3. Mental status examination.
- 4. Screening for depression and posttraumatic stress disorder (PTSD).
- 5. Referral for refugees considered at significant risk.

The importance of records from overseas is described above. The screening should give particular attention to history of head trauma with loss of consciousness, known psychiatric conditions, history of treatment, substance use, and exposure to traumatic events. The physical examination should look for signs of maltreatment (such as torture) and unexplained somatic symptoms that may be related to psychological distress [1].

CDC recommends that all refugees over 16 years old should be screened for major depression and PTSD. It is important however to prepare the patient before asking specific questions related to trauma. Attempts should be made at normalizing the emotional stress associated with the experience of trauma and with immigration. Structured instruments are also available for screening: for depression, PHQ—9 or

the depression section of the Hopkins symptoms checklist; for PTSD, questions 1–16 of the PTSD portion of the Harvard trauma questionnaire as well as Primary Care PTSD screen (PC-PTSD). Some of these instruments are available for public use, while some must be purchased [2]. Many of these instruments have been translated in multiple languages. It is important however to keep in mind that psychiatric diagnosis should not be made based on psychological instruments alone. Anyone meeting the threshold scores for depression or PTSD on the screening questionnaire should be referred for a full evaluation with a mental health professional. A more detailed discussion on screening follows in Chap. 12.

Other countries have also issued guidelines regarding refugee mental health screening. For instance the Canadian Collaboration for Immigrant and Refugee Health (CCIRH) recommends screening for four mental health conditions: abuse and domestic violence, anxiety and adjustment disorder, depression, and torture and PTSD [3]. In Sweden, use of the health screening interview by social workers has been shown to be reliable in identifying PTSD in refugees [4].

Screening for mental health problems can be challenging due to many factors, patient or provider related. Refugees often arrive from places where stigma surrounding mental health issues is significant. Some of them cannot cope with recollection of traumatic events. In addition, the clinician may feel uncomfortable asking about psychiatric problems for fear that "it may open a can of worms" with strong emotional content that may delay the delivery of medical care. It is helpful to normalize the refugee's experience as much as possible (not only the trauma: "many refugees in your situation have been through traumatic experiences such as..." but also the mental health screening itself: "every refugee that we see here in this clinic is asked these questions"). Another helpful approach is to emphasize the importance of addressing these problems, if needed, for their overall adjustment and success in their new life. Refugees are usually quite open to talking about their stories, often with little prompting. Sometimes refugees decline mental health intervention, even if it is indicated. In these cases, psycho-education about the impact of symptoms upon their quality of life and available treatments prompts some refugees to return later for treatment. Also, personal contact established at screening is important since the refugees tend to ask for the clinician they spoke with when they were initially offered mental health care.

Risk Factors for Psychiatric Problems in Refugees

Risk factors can be broadly considered under three phases of migration: premigration, post-migration, and during migration.

Pre-migration Factors

Age

Studies looking at age of refugees and prevalence of mental illness have produced variable results. Some studies showed that refugees of younger ages experience more depression [5] while other studies showed that adolescents do better than older adults, especially in the Ethiopian population [6].

Gender

In most studies, women have a higher prevalence of PTSD and depression than men in Middle Eastern, Central African, Southern Asian, and Southeastern European refugees [7]. Other psychiatric conditions such as anxiety and pain disorder are also more common in women: tortured Bhutanese women reported higher prevalence of generalized anxiety disorder, pain disorder, and dissociative disorders than men. Several studies, however, found depression more common in male refugees than in female refugees [5]; oftentimes this is a reverse of the ratio seen in the country of origin. One study found an abnormal (80 %) prevalence of psychosis in men in a Somali refugee clinic population [8].

Education

Overall, more educated refugees scored lower on the mental health indices [6], which is thought to be related to loss of status that these refugees experience during the resettlement. At the same time, patients with limited education have more difficulties with integration and are more likely to have depression [5].

Rural Versus Urban Area of Origin

Refugees from rural areas had poorer outcomes [6].

Region of Origin

Refugees from Europe had worse mental health outcomes than those from Asia or the Middle East [6]. In addition, Southeastern European subjects had more somatic complaints than Central African refugees [9].

Trauma/Torture

There are multiple studies showing that a history of torture increases the risk of mental health problems [10]. The concept of "cumulative trauma" summarizes the fact that more episodes of trauma were related with more intensive symptoms of PTSD in refugees (with the exception of avoidance, which did not correlate with number of traumatic events experiences) [11]. In addition, there is evidence that in victims of torture, mental health problems may persist long after the resettlement [12, 13].

Death of a Relative

Having lost a relative or a close friend in the home country or during the resettlement has been associated with increased likelihood of psychiatric problems [14].

Migration Factors

The following factors characterizing the migration process have been associated with poorer mental health status:

Being detained after leaving country [15]
Time spent in refugee camp
Long time to be granted refugee status/asylum status
Incidence of torture [10]
One positive impact on mental health is being granted the refugee status [16]

Post-migration Factors

Although emphasis is often placed on the refugees' experience of trauma in their country of origin, there is a growing body of evidence that factors related to their post-settlement period can contribute more to mental health problems than experiences prior to fleeing their country [17].

Communication Problems

Lack of knowledge of the language of the adoptive country can affect the prevalence of mental health problems in two ways: on the one hand, it can seriously impact the quality of adjustment to the new environment and therefore increase the prevalence of depression or anxiety. At the same time, communication barriers can

cause underdiagnosis and poor access to care leading to underreporting of psychiatric problems.

Housing Accommodations

Permanent private accommodations were related to better mental health than institutional or temporary accommodations [6]. In addition, residential mobility (frequent changes in residence) was seen as stressful and worsened mental health [18]. Living in unsafe neighborhoods and being concerned for own physical safety can also contribute to psychiatric problems [14].

Restricted Economic Opportunity

Lack of employment or loss of economic status has been associated with worse mental health [6].

Other post-migration factors associated with worse mental health outcomes: Repatriation to a country they had previously fled [6] Initiating conflict not resolved [6] Worry about family not in the host country [19, 20]

Prevalence of Common Mental Illnesses

Determining the prevalence of various psychiatric disorders in the refugee populations presents multiple levels of challenges. Most of the prevalence studies have been done in clinical populations, typically refugees who were seen either in mental health clinics or in general health programs, which already introduces a selection bias. Epidemiologic studies attempt to overcome this bias, but face communications difficulties, fear of stigma and local beliefs about mental illness, and how it is integrated in everyday life. These factors lead to low rates of participation and minimizing of symptoms on questionnaires. In addition, the measures used to identify mental health problems have to meet the demands of being at the same time, culture specific, standardized, and practical for the provider. A study looking at how refugee trauma and health status were measured in English language publications identified over 125 different screening or diagnostic instruments used [21]. This illustrates the complexity of studying the prevalence of mental illness in the refugee population.

Communication can be particularly difficult when working with refugees due to multiple factors: language and cultural differences, the effect of culture on symptoms and illness behavior, differences in family structure, acculturation, and intergenerational conflict. Aspects of acceptance by the receiving country as reflected in employment and social status can also interfere with the process of evaluation and mental health treatment. These difficulties can be addressed through specific inquiry, use of trained interpreters, culture brokers, meetings with families, and community organizations [22].

Working with interpreters, when available, must be done with a culturally informed approach. The first step in working with an interpreter is selecting the language in which the interview will be conducted. Refugees, like many migrants, oftentimes speak more than one language. Although it may be convenient to conduct the interview in a language that is known to both patient and clinician, effort must be made in order to identify the language in which the patient can be most accurate. This will help avoid abbreviated statements and allow the expression of emotional content. In certain situations it may be possible to dispense with interpreter services: patients speak some English and insist on conducting the interview in English or later in treatment when patients' mastery of English improves. Interpreters or translators should be familiar with the psychiatric assessment, and they need to be able to translate (to find the corresponding words from one language to another while retaining the same meaning) but also to interpret which implies the transmission of denotative meaning, in addition to the connotative meaning [23]. It is important to train the interpreter to be able to translate in such a way that the clinician can assess the more important parts of the mental status exam such as the process, association, affect.

A frequent model uses the bilingual psychiatric worker, which is sometimes employed in places where there are communities of refugees from the same country or cultures. In this case, attention must be given to boundaries and countertransference. Patients tend to try to recreate the doctor–patient relationship from their country, which often may be different than the accepted model in the US. Some examples include total trust and obedience in the provider (which can translate into a passive attitude or lack of participation), a desire to compensate the provider with gifts, or asking the provider for a letter of reference for a job application. A sensitive but firm delineation of boundaries will help the refugee in learning and adjusting to the US health care system and will promote a healthy societal integration in general. For all clinicians evaluating or treating refugees, but especially for those clinicians who are themselves prior refugees, special attention must be given to counter-transference, and additional peer supervision should be sought if necessary.

Another factor that can affect the attendance of mental health programs and the evaluation of the prevalence of psychiatric disorders in refugees and immigrants is the use of alternative or complementary medicine. Traditionally it was believed that use of alternative medicine is associated with avoidance of Western medicine in immigrants. A study of Cambodian refugees showed that 34 % of them relied on alternative medicine in the past year; however, only 5 % used the alternative medicine exclusively. Surprisingly, using alternative medicine was positively associated with seeking Western sources for mental health care [24].

In addition to the above challenges, given that the phenomenology of mental illness can be very different across cultures, Western diagnoses are not universally

accepted as valid for these populations. However, most studies of prevalence utilize Western psychiatric diagnoses as outlined in the Diagnostic and Statistical Manual (DSM). See Chap. 12 for a discussion of standardized assessment scales validated in refugee populations.

PTSD and Depression are by far the most common diagnoses encountered in refugee populations. Table 11.1 presents a summary of the most illustrative studies regarding prevalence of mental health problems in refugees.

Other Psychiatric Disorders

In addition to depression and anxiety, other psychiatric disorders have been described in refugees: *traumatic brain injury* [37], *suicide* (rates were 4–5 times higher in Ethiopian immigrants than in the national population in one study) [38]. *Postnatal depression* has been reported as high as 42 % in migrant women (including immigrants, asylum seekers, and refugees) as opposed to 10–15 % in nativeborn women [39]. *Pathological gambling* was initially thought to be very common in Cambodian refugees (70 % prevalence [40]); however, a later study, considered to be more representative of Cambodian refugee communities in the US, showed a prevalence of only 13.9 % [41]. *Substance abuse* has been reported as well: 45 % of Indo-Chinese refugees had problems with alcohol or tobacco, while 13.9 % of the same had problems with drugs [42].

Influence of acculturation may vary with gender—in Somali girls for instance, greater Somali acculturation was associated with better mental health, while for Somali boys, greater American acculturation was associated with better mental health [43].

Domestic violence is considered to be underreported due to cultural factors, fear of stigma, but also fear of losing children to the child protection agencies if abuse is reported. Victimized women have a lower tendency to receive psychological support from the family; on a positive note, they were also less likely to use tranquilizers, to smoke, to think of suicide, and to attempt suicide [42].

Finally, comorbidities are extremely frequent; in a clinical sample of 61 refugee outpatients from psychiatric clinics in Norway, 80 % of those who had PTSD had three or more additional psychiatric diagnosis [9].

Resilience and Posttraumatic Growth

Although the prevalence of psychiatric problems is relatively high compared to the general population, many of the refugees succeed in integrating in the receiving society and achieving a good quality of life. The concept of posttraumatic growth, which summarizes the positive personal changes one makes in reaction to traumatic events, has received recent attention from researchers. Posttraumatic growth is

			Prevalence (lifetime prevalence,	
Year	Author	Population	unless specified otherwise)	Assessment
2012	Lopes Cardozo [25]	Cambodian (landmine survivors)	Anxiety 62 %	Harvard Trauma Questionnaire
			Depression 74 %	Hopkins Symptom Checklist
			PTSD 34 %	SF36 Health Survey
2012	Slewa-Younan [26]	Iraqi refugees in Australia	PTSD 48 %	Descriptive/clinical
			MDD 36 %	
			Dysthymia 36 %	
2011	Hussain [27]	Sri Lankan (internally displaced)	PTSD 7 %	Harvard Trauma Questionnaire
			Anxiety 32.6 %	Hopkins Symptoms Checklist
			Depression 22.2 %	
2011	Kroll [8]	Somali men in an inner-city	Psychosis 80 %	Clinical evaluation DSM IV based
		community clinic (non-Somali		
		men in the same clinic—13.7% prevalence of psychosis)		
2011	Schweitzer [19]	Burmese refugees in Australia	PTSD 9 %	Harvard Trauma Questionnaire
			Anxiety 20 %	Post-migration Living Difficulties checklist
			Depression 36 %	Hopkins Symptoms Checklist
			Somatization 37 %	
2009	Fawzi [14]	Haitian refugees	PTSD 11.6 %	Interview via standardized questionnaire
			Depression 14 %	
			PTSD+depression 7.9 %	
2007	Jamil [28]	Iraqi refugees in the US	Anxiety 80 %	Posttraumatic Stress
			Depression 80 %	Diagnostic Scale
			PTSD 54.3 % in men	Hopkins Symptom Checklist
			11.4 % in Women	
2006	Sabin [29]	Mayan refugees to Guatemala	PTSD 8.9 %	Harvard Trauma Questionnaire
			Anxiety 17.3 %	Hopkins Symptom Checklist 25
			Depression 47.8 %	
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Table 11.1 (continued)

Year	Author	Population	Prevalence (lifetime prevalence, unless specified otherwise)	Assessment
2005	Basoglu [30]	Refugees from Yugoslavia	PTSD 33 %	Trauma Survivors Questionnaire (RTSQ)
			MDD 10 %	48-item Emotions and Beliefs After War (EBAW)
				Semi-Structured Interview for Survivors of War (SISOW)
				Diagnostic and Statistical Manual of Mental Disorders (DSM-IV) (SCID-I/NP, version 2)
2005	Steel [31]	Vietnamese refugees in Australia	Anxiety 6/1 % Depression 6.1 % Substance dependence 6.1 % (12 months prevalence)	Composite International Diagnostic Interview (CIDI 2.1)
2005	Marshall [13]	Cambodian refugees	PTSD 62 %	Harvard Trauma Questionnaire
		(99% had experienced near—death situations, 90% had a family member of a friend killed)	MDD 51 % Alcohol use disorders 4 %	
2004	Karunakara [32]	Sudanese	PTSD 46 % in refugees (48 % in stavees and 18 % in Uganda nationals)	Posttraumatic Stress Diagnostic Scale (PDS)
2004	Fenta [5]	Ethiopian refugees and immigrants	Depression 9.8 %	Composite International Diagnostic Interview
2004	Van Ommeren [33]	Bhutanese refugees in Nepal	Somatoform pain disorders 31 %	Diagnostic interview ICD 10 based
1998	D'Avanzo [34]	Cambodian refugee women	FISD 85 % 87 % depression (France)	Hopkins Symptom Checklist
			65 % depression (USA)	
1999	Peltzer [35]	Tibetan refugees	PTSD 32 %	Hopkins Symptom Checklist
			Depression 30 %	
1999	Holtz [36]	Tibetan refugees	Anxiety 41.4 %	Hopkins Symptom Checklist
			Depression 14.4 %	

related to a higher quality of life in general; in addition, it explained more of the variance in quality of life than did posttraumatic stress symptoms, depressive symptoms, or unemployment [45].

Cultural Factors

Each culture has specific syndromes that in the Westerner's eye are classified as psychiatric diseases or specific presentations of more common psychiatric diseases. Various populations can present with specific syndromes, but at the same time, the same syndrome can be seen in different cultures located in different geographic regions. For instance, women who jump into wells in suicide attempts have been described in Pakistan, Punjab, Bangladesh, Sri Lanka [46]. *Koro* (the penis shrinking syndrome) is a classic example of a culture-bound syndrome seen in different ethnic and geographic groups [47]. Survivors of the Rwanda genocide divided mental health symptoms into a mental trauma syndrome (a PTSD like presentation plus some depression symptoms plus "local" symptoms) and a grief syndrome (other depression symptoms plus "local" symptoms) [48]. Multiple culture specific syndromes have been described in the Cambodian population; among them, *Khya^1* attacks (a variant of panic attack, characterized by physical symptoms and fear of heart arrest) or *khmaoch sangot* ("the spirit pushes you down"—a form of sleep paralysis) [49].

Transcultural Psychiatry, which, in part, focuses on the study of these syndromes, is a rapidly growing discipline. Even in the absence of clearly defined cultural syndromes, there are many subtle cultural variations in illness manifestations. In working with refugees, one must not only become familiar with the specific culture to which the patients belong, but also consider local and individual specifics and avoid premature labeling. Many areas of conflict are extremely multicultural or multireligious. As in any clinical setting, maintaining an attitude of inquiry and curiosity will facilitate breaking transcultural barriers.

References

- Center for Diesease Control. Guidelines for mental health screening during the domestic medical examination for newly arrived refugees. 2013. http://www.cdc.gov/immigrantrefugeehealth/guidelines/domestic/mental-health-screening-guidelines.html; Accessed 3 Apr 2013
- Harvard Program in Refugee and Trauma, Measuring Trauma, Measuring Torture manual on CD-ROM. http://hprt-cambridge.org/?page_id=420, Accessed 20 Aug 2013.
- 3. Swinkels H, Pottie K, Tugwell P, et al. Canadian Collaboration for Immigrant and Refugee Health (CCIRH). Development of guidelines for recently arrived immigrants and refugees to Canada: Delphi consensus on selecting preventable and treatable conditions. Can Med Assoc J. 2011;183(12):E928–32.

4. Sondergaard HP, Ekblad S, Theorell T. Screening for post-traumatic stress disorder among refugees in Stockholm. Nord J Psychiatry. 2003;57(3):185–9.

- 5. Fenta H, Hyman I, Noh S. Determinants of depression among Ethiopian immigrants and refugees in Toronto. J Nerv Ment Dis. 2004;192(5):363–72.
- Porter M, Haslam N. Predisplacement and postdisplacement factors associated with mental health of refugees and internally displaced persons: a meta-analysis. JAMA. 2005;294(5):602–12.
- 7. Schubert CC, Punamaki RL. Mental health among torture survivors: cultural background, refugee status and gender. Nord J Psychiatry. 2011;65(3):175–82.
- 8. Kroll J, Yusuf AI, Fujiwara K. Psychoses, PTSD, and depression in somali refugees in minnesota. Soc Psychiatr Psychiatri Epidemiol. 2011;46(6):481–93.
- 9. Teodorescu DS, Heir T, Hauff E, et al. Mental health problems and post-migration stress among multi-traumatized refugees attending outpatient clinics upon resettlement to Norway. Scand J Psychol. 2012;53(4):316–32.
- 10. Mills E, Singh S, Roach B, et al. Prevalence of mental disorders and torture among Bhutanese refugees in Nepal: a systemic review and its policy implications. Med Conflict Surviv. 2008;24(1):5–15.
- Mollica RF, McInnes K, Poole C, et al. Dose-effect relationships of trauma to symptoms of depression and post-traumatic stress disorder among Cambodian survivors of mass violence. Br J Psychiatry. 1998;173:482–8.
- Tang SS, Fox SH. Traumatic experiences and the mental health of Senegalese refugees. J Nerv Ment Dis. 2001:189(8):507–12.
- 13. Marshall GN, Schell TL, Elliott MN, et al. Mental health of Cambodian refugees 2 decades after resettlement in the United States. JAMA. 2005;294(5):571–9.
- 14. Fawzi MC, Betancourt TS, Marcelin L, et al. Depression and post-traumatic stress disorder among Haitian immigrant students: implications for access to mental health services and educational programming. BMC Public Health. 2009;9:482.
- 15. Ichikawa M, Nakahara S, Wakai S. Effect of post-migration detention on mental health among Afghan asylum seekers in Japan. Aust New Zeal J Psychiatr. 2006;40(4):341–6.
- Silove D, Steel Z, Susljik I, et al. The impact of the refugee decision on the trajectory of PTSD, anxiety, and depressive symptoms among asylum seekers: a longitudinal study. Am J Disaster Med. 2007;2(6):321–9.
- 17. Montgomery E. Long-term effects of organized violence on young middle eastern refugees' mental health. Soc Sci Med. 2008;67(10):1596–603.
- 18. Warfa N, Bhui K, Craig T, et al. Post-migration geographical mobility, mental health and health service utilisation among Somali refugees in the UK: a qualitative study. Health Place. 2006;12(4):503–15.
- Schweitzer RD, Brough M, Vromans L, et al. Mental health of newly arrived Burmese refugees in Australia: contributions of pre-migration and post-migration experience. Aust New Zeal J Psychiatr. 2011;45(4):299–307.
- 20. Nickerson A, Bryant RA, Steel Z, et al. The impact of fear for family on mental health in a resettled Iraqi refugee community. J Psychiatr Res. 2010;44(4):229–35.
- 21. Hollifield M, Warner TD, Lian N, et al. Measuring trauma and health status in refugees: a critical review. JAMA. 2002;288(5):611–21.
- 22. Kirmayer LJ, Narasiah L, Munoz M, et al. Canadian Collaboration for Immigrant and Refugee Health (CCIRH). Common mental health problems in immigrants and refugees: general approach in primary care. Can Med Assoc J. 2011;183(12):E959–67.
- Westermeyer J. Working with an interpreter in psychiatric assessment and treatment. J Nerv Ment Dis. 1990;178(12):745–9.
- 24. Berthold SM, Wong EC, Schell TL, et al. U.S. Cambodian refugees' use of complementary and alternative medicine for mental health problems. Psychiatr Serv. 2007;58(9):1212–8.
- Lopes Cardozo B, Blanton C, Zalewski T, et al. Mental health survey among landmine survivors in Siem Reap province, Cambodia. Med Conflict Surviv. 2012;28(2):161–81.

- 26. Slewa-Younan S, Chippendale K, Heriseanu A, et al. Measures of psychophysiological arousal among resettled traumatized Iraqi refugees seeking psychological treatment. J Trauma Stress. 2012;25(3):348–52.
- Husain F, Anderson M, Lopes Cardozo B, et al. Prevalence of war-related mental health conditions and association with displacement status in postwar Jaffna district, Sri Lanka. JAMA. 2011;306(5):522–31.
- 28. Jamil H, Farrag M, Hakim-Larson J, et al. Mental health symptoms in Iraqi refugees: post-traumatic stress disorder, anxiety, and depression. J Cult Divers. 2007;14(1):19–25.
- 29. Sabin M, Sabin K, Kim HY, et al. The mental health status of Mayan refugees after repatriation to Guatemala. Pan Am J Publ Health. 2006;19(3):163–71.
- Basoglu M, Livanou M, Crnobaric C, et al. Psychiatric and cognitive effects of war in former Yugoslavia: association of lack of redress for trauma and posttraumatic stress reactions. JAMA. 2005;294(5):580–90.
- 31. Steel Z, Silove D, Chey T, et al. Mental disorders, disability and health service use amongst Vietnamese refugees and the host Australian population. Acta Psychiatr Scand. 2005;111(4):300–9.
- 32. Karunakara UK, Neuner F, Schauer M, et al. Traumatic events and symptoms of post-traumatic stress disorder amongst Sudanese nationals, refugees and Ugandans in the west Nile. Afr Health Sci. 2004;4(2):83–93.
- 33. Van Ommeren M, de Jong JT, Sharma B, et al. Psychiatric disorders among tortured Bhutanese refugees in Nepal. Arch Gen Psychiatry. 2001;58:475–82.
- 34. D'Avanzo CE, Barab SA. Depression and anxiety among Cambodian refugee women in France and the United States. Issues Ment Health Nurs. 1998;19(6):541–56.
- Peltzer K. Trauma and mental health problems of Sudanese refugees in Uganda. Cent Afr J Med. 1999;45(5):110–4.
- Holtz TH. Refugee trauma versus torture trauma: a retrospective controlled cohort study of Tibetan refugees. J Nerv Ment Dis. 1998;186(1):24–34.
- 37. Mollica RF, Lyoo IK, Chernoff MC, et al. Brain structural abnormalities and mental health sequelae in South Vietnamese ex-political detainees who survived traumatic head injury and torture. Arch Gen Psychiatry. 2009;66(11):1221–32.
- 38. Arieli A, Gilat I, Aycheh S. Suicide by Ethiopian immigrants in Israel. Harefuah. 1994;127(3–4):65–70.
- 39. Collins CH, Zimmerman C, Howard LM, et al. Refugee, asylum seeker, immigrant women and postnatal depression: rates and risk factors. Arch Womens Ment Health. 2011;14(1):3–11.
- 40. Petry NM, Armentano C, Kuoch T, et al. Gambling participation and problems among South East Asian refugees to the United States. Psychiatr Serv. 2003;54:1142–8.
- 41. Marshall GN, Elliott MN, Schell TL, et al. Prevalence and correlates of lifetime disordered gambling in Cambodian refugees residing in Long Beach, CA. J Immigr Minor Health. 2009;11(1):35–40.
- 42. Yee BW, Nguyen DT. Correlates of drug use and abuse among Indochinese refugees: mental health implications. J Psychoactive Drugs. 1987;19(1):77–83.
- 43. Ellis BH, MacDonald HZ, Klunk-Gillis J, et al. Discrimination and mental health among Somali refugee adolescents: the role of acculturation and gender. Am J Orthopsychiatr. 2010;80(4):564–75.
- 44. Al-Modallal H. Patterns of coping with partner violence: experiences of refugee women in Jordan. Public Health Nurs. 2012;29(5):403–11.
- 45. Teodorescu DS, Siqveland J, Heir T, et al. Posttraumatic growth, depressive symptoms, post-traumatic stress symptoms, post-migration stressors and quality of life in multi-traumatized psychiatric outpatients with a refugee background in Norway. Health Qual Life Outcome. 2012;10:84.
- 46. Guzder J. Women who jump into wells: reflections on suicidality in women from conflict regions of the Indian subcontinent. Transcult Psychiatry. 2011;48(5):585–603.

47. Crozier I. Making up koro: multiplicity, psychiatry, culture, and penis-shrinking anxieties. J Hist Med Allied Sci. 2012;67(1):36–70.

- 48. Bolton P. Local perceptions of the mental health effects of the Rwandan genocide. J Nerv Ment Dis. 2001;189(4):243–8.
- 49. Hinton DE, Hinton AL, Eng KT, et al. PTSD and key somatic complaints and cultural syndromes among rural Cambodians: the results of a needs assessment survey. Med Anthropol Q. 2012;26(3):383–407.