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REVIEW

Systematic review of prevention and management strategies for the consequences of gender-based violence in refugee settings

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Uncertainties continue regarding effective strategies to prevent and address the consequences of gender-based violence (GBV) among refugees. The databases of PubMed, Cochrane Library, Scopus, PsycINFO, Web of Science, Anthropology Plus, EMBASE, DARE, Google Scholar, MSF Field Research, UNHCR and the regional and global indices of the WHO Global Health Library were searched twice within a 6-month period (April and September 2011) for English-language clinical, public health, basic and social science studies evaluating strategies to prevent and manage health sequelae of GBV among refugees before September 2011. Studies not primarily about prevention and treatment, and not describing population, health outcome and interventions, were excluded. The literature search for the prevention and management arms produced 1212 and 1106 results, respectively. After reviewing the titles and abstracts, 29 and 27 articles were selected for review in their entirety, none of which met the inclusion criteria. Multiple panels of expert recommendations and guidelines were not supported by primary data on actual displaced populations. There is a dire need for research that evaluates the efficacy and effectiveness of various responses to GBV to ultimately allow a transition from largely theoretical and expertise driven to a more evidence-based field. We recommend strategies to improve data collection and to overcome barriers in primary data driven research.

Keywords: Gender-based violence, Refugees, Internally displaced persons, Prevention, Treatment, Review

Introduction

As of 2009, the total population under the protection of the United Nation's High Commissioner for Refugees (UNHCR) was estimated at 36.5 million people, including 10.4 million refugees, 15.6 million internally displaced persons (IDP), 6.6 million stateless persons and persons of concern who do not fall into any of the aforementioned categories.[1] The majority of these persons were from Asia and Africa, specifically Central and North Africa, and the Middle East and Europe.[1]

There are a number of studies on the prevalence of sexual violence and description of its sequelae among displaced populations[2–9] and some have reported rates of 17% in Sierra Leone to over 60% in Azerbaijan.[2–4] It is widely recognized that displaced women are at an increased risk of gender-based violence (GBV).[10–12] Multiple factors have been suggested to increase the risk of GBV during displacement and repatriation. Examples of these include displacement in the context of armed conflict or human rights violations; minority status; lack of access to water, food and fuel; extreme poverty; lack of familial and community support structures; abandonment; lack of educational and employment opportunities; involuntary recruitment into armed forces; having a diagnosis of HIV and/or AIDS; and physical and/or mental disabilities.[13]

GBV in displaced populations has both physical and psychological consequences that vary greatly across different contexts. Some of the commonly cited sequelae include increased rates of sexually transmitted diseases (STD) such as HIV/AIDS[14,15] and syphilis,[16] unwanted pregnancy,[17] depression[18] and post-traumatic stress disorder (PTSD).[19] The data on specific interventions developed or adapted for this population to prevent and/or address these consequences is extremely limited.[20]

This study attempts to evaluate strategies and approaches that could prevent and/or manage GBV and its health sequelae in refugee or displaced populations.

Methods

For the purposes of this study, refugees and IDPs were defined as people from developing regions or developed regions who have been displaced within or outside their home countries.[21–23] GBV was defined in accordance with UNHCR GBV guidelines as 'an umbrella term for any harmful act that is perpetrated against a person's will, and that is based on socially ascribed (gender) differences between males and females'.[24] Thus, the term GBV includes but is not limited to acts of sexual violence, including sexual exploitation and/or abuse; forced prostitution; domestic violence; trafficking; forced/early marriage; and harmful traditional practices such as female genital mutilation, honour

killings and widow inheritance (a type of marriage in which a widow marries a kinsman of her late husband, often his brother).[24] The health sequelae of GBV were defined as all adverse physical and psychological outcomes related to this form of violence.

A systematic review of literature with two distinct arms on the prevention and treatment/management of GBV among refugees and IDPs was conducted in the following databases: PubMed, Cochrane Library, Scopus, PsycINFO, Web of Science, Anthropology Plus, EMBASE, DARE, Google Scholar, MSF Field Research, UNHCR and the WHO Global Health Library, which includes the regional indexes of AIM, IMSEAR, IMEMR, LILACS, and WPRIM and the global databases of MEDLINE and WHOLIS.

This review included all clinical, public health, basic and social science studies published before September 2011 and reporting primary data on strategies to prevent and/or treat/manage the sequelae of GBV in refugees and IDPs. In addition to the primary literature search, we performed a 'snowballing search' in which references cited in guidelines and the recommendations of panels of experts were reviewed, whether or not they met any of the exclusion criteria.

A list of key search terms was developed through a preliminary review of the literature on GBV, during multiple brainstorming sessions (involving authors, contributors and two librarians), through an extensive review of the MeSH terms from relevant articles found by preliminary searches in PubMed and using a thesaurus. We divided the search terms into subcategories: population, GBV, prevention methods, health sequelae and health interventions (Box 1).

Box 1. Search terms used for review of literature on prevention and treatment/management of gender-based violence in displaced populations

Population
: Refugee, displaced, internally displaced person, IDP, political violence, ethnocide, genocide, ethnic cleansing, trafficking, war population

Gender-based violence
: Gender based violence, GBV, sexual violence, violence against women, violence against children, rape, forced intercourse, sexual abuse, sexual assault, child marriage

Prevention methods
: Preventative, primary prevention, secondary prevention, condoms, contraception, lighting, guards, camp layout, security, education

Health sequelae
: Sexually transmitted disease, STD, sexually transmitted infection, STI, HIV/AIDS, HIV, AIDS, human immunodeficiency virus, gonorrhea, chlamydia, syphilis, herpes, depression, anxiety, suicide, PTSD, post traumatic stress disorder, trauma, wound, injury, unwanted pregnancy, dysuria, vaginitis

Health intervention
: Healthcare, health care, treatment, therapy, care, mental health, humanitarian, psychotherapy, reproductive health, contraceptive, post exposure prophylaxis, PEP, support group, medication, medicine, drug, vaccination, vaccine, hospitalization, psychological, psychosocial

The searches were limited to the title and abstract of the literature. The search terms for the treatment/management arm of the study were combined in the following manner: (all 'population' terms connected by the search term OR) AND (all 'GBV' terms connected by the search term OR) AND (all 'health sequelae' terms connected by the search term OR) AND (all 'health intervention' terms connected by the search term OR).

In the prevention arm of the study, two searches were constructed to account for potential pitfalls in some of the less conventional search engines. The first was aimed at primary prevention studies and combined the search terms from 'population' and 'GBV' and 'prevention' as for the treatment/management arm. The second was aimed at secondary and tertiary prevention studies and combined the search terms from 'population' and 'GBV' and 'health intervention' and 'prevention' as for the treatment/management arm.

The search engines in the Google Scholar and UNHCR databases use a search algorithm that does not recognize Boolean operators. In these databases, simplified searches were conducted using an abbreviated list of the key terms that were not grouped into categories. In Google Scholar, multiple searches of this nature were performed in order to capture different combinations of terms in the literature. For example, in one search for the treatment/management arm of the study, 'refugee' was combined with several GBV terms, health outcome terms and health intervention terms; in another search, 'internally displaced' was combined with the same terms.

The inclusion criteria were: studies that referenced refugee/IDP patients with any physical or mental health sequelae of GBV in the title and/or abstract; or studies that referenced refugee/IDP with any prevention strategy for GBV in the title and/or abstract.

The exclusion criteria for the prevention arm were: studies that did not specifically describe the study population, any form of GBV in that population or the intervention proposed; studies that did not have more than one subject; review studies (except meta-analyses) and theoretical studies (except for recommendations from panels of experts); and studies not published in English.

The exclusion criteria for the treatment/management arm were: studies that did not specifically describe the study population, any form of GBV and its health sequelae in that population, and the intervention proposed; studies that did not describe the outcomes of the intervention; studies that did not have more than one subject; review studies (except meta-analyses) and theoretical studies (except panel of expert recommendations); and studies not published in English.

A four-stage screening process was undertaken to select the most relevant literature for review. First, databases were searched for articles containing the key search terms in their title and/or abstract. Second, the title and abstracts of these articles were reviewed for exclusion criteria. Third, the full texts of the articles that had not been excluded were reviewed to confirm that they met the inclusion and exclusion criteria. A snowballing search was also applied by reviewing references in guidelines and panel of expert recommendations selected for the full text review. Last, we planned to undertake a final in-depth review of the remaining studies. This included development of a data extraction and analysis tool that allowed the reviewers to review each study independently to assess methodological quality and investigate both external and internal

validity and reliability of data collection. These included assessing research design and technical information about all outcomes and findings, and evaluation of systematic and random bias including but not limited to bias in selecting subjects, reporting of measurement of independent and dependent variables and ascertainment and definition of numerators and denominators. The effect of methodological quality was assessed separately for each individual study. To compare studies, reviewers planned to produce multiple categories for evaluation: high quality, good quality, poor quality, unacceptable quality, and not applicable.

Two independent researchers (MW and EE) performed searches and study selections and RA reviewed the searches and resolved conflict when needed. The original search concluded in April 2011. To improve our sensitivity in capturing evidence and to have a more updated search before drafting the manuscript, we performed the entire systematic review a second time by September 2011.

Results

The literature search for the prevention arm resulted in 1510 articles. We eliminated 1481 articles because they did not meet the inclusion criteria or were duplicates and reviewed the full text of the remaining 29 articles (Figure 1). The literature search for the treatment/management arm resulted in 1308 articles and 1281 were eliminated because they did not meet the inclusion criteria or were duplicates, and the full texts of the remaining 27 articles were reviewed (Figure 2). The search results for each database and their key search features are presented in Supplementary Table 1.

We did not find a single article evaluating either the prevention or treatment/management of GBV and its health consequences in displaced populations that met the inclusion criteria. General reasons included but were not limited to the following: studies were not about refugees or IDPs; did not define and/ or measure outcomes; were primarily descriptive or guidelines without primary data; were not about GBV or its sequelae; did not describe treatment or prevention strategy; did not include baseline data for comparison; and were qualitative without outcome measurement. The searches produced multiple panel of expert recommendations and guidelines from international organizations such as UNHCR, Inter-Agency Standing Committee (IASC), WHO, Women's Commission for Refugee Women and Children and the International Rescue Committee

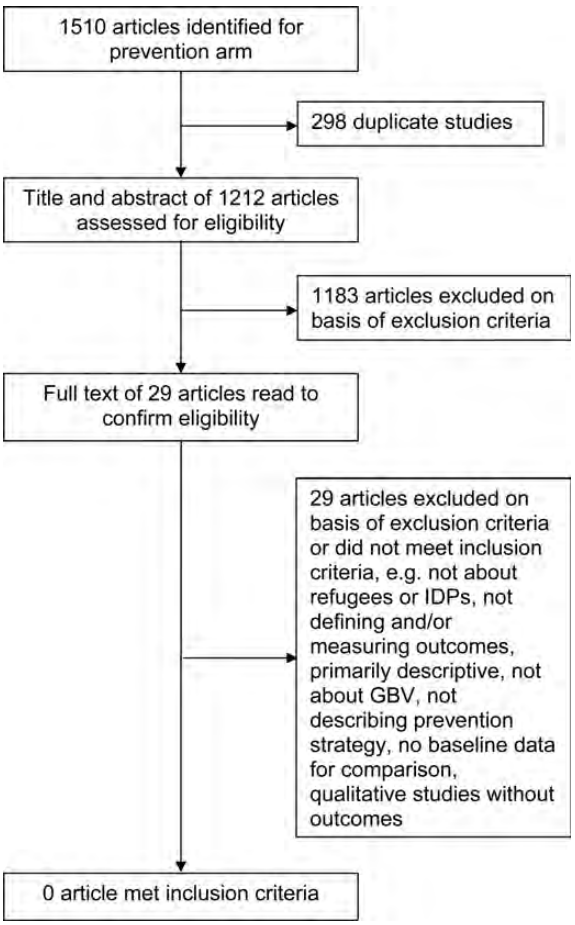

Figure 1. Literature review search showing the process of selecting studies suitable for inclusion in the final review of the literature on prevention of gender-based violence (GBV) in displaced populations. IDP: internally displaced persons.

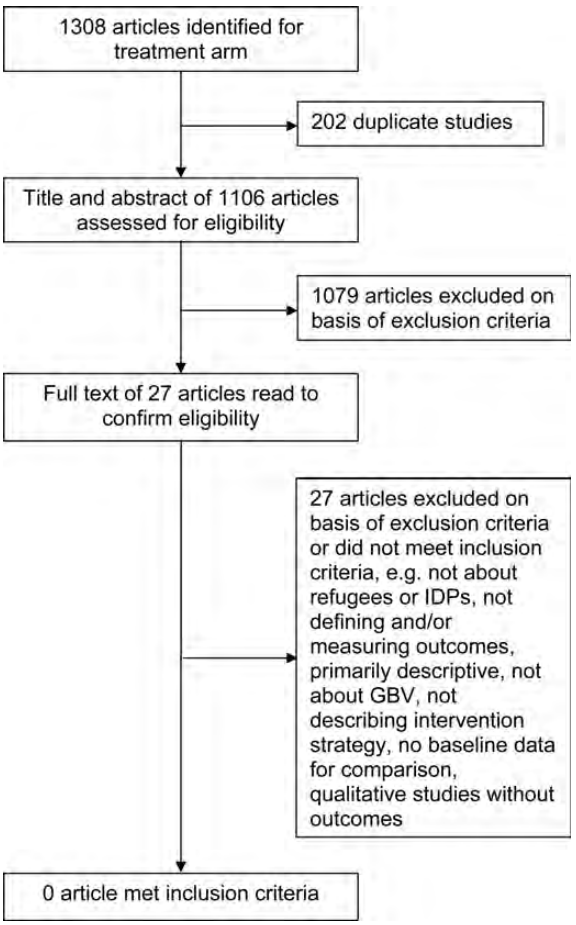

Figure 2. Literature review search showing the process of selecting studies suitable for inclusion in the final review of the literature on treatment/management of gender-based violence (GBV) in displaced populations. IDP: internally displaced persons.

(IRC) that outlined specific strategies to prevent and/or treat the health consequences of GBV, but none were supported by primary research on actual displaced populations. Despite this lack of direct evidence, we have outlined some of the recommendations in Box 2 to provide insight into the prevention and treatment strategies that are currently being used in the field. All of these recommendations emphasize the need for women and communities to take an active role in risk identification, prevention and interventions.

Box 2. Current field practices for prevention and management of gender-based violence (GBV) sequelae in displaced populations

Primary prevention of GBV[10,24,26,29–31]

(1) Identifying causes and contributing factors
(2) Transforming sociocultural norms (e.g. gender balance in leadership, employment opportunities for women)
(3) Rebuilding family and community structures (e.g. programmes targeting both genders, programmes targeting host as well as displaced communities)
(4) Effective services and facilities (e.g. camp lighting and layout, security personnel, access to health services including reproductive health services, access to food, water and fuel)
(5) Working with formal and traditional legal systems (e.g. prosecution of perpetrators of GBV)
(6) Assessment, monitoring and documentation (e.g. refugee registration and documentation, reporting system for GBV incidents)
(7) Information, education and communication (e.g. awareness campaigns involving both genders, educational programmes involving the host and displaced communities)

Secondary prevention of health sequelae of GBV [25–27,29]

HIV prophylaxis, gonorrhea and chlamydia prophylaxis, emergency contraception, group therapy counselling, education, other psychosocial support, community support groups, implementation of the minimum initial service package

Treatment of health sequelae[5,10,27,28,31]

Antibiotic therapy, cognitive therapies, psychotherapy, psychotropic medications

Discussion

In the last decade, there has been a call for greater recognition of GBV in the refugee setting; UNHCR,[24–26] WHO[27–29] and IASC[30,31] have published guidelines relating to the prevention and management of GBV. However, these guidelines are often based on expert opinion rather than on objective data. When they are evidence-based, they are extrapolated from data on interventions in non-displaced populations. In this systematic review, we used a comprehensive search strategy in a variety of search engines to cover complementary areas of the literature relevant to GBV, including the grey literature and datasets from non-governmental organizations. This process was time consuming, and to ensure maximum validity we conducted the entire systematic review twice; the first round concluded in April 2011 and the second in September 2011. Through this extensive search, we were not been able to find any publications that evaluated strategies to prevent and/or manage GBV in displaced populations in any kind of systematic way. Thus, there is no data currently available to demonstrate whether or not the prevention and management strategies that are included in proposed and widely used guidelines are feasible, efficacious or effective. There is however a limitation to our study in that we only searched the English language literature and it is possible that we missed studies that were published in other languages. Indeed, it is likely that many of the strategies proposed in existing guidelines have already been applied to displaced populations by aid agencies and/or other service providers in the field. It is also possible that data on the feasibility, efficacy and effectiveness of these strategies has been collected by these providers. However, this data has not reached mainstream scientific forums or even the grey literature.

In general, data on rape and other forms of GBV within displaced populations is severely underreported for a myriad of reasons, and where it is reported the quality of this data is questionable.[32] We hypothesize that multiple factors make it difficult to implement and maintain GBV prevention and management strategies in displaced populations, and to evaluate these strategies through proper data collection. These factors include the transient and volatile nature of the refugee setting where the threat of violence is constant,[33] and that the service providers working for these populations often lack the technical expertise necessary for conducting research that other organizations and/or academic institutions possess.[34] Given that many of the health sequelae of GBV relate to mental health, this research may also be hindered by the lack of recognition of the importance and feasibility of programmes that address mental health issues in the field of global health in general.[35–38]

Given the existence of the 36.5 million refugees and IDPs worldwide[1] who face significant rates of GBV and suffer from its sequelae, this lack of literature on prevention and management strategies consitutes a failure of the international community to uphold its commitment to the principle of humanity and human rights, and its legal responsibilities. The Sphere Project's Humanitarian Charter emphasizes the right to life with dignity and the right to protection and security in humanitarian situations[39] and from a legal standpoint, there are multiple international frameworks related to GBV that define the laws, roles and responsibilities of states and involved parties, from the Geneva Convention International Humanitarian Law (1949) to the 2009 UN Security Council Resolution.[40] Some of these frameworks are legally binding for the UN member states. Thus, it is the responsibility of the international community to engage in research to inform evidence-based policy on the prevention and management of GBV from both a moral and legal standpoint.

We argue that a range of overarching initiatives is desperately needed in order to address the pervasive lack of research regarding GBV in displaced populations. One important area to focus is on how monitoring and evaluation in the refugee setting can be improved in the existing initiatives and in general. The first and foremost factor is perhaps to change the mindset within international health service providers, emphasizing the importance of proper data collection in regard to forms and sequelae of GBV, and that collecting relevant data should be added into general and routine collection of health indicators and the public health surveillance system through accurate

documentation and tracking of GBV cases and health sequelae. The collective and collaborative work for better and widely acceptable definitions for different forms of GBV, and creating a monitoring system for therapeutic interventions to address specific health sequelae are not be overlooked. As a practical option with proven efficacy in various forms of public health surveillance in resource-poor settings, local community health workers could be effectively trained so that they could gather both qualitative and quantitative data on an ongoing basis.[41–43] The other area to improve the quantity and quality of research is performing direct primary research on the feasibility and efficacy of specific GBV prevention and management strategies that may be applicable in this setting. Given the difficulty of performing controlled trials and or other prospective research designs in the context of public health and community intervention, relevant organizations could consider performing multiple cross-sectional studies as viable options. Prevalence surveys evaluating outcomes of interest prior and after different types of preventive or management strategies for GBV sequelae over extended period of time and within subgroups of population are more feasible to perform and are likely to provide acceptable level of evidence.[44,45] We also argue that sound qualitative research is needed to seek and evaluate the perspective and solutions proposed by community members and or survivors. For technical resources and expertise in performing and maintaining sound research, service providers could consider teaming up with academic institutions or research-oriented organizations[34] that have both expertise and technology to provide consultancy and/or be deployed to short-term field assignments. In general, all forms of research should have a balanced focus on specific health outcomes, delivery of health services, and broader policy strategies, and they need to be contextualized incorporating community perspectives.[34]

Conclusions

The results of our systematic review indicate that there is a dire need for accessible research that evaluates the efficacy and effectiveness of various GBV prevention and management strategies in displaced populations. Ultimately, this research will allow the field of refugee health and protection to transition from one that is largely theoretical and expertise driven to one that is more evidence based. The guidelines put forth are extremely broad and fail to give specifics on how to prevent and manage GBV in this complex setting. We suspect this may also be due to a lack of published evidence that could give support to specific and proven interventions. It is interesting to note that all the guidelines include assessment and monitoring, clearly emphasizing the need for good data collection. It is likely that some data to support these interventions exist, and simply need to be published. There are obviously barriers that need to be addressed systematically, but the first and foremost step is to raise awareness of this issue among providers and research institutions in global health. The next is to, collectively and through professional organizations, seek resources, funding and technical assistance and develop strategies to overcome barriers in conducting primary data driven research amongst mobile and displaced populations.

Supplementary data

Supplementary data are available at *International Health* Online (http://inthealth.oxfordjournals.org/).

Authors' contributions: RA conceived and designed the study and analysed the data; RA, EE and MW searched the literature and reviewed and interpreted the data, drafted the manuscript, critically revised the manuscript for important intellectual content and read and approved the final version. RA is guarantor of the paper.

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References

1 UNHCR. UNHCR Statistical Yearbook 2009: Chapter II: Population Levels and Trends. Geneva: United Nations High Commissioner on Refugees; 2010. http://www.unhcr.org/4ce5317d9.html [accessed 1 February 2012].

2 Amowitz LL, Reis C, Lyons KH et al. Prevalence of war-related sexual violence and other human rights abuses among internally displaced persons in Sierra Leone. JAMA 2002;287:513–21.

3 Ward J. If not now, when? Addressing gender-based violence in refugee, internally displaced, and post-conflict settings. A global overview. New York, NY: The Reproductive Health for Refugees Consortium Consortium; 2002. http://www.rhrc.org/resources/ifnotnow.pdf [accessed 1 February 2012].

4 Kerimova J, Posner SF, Brown YT et al. High prevalence of self-reported forced sexual intercourse among internally displaced women in Azerbaijan. Am J Public Health 2003;93:1067–70.

5 Zraly M, Rubin-Smith J, Betancourt T. Primary mental health care for survivors of collective sexual violence in Rwanda. Glob Public Health 2011;6:257–70.

6 Hynes M, Robertson K, Ward J, Crouse C. A determination of the prevalence of gender-based violence among conflict-affected populations in East Timor. Disasters 2004;28:294–321.

7 Nduna S, Goodyear N. Pain Too Deep for Tears: Assessing the Prevalence of Sexual and Gender Violence Among Burundian Refugees in Tanzania. New York, NY: International Rescue Committee; revised September 1997. http://www.rescue.org/sites/default/files/migrated/resources/sgbv_1.pdf [accessed 1 February 2012].

8 Human Rights Watch. Sexual Violence and its Consequences Among Displaced Persons in Darfur and Chad - A Human Rights Watch Briefing Paper. New York, NY: Human Rights Watch; 12

April 2005. http://www.cmi.no/sudan/doc/?id=1069 [accessed 1 February 2012].

9 Zraly M, Nyirazinyoye L. Don't let the suffering make you fade away: an ethnographic study of resilience among survivors of genocide-rape in southern Rwanda. Soc Sci Med 2010;70:1656–64.

10 UNHCR. Reproductive Health in Refugee Situations: an Inter-agency Field Manual. Geneva: United Nations High Commissioner on Refugees; 1999. http://www.iawg.net/resources/iawg_Field%20Manual_1999.pdf [accessed 1 February 2012].

11 Austin J, Guy S, Lee-Jones L et al. Reproductive health: a right for refugees and internally displaced persons. Reprod Health Matters 2008;16:10–21.

12 Shanks L, Schull M. Rape in war: the humanitarian response. CMAJ 2000;163:1152–6.

13 WCRWC. Displaced Women and Girls at Risk: Risk Factors, Protection Solutions and Resource Tools. New York, NY: Women's Commission for Refugee Women and Children; 2006. http://www.womensrefugeecommission.org/images/stories/WomriskSyn.pdf [accessed 1 February 2012].

14 Kim AA, Malele F, Kaiser R et al. HIV infection among internally displaced women and women residing in river populations along the Congo River, Democratic Republic of Congo. AIDS Behav 2009;13:914–20.

15 Spiegel PB, Bennedsen AR, Claass J et al. Prevalence of HIV infection in conflict-affected and displaced people in seven sub-Saharan African countries: a systemic review. Lancet 2007;369:2187–95.

16 Cossa HA, Gloyd S, Vaz RG et al. Syphilis and HIV infection among displaced pregnant women in rural Mozambique. Int J STD AIDS 1994;5:117–23.

17 Lehmann A. Safe abortion: a right for refugees? Reprod Health Matters 2002;10:151–5.

18 John-Langba J. The relationship of sexual and gender-based violence to sexual-risk behaviour among refugee women in Sub-Saharan Africa. World Health Popul 2007;9:26–37.

19 Sideris T. War, gender and culture: Mozambican women refugees. Soc Sci Med 2003;56:713–24.

20 Hustache S, Moro MR, Roptin J et al. Evaluation of psychological support for victims of sexual violence in a conflict setting: results from Brazzaville, Congo. Int J Ment Health Syst 2009;3:7.

21 UNHCR. Working with the Internally Displaced. UNHCR Global Report. Geneva: United Nations High Commissioner on Refugees; 2010.

22 UNHCR. Working with the Internally Displaced. UNHCR Global Appeals Update. Geneva: United Nations High Commissioner on Refugees; 2011. http://www.unhcr.org/4dfdbf380.html [accessed 1 February 2012].

23 UNHCR. Convention and Protocol Related to the Status of Refugees. Geneva: United Nations High Commissioner on Refugees; 2010. http://www.unhcr.org/3b66c2aa10.html [accessed 1 February 2012].

24 UNHCR. GBV Protocols and Sexual and Gender-Based Violence Against Refugees, Returnees and Internally Displaced Persons, Guidelines for Prevention and Response. Geneva: United Nations High Commissioner on Refugees; 2003. http://www.unicef.org/emerg/files/gl_sgbv03.pdf [accessed 1 February 2012].

25 Altaras R, Schilperoord M. A Field Experience: Evaluation of the Introduction of Post Exposure Prophylaxis in the Clinical Management of Rape Survivors in Kibondo Refugee Camps, Tanzania. Geneva: United Nations High Commissioner on Refugees, HIV-AIDS Unit; 2005. http://data.unaids.org/pub/Report/2005/pep_field_experience.pdf [accessed 1 July 2012].

26 UNHCR. Evaluation of UNHCR's Efforts to Prevent and Respond to Sexual and Gender Based Violence in Situations of Forced Displacement. Geneva: United Nations High Commissioner on Refugees; 2008. http://www.unhcr.org/48ea31062.html [accessed 1 June 2012].

27 WHO. Guidelines for Medico-legal Care for Survivors of Sexual Violence. Geneva: World Health Organization; 2003. http://whqlibdoc.who.int/publications/2004/924154628X.pdf [accessed 1 July 2012].

28 WHO. Clinical Management of Rape Survivors. Geneva: World Health Organization; 2004. http://www.who.int/reproductivehealth/publications/emergencies/924159263X/en/index.html [accessed 1 July 2012].

29 WHO. Inter Agency Field Manual on Reproductive Health in Humanitarian Settings. Geneva: World Health Organization; 2010. http://www.who.int/reproductivehealth/publications/emergencies/field_manual_rh_humanitarian_settings.pdf [accessed 1 July 2012].

30 IASC. Action to Address Gender Based Violence in Emergencies: IASC Statement of Commitment. Geneva: Inter-Agency Standing Committee; 2004. http://www.who.int/hac/network/interagency/StatementonGBV12_2004.pdf [accessed 1 February 2012].

31 IASC. Guidelines for Gender-based Violence Interventions in Humanitarian Emergencies: Focusing on Prevention and Response to Sexual Violence. Geneva: Inter-Agency Standing Committee; 2005. http://www.humanitarianinfo.org/iasc/pageloader.aspx?page=content-subsidi-tf_gender-gbv [accessed 1 February 2012].

32 Heise LL, Pitanguy J, Germain A. Violence Against Women: The Hidden Health Burden. Washington, DC: The World Bank; 1994, World Bank Discussion Paper, No. 255. http://documents.worldbank.org/curated/en/1994/07/442273/violence-against-women-hidden-health-burden [accessed 1 February 2012].

33 Voelker R. Mission to Chad pinpoints sexual violence. JAMA 2009;302:477–80.

34 Turner T, Green S, Harris C. Supporting evidence-based health care in crises: what information do humanitarian organizations need? Disaster Med Public Health Prep 2011;5:69–72.

35 Saraceno B, van Ommeren M, Batniji R et al. Barriers to improvement of mental health services in low-income and middle-income countries. Lancet 2007;370:1164–74.

36 Minas H, Cohen A. Why focus on mental health systems? Int J Ment Health Syst 2007;1:1.

37 Eaton J, McCay L, Semrau M et al. Scale up of services for mental health in low-income and middle-income countries. Lancet 2011;378:1592–603.

38 Tomlinson M, Lund C. Why does mental health not get the attention it deserves? An application of the shiffman and smith framework. PLoS Med 2012;9:e1001178.

39 Sphere Project. Humanitarian Charter and Minimum Standards in Disaster Response. Geneva: The Sphere Project; 2011. http://www.sphereproject.org/handbook/ [accessed 1 February 2012].

40 GBV AoR. Handbook for Coordinating Gender-based Violence Interventions in Humanitarian Settings. Global Protection Cluster, Gender-based Violence Area of Responsibility Working Group; 2010, p. 131–2. http://www.globalprotectioncluster.org/_assets/files/tools_and_guidance/gender_based_violence/GBV_Handbook_Long_Version_EN.pdf [accessed 1 February 2012].

41 Liu A, Sullivan S, Khan M et al. Community health workers in global health: scale and scalability. Mt Sinai J Med 2011;78:419–35.

42 Wakabi W. Extension workers drive Ethiopia's primary health care. Lancet 2008;372:880

43 Farzadfar F, Murray CJ, Gakidou E et al. Effectiveness of diabetes and hypertension management by rural primary health-care workers (Behvarz workers) in Iran: a nationally representative observational study. Lancet 2012;379:47–54.

44 Victora CG, Habicht JP, Bryce J. Evidence-based public health: moving beyond randomized trials. Am J Public Health 2004;94:400–5.

45 Des Jarlais DC, Lyles C, Crepaz N; TREND Group. Improving the reporting quality of nonrandomized evaluations of behavioral and public health interventions: the TREND statement. Am J Public Health 2004;94:361–6.