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Kelley VanMaldeghem Date

Sexual and Reproductive Health Programs in Complex Humanitarian Emergencies: A Systematic Review

By

Kelley VanMaldeghem
Master of Public Health

Hubert Department of Global Health

Dabney P. Evans, PhD, MPH
Committee Chair

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By

Kelley VanMaldeghem

BSN
University of Michigan
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Thesis Committee Chair: Dabney P. Evans, PhD, MPH

An abstract of
A thesis submitted to the Faculty of the
Rollins School of Public Health of Emory University
in partial fulfillment of the requirements for the degree of
Master of Public Health
in Global Health
2016

Abstract

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By Kelley VanMaldeghem

The shift in focus over the last two decades to the sexual and reproductive health of women refugees in complex humanitarian emergencies (CHEs) has revealed extraordinarily large gaps of unmet needs in this population. This merits a review and evaluation of previous and present sexual and reproductive programs occurring in CHEs to identify what approaches have been effective in fulfilling unmet needs and what future actions are needed to address remaining needs. This systematic review of the literature examines both published and unpublished (grey) literature to conduct a detailed evaluation of sexual and reproductive programs and interventions that have occurred in CHE settings. A total of 20 articles are identified within the systematic review, evaluating programs that focus on the key areas of maternal health, family planning, human immunodeficiency virus (HIV)/acquired immunodeficiency syndrome (AIDS) & sexual transmitted infections (STIs), and gender-based violence (GBV). A discussion of the programs focuses on successes of the interventions, along with gaps that are still existing within the identified key areas. This systematic review concludes with recommendations for future sexual and reproductive programs and interventions.

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Acknowledgements

I would like to extend my utmost gratitude to Dr. Dabney Evans. Without her continued support, guidance, and encouragement to explore this topic this thesis would not exist. I am so grateful for all you have done to help make this thesis a reality. Thank you.

I would also like to extend a heartfelt thank you to my family. Without their continued love and support I could not have made it to where I am today. I love you all so much.

Acronyms

AIDS	Acquired Immunodeficiency Syndrome
ARC	American Refugee Committee
CHE	Complex Humanitarian Emergency
HIV	Human Immunodeficiency Virus
IASC	Inter-Agency Standing Committee
IAWG	Inter-Agency Working Group on Reproductive Health in Refugee Situations
ICPD	International Conference on Population and Development
IUD	Intrauterine Device
IRC	International Rescue Committee
FP	Family Planning
GBV	Gender-Based Violence
LARC	Long-Term Acting Reversible Contraceptives
MISP	Minimal Initial Service Package
NGO	Non-Governmental Organization
RH	Reproductive Health
RHRC	Reproductive Health Response in Conflict
STIs	Sexually Transmitted Infections
UN	United Nations
UNFPA	United Nations Population Fund
UNHCR	United Nations High Commissioner for Refugees
WHO	World Health Organization

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Introduction

Over the last two decades there has been an increasing shift of focus to the sexual and reproductive health needs of refugees in complex humanitarian emergencies (CHEs) settings; this recent rotation of attention has unearthed extraordinarily large gaps of unmet sexual and reproductive health needs for women refugees in CHEs. As the number of CHEs continues to increase each year, leading to a rapidly increasing population of refugees, many of whom are women, action is desperately needed to not only address their basic needs of shelter, food and water, but also to address the equally important and vital sexual and reproductive health needs of these refugees. This calls for a review and evaluation of previous and present sexual and reproductive health programs and interventions that have occurred in CHEs to identify what approaches have been effective in filling gaps and what future actions must be taken to address needs still remaining unmet.

Definition of Terms

The key terms that will be used in this systematic review will be defined here. *Reproductive Health* is defined in accordance to the International Conference on Population and Development (ICPD)'s Programme of Action as "a state of complete physical, mental, and social well-being and not merely the absence of disease or infirmity, in all matters relating to the reproductive system" (ICPD, 1994). *Complex Humanitarian Emergency* is defined in accordance to the Inter-Agency Standing Committee (IASC) as "a humanitarian crisis in a country, region or society where there is total or considerable breakdown of authority resulting from internal or external conflict and which requires an international response that goes beyond the mandate or capacity of any single and/or ongoing UN country programme" (WHO, 2008). *Refugee* is defined in accordance to the 1951 Refugee Convention's Status of Refugees

Document as someone who "owing to a well-funded fear of being persecuted for reasons of race, religion, nationality, membership of a particular social group or political opinion, is outside the country of his nationality, and is unable to, or owing to such fear, is unwilling to avail himself of the protection of that country" (UNHCR, 2001).

Background and Significance

Sexual and reproductive health first became a true area of focus and concern to humanitarian actors in the early 1990s; up until this point, it was truly only pregnant women that received targeted health care and interventions, many of which only focused on the woman's health in terms of her pregnancy (McGinn, Casey, Purdin & Marsh, 2004). The first truly influential document released that brought attention to the specific challenges female refugees faced was the United Nations High Commissioner for Refugees' (UNHCR) 1990 'Policy on Refugee Women and International Protection' (McGinn et al., 2004). The policy, although not specific about the reproductive health services that should be allotted to women refugees, did state that the needs of refugee women should be actively considered and accounted for in all aspects of humanitarian programming (UNHCR, 1990). The policy also made sure to emphasize that is UNHCR's responsibility to prevent and address physical and sexual abuse, and more specifically, physical and sexual abuse against women refugees (UNHCR, 1990; McGinn et al., 2004).

Following the release of this policy The Lancet released their own equally influential editorial arguing in favor of the vital need for sexual and reproductive health services for refugee women (Black, Forster & Mezey, 1993). The editorial, 'Reproductive Freedom for Refugees' was one of the first literature pieces to note just how poor reproductive health was for refugee women: it in its review of different refugee populations located throughout the world, it reported

on the extremely limited amount of options refugees had for sexual and reproductive health care and the devastating health effects resulting from the unmet needs of women. The article concluded with a pleading call for action, stating that although "refugees are a nation lacking borders, surely they deserve reproductive freedom" (Black et al., 1993).

This call to action was only further intensified when the following year, in 1994, the Women's Commission for Refugee Women and Children released their own study illuminating the truly shocking limited amount of reproductive health resources available for refugees (McGinn et al, 2004). That same year, following these reports and declarations, the United Nations Internal Conference on Population and Development (ICPD) was held and, in what many credit to be the most influential moment for sexual and reproductive health of refugee populations, 179 countries came together in Cairo to adopt the Programme of Action (Ashford, 2004). This Programme formally defined sexual and reproductive health, and for the first time, recognized reproductive health care as a right that should be allotted to all refugees (Ashford, 2004).

Following ICPD's landmark declaration in Cairo, many non-governmental organizations (NGOs) were quick to join the efforts of making sexual and reproductive care in CHEs a priority. Five of these NGOs, Care, the International Rescue Committee, the JSI Research and Training Institute, Marie Stopes International and the Women's Commission for Refugee Women and Children formed the Reproductive Health Response in Conflict Consortium with the main aim of promoting access to complete and quality reproductive health care in CHEs (McGinn et al., 2004). In 1998 this group expanded to seven members with the American Refugee Committee (ARC) and the Heilbrunn Department of Population and Family Health at Columbia University joining in (UNHCR, 2004).

Another group, the Inter-Agency Working Group on Reproductive Health in Refugee Situations (IAWG) also emerged at this time, and, composed of UNHCR and the United Nations Population Fund (UNFPA), also dedicated themselves to strengthen access to quality sexual and reproductive health services for people in CHEs (McGinn et al, 2004). In 1999, IAWG made its biggest contribution to sexual and reproductive health yet with its production of the first ever field manual for reproductive and sexual health, "Reproductive Health in Refugee Situations: An Inter-Agency Field Manual" (Austin, Guy, Lee-Jones, McGinn & Schlecht, 2008). Another key advance made by IAWG in the field was the introduction of the Minimum Initial Service Package (MISP) within the IAWG Field Manual (Austin et al., 2008). The MISP, one of the most important sexual and reproductive health interventions currently being implemented in a growing number of CHEs, is composed of a set of reproductive health activities that are intended to be implemented during the initial stages of a CHE (Onyango, Hixson & Siobhan, 2012). The MISP is one of the first tools that put forth the targeted areas of focus of sexual and reproductive reproductive health in CHEs, including: rape and GBV, the transmission of HIV/AIDS & STIs, increases in maternal mortality, and access to family planning (Onyango, Hixson & Siobhan, 2012). The MISP often serves as a foundation for current sexual and reproductive health interventions, and evaluations on its effectiveness have shown that while work is still needed to improve upon it, it is currently one of the most recognized and comprehensive tools available for the immediate aftermath of a CHE (Onyango, Hixson & Siobhan, 2012).

However, while much progress has been made in the last two decades in sexual and reproductive health in CHEs, there still remains vast gaps of unmet sexual and reproductive health needs for women refugees: the maternal mortality rate in CHEs remains around 1.9 times the world average, and the number of maternal deaths in CHEs accounts for an estimated 61% of

the total number of maternal deaths worldwide (UNFPA, 2015). Family planning services remain an often neglected area of sexual and reproductive health programs in CHEs, with only 14% of funding appeals for reproductive health including family planning; furthermore, family planning remains completely unavailable in some CHEs, and in others it is often only short-term methods that are available to women (International Rescue Committee, 2015). Looking at HIV/AIDs and STI services, numerous studies have shown rates of HIV/AIDS and STIs in CHEs to be as high as 6% and 13% respectfully, and with many health centers and hospitals unable to offer all needed treatment medicals or HIV post-exposure prophylaxis this is unlikely to change (McGinn, 2000; Henttonen, Watts, Roberts, Kaducu & Borchert, 2008). Finally, looking at the focus area of gender-based violence, studies in Uganda, Thailand and Columbia have shown the proportion of women that have experienced some form of gender-based violence to range anywhere from 23% to as high as 44%; unfortunately, in CHE settings there still remain too few systems in place for victims to safely report incidences of violence or receive treatment and support so without dramatic intervention, this number is likely to remain as is or continue to grow (Austin et al., 2008).

Purpose Statement

The purpose of this systematic review is to identify and evaluate current and past sexual and reproductive health programs and interventions carried out in complex humanitarian emergencies. More specifically, this paper will evaluate sexual and reproductive health programs and their impacts on the four identified focus areas: maternal health, family planning, HIV/AIDs & STIs, and gender-based violence. These findings will be used to identify gaps still remaining within sexual and reproductive health programs being carried out in CHEs and make recommendations for future interventions in this area.

Methods

As previously stated, the goal of this systematic review is to evaluate sexual and reproductive health programs that have been carried out in complex humanitarian emergency settings and identify gaps and problems that exist within these programs. In order to accomplish this goal, a review of both published and unpublished ("grey") literature was performed. Specific inclusion and exclusion criteria were developed and applied to a literature search performed across four databases. Articles fitting the defined inclusion criteria were analyzed and main themes in the literature were defined; a meta-analysis was not conducted. This study did not require review by the Institutional Review Board (IRB).

This study involved a review of the literature for articles published in Pubmed, Embase, Popline and Web of Science. The same search terms were utilized for the four searches; no changes to search terms or to the dictation of the search terms was needed to conduct a search successfully in the four databases. Details regarding the search terms are shown in Table 1:

Table 1: Search Terms Used in Databases

Database	**Search Terms**
Pubmed	("sexual health" OR "reproductive health" OR "maternal health" OR "gender-based" OR "family planning" OR contraceptive) AND ("protracted crisis" OR "protracted crises" OR disaster OR "humanitarian emergency" OR "humanitarian crisis" OR refugee) AND (Service OR services OR intervention OR interventions OR program OR programs OR prevention OR education)
Embase	
Web of Science	
Popline	

After the search was conducted in all four databases citations were exported to EndNote and all duplicates were deleted. Titles and abstracts of each piece of literature were reviewed and evaluated using the pre-determined exclusion and inclusion criteria. In order to be considered for inclusion into the systematic review, the literature had to be:

- Written in English;
- Published between the years January 1st 1990 to December 31st, 2015. The year 1990 was decided as a starting point because sexual and reproductive health programs truly began to take shape and become a priority in the early 1990s as a result of the Cairo Declaration (Ashford, 2004). Prior to this point in time, sexual and reproductive health was not seen as a fundamental human right for all refugees and programs from this time were often focused only on maternal health;
- Available through the Emory Library or other catalog system;
- Evaluate a sexual and reproductive health program or intervention that has been carried out;
- Discuss a reproductive or sexual health intervention or program carried out in a complex humanitarian emergency.

Exclusion criteria included:

- Published in a language besides English;
- Published before 1990 or in 2016, after this literature search was conducted;
- Did not have full text available through the Emory library system or any other catalog system;
- Did not evaluate or discuss the results of a sexual and reproductive health program or intervention being implemented in an emergency setting;
- Discussed a sexual and reproductive health program carried out in non-crisis setting. complex humanitarian emergencies provide a unique setting with unique challenges, and as such reproductive and sexual health programs carried out in the response and recovery stages of a complex humanitarian emergency environment may be fundamentally

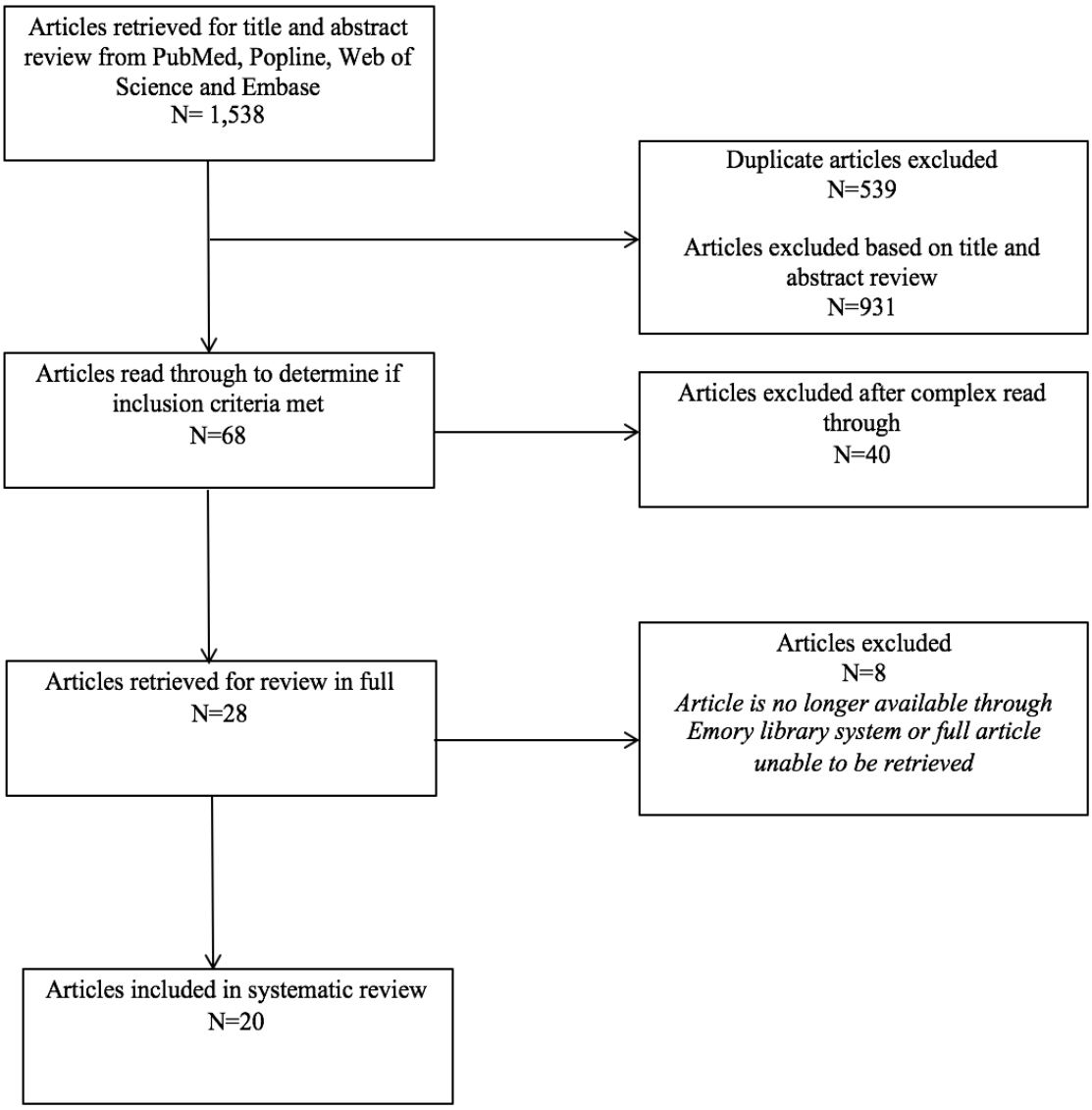
different than sexual and reproductive health programs carried out in non-emergency settings.

As sexual and reproductive health in emergencies is a relatively new practice, grey literature documents (i.e. documents from organizations like the International Rescue Committee) were accepted in an effort to obtain all relevant data and information available for this systematic review; all grey literature documents were examined and evaluated using the existing inclusion and exclusion criteria.

Full text was obtained for all articles that met the inclusion criteria. All articles were carefully studied to insure their adherence to the specified inclusion criteria; any literature that did not was excluded from the final results. After careful review, a list of core themes within the literature was identified: gender-based violence, family planning, maternal health care including abortion, and HIV/AIDS & STIs. Relevant data were extracted from the final selected literature and input and within an Excel spreadsheet; these data were organized within Excel by theme.

Using the above described search strategy, there were a total of 1538 articles retrieved from the four databases; after duplicates were removed 999 article remained. Upon completion of screening titles and abstracts a total of 931 articles were excluded. Of the remaining 68 articles 39 of them were excluded after a full reading of the article was conducted. An additional 8 articles were excluded because the full article was unavailable or because the article could not be accessed through the Emory library system. Details regarding the excluding and including of articles are shown in Figure 1.

Figure 1. Flow diagram illustrating article review process



In total, 20 articles were ultimately identified in the published and unpublished (grey) literature as meeting the inclusion criteria.

Results

Of the 20 articles selected for review it was found that 5 focused on HIV/AIDS and STI programs and interventions, 2 focused on gender-based violence, 3 focused on pregnancy and maternal health care, 4 focused on family planning, and 6 focused generally on sexual and reproductive health as a whole. The 20 studies were conducted in 19 different crisis affected countries, with some interventions occurring in multiple countries concurrently. The earliest intervention evaluated occurred in 1994 and the most recent in 2013.

HIV/AIDS & STIs

The 5 articles that focused on HIV/AIDS and STIs included 3 education-based programs and 2 prevention and treatment based programs. Two of the education programs, both carried out in Guinea, focused on the 'reproductive health for refugees by refugees model' with refugees being trained by nurses and midwives to provide education to the other men and women refugees in their communities (Chen, von Roenne, Souare, von Roenne, Ekirapa, Howard, & Borchert, 2008; Woodward, Howard, Souare, Kollie, von Roenne, & Borchert, 2011). In both studies it was found that receiving peer education had a greater impact on the knowledge and behaviors of refugees then receiving information from a health care worker or other source; Chen et al. (2008) found that both men and women that received education from a peer educator were more likely to identify effective methods to prevent STIs (adjusted odds ratio (OR) =2.9, 95% confidence interval (CI) of 1.5-5.8 in men and OR=4.6, 1.6-13.2 in women). Both men and women in Chen et al. (2008) named refugees as their education sources were also more likely to be able to identify key STI symptoms (OR for men 5.2%, CI 1.9-13.9, and OR for women 2.0, 95% CI .9-4.6). In the Woodward et al. (2011) study refugees that reported receiving peer education had

over twice the odds of reporting practicing HIV-avoidant behaviors than refugees receiving their information from other sources (adjusted OR 2.49, CI 1.52-4.08).

The other education program carried out in Sierra Leone focused on male and female youth and used trained health care workers to provide education (Casey, Larsen, McGinn, Sartie, Dauda & Lahai, 2006). In this program a post-intervention survey found that HIV/AIDs knowledge had greatly increased for both female and male youth during the two-year intervention period, with those able to name three effective means of preventing HIV/AIDS growing from 4% at baseline to 36% post-intervention among female youth and from 4% to 45% among male youth (Casey et al., 2006). Furthermore, reported condom use also increased during the intervention period, with a baseline of 16% of female youth reporting use of condoms at last sexual intercourse and 46% condom use post-intervention; for male youth, use of condoms at last act of sexual intercourse increased from 16% at baseline to 37% post-intervention (Casey et al., 2006).

The fifth study, carried out by the Joined United Nations Programme on HIV/AIDS, evaluated a large-scale HIV/AIDs & STI program that was implemented in 1994 in Rwandan refugee camps in Tanzania (African, M. R., Foundation, London School of Hygiene, Tropical Medicine, 2003). The evaluation, a survey collecting data on specific indicators 18 months after the start of the program, found that overall the program had the biggest impact in STI prevention and treatment; over 11,000 cases of STIs were treated within the first year of intervention (African Medical Research Foundation, 2003). Additionally, the amount of vaginal infections treated decreased by 25% and the prevalence of syphilis remained at low levels throughout the intervention (no reported numbers given) (African Medical Research Foundation, 2003).

The sixth and final study evaluated a two-year pilot program that focused on preventing mother-to-child HIV transmission in the Greater Lukole refugee camp located in western Tanzania (Rutta, Gongo, Mwansasu, Mutasingwa, & Rwegasira, 2008). The program activities focused on routine voluntary HIV testing and counseling for all pregnant women, administration of Nevirapine to all HIV-infected women when they were in labour and to infants 72-hours after being born to an HIV-infected mother, and infant feed counseling for HIV-infected mothers (Rutta et al., 2008). At the end of the two- year study period it was found that of the 201 HIV-infected women in the camp, 93% agreed to take Nevirapine at 34 weeks of gestation, with only three women refusing (Rutta et al., 2008). Additionally, all women that tested HIV positive brought their newborns to the hospital for Nevirapine (Rutta, 2008). The program also found that 14.4% of males that received HIV couples counseling with their partners agreed to get testing, an observed increase then what it was before the program occurred; however, no baseline data was available for comparison (Rutta et al., 2008).

Gender-Based Violence

Two studies were identified that focused on the prevention and treatment of GBV. One evaluated the Inter-Agency Standing Committee's Guidelines for GBV in 12 health facilities and the other discussed a multi-year video project run by the American Refugee Committee (ARC) and Communication for Change (Henttonen, Watts, Roberts, Kaducu & Borchert, 2008; Gurman, Trappler, Acosta, McCray, Cooper & Goodsmith, 2014).

The Henttonen et al. (2008) evaluation of the IASC Guidelines for GBV took place in Gulu, Uganda in 4 hospitals and 8 health clinics and was completed through in-depth interviews and a stock supply review. Overall, while it was found that while effort had been made to adhere to the guidelines, significant gaps in coverage still existed. First, the evaluation found that while

the majority of health facilities had at least one staff member formally trained on GBV treatment, the majority of the trained staff members reported that they did not feel confident treating or counseling GBV survivors. Additionally, only 2 of the 4 hospitals had post-exposure prophylaxis (PEP) in stock to prevent HIV infection and only 1 of the 8 health clinics had emergency contraception available (Henttonen et al., 2008). Furthermore, all health facilities reported only seeing a small number of cases of reported sexual violence during the last six months, and all thought survivors did not feel safe enough coming forward to report experiences of violence; many health providers actually thought GBV had increased due to living conditions of the camps, although no concrete numbers were available to support this (Henttonen et al., 2008).

The Gurman et al. (2014) study discussed a multi-year video project called "Through Our Eyes" that filmed and screened videos in communities in South Sudan, Uganda, Thailand, Liberia and Rwanda about different gender-based violence issues. The videos were viewed in the communities that they were shot in and following the viewing focus groups were formed with community members where they were encouraged in engage in open dialogue about GBV (Gurman et al., 2014). In the focus groups respondents that viewed the videos reported increased awareness about women's rights and, males in particular, reported the video project allowing them to gain a clearer understanding of their own rights as well as the rights of women (Gurman et al., 2014). Men also reported increased knowledge of GBV and a change in their attitude and behavior towards their spouses and partners (Gurman et al., 2014). Additionally, women and children reported increased communication within their families and reduced incidences of violence (Gurman et al., 2014). Overall, this video project was very positively received by the

communities it occurred in and was credited with allowing open and honest discussion to occur within communities about GBV and the importance of preventing it (Gurman et al., 2014).

Family Planning

Three of the articles in the systematic review on the topic of family planning discussed programs that involved introducing reproductive health services into health facilities and clinics that served refugee camps (Curry, Rattan, Huang & Noznesky, 2015; Curry, Rattan, Nzau & Giri, 2015; Madi, 1998). The remaining article focused on training refugee midwives to provide health information to their fellow refugees (Howard, Kollie, Souare, von Roenne, Blankhard, Newey, Chen & Borchert, 2008).

In all 3 studies that introduced reproductive health services into health centers in refugee camps there was an increase in modern contraceptives used; in the Curry et al. study (2015) 52,616 new users were documented in the 5 different countries the study was carried out in (Chad, Democratic Republic of Congo, Djibouti, Mali and Pakistan) and in the Madi study (1997) 41.1% of women were documented as using modern contraceptive methods (compared to 37.5%) pre-intervention. The Curry et al. study (2015) also documented the types of contraceptives that new users took up and found that 61% of new users chose long-term reversible contraceptive (LARC) methods. The Madi (1997) study further found that the prevalence of contraceptive use increased in each age group during the study except for the 40 and above group.

Examining the Howard et al. (2008) study, it was found that when refugee midwives were used to educate fellow refugees on reproductive health, the amount of knowledge on family planning methods increased in both men and women: at the end of the study over 90% of men and women knew where to access contraceptive methods. More so, the Howard et al. (2008)

study found that refugee educators were cited by both men and women as their primary source of reproductive health information during the study, and in camps that were served by refugee educators the number of contraceptives used was higher than both the refugees' country of origin or host country (17% vs. 3.9% and 4.9% respectively). It was also found that female participants were almost 5 times more likely to know about family planning concepts and methods than were male participants (OR 4.8, 90% confidence interval 2.9-7.9) (Howard et al., 2008).

Maternal Health

Of the 3 articles included in this systematic review, 2 focus on a pilot project carried out in Burma between 2005 and 2008 that aimed to bring maternal care services directly to refugees through community-based providers, instead of requiring refugees to seek out services in their communities (Mullany, Lee, Yone, Lee, Teela, Paw, Shwe Oo, Maung, Kuiper, Masenior & Beyrer, 2010; Mullany, Paw, Shwe Oo, Maung, Kuiper, Masenior, Beyrer & Lee, 2008). The other described an emergency obstetric care project that was implemented by the Reproductive Health Response in Conflict in 9 different countries (Krause, Meyers, Friedlander, 2006).

The Burma pilot project carried out used a three-tiered network of community-based providers to provide health care in refugee communities: the first tier was made up of traditional birth attendants that oversaw uncomplicated deliveries, ensured that proper hygienic practices were followed during deliveries and created connections between community members and higher-tired workers as needed (Mullany et al., 2010; Mullany et al., 2008). The second tier of workers consisted of health workers and they were in charge of overseeing antenatal care, managing family planning supplies, and providing misoprostol for the prevention of postpartum hemorrhage (Mullany et al., 2010; Mullany et al., 2008). The final and third tier consisted of maternal health workers that were responsible for monitoring the care that traditional birth attendants and health workers provided; they also oversaw complicated deliveries (Mullany et

al., 2010; Mullany et al., 2008). Using this three tier system where health care workers went into the refugee camps to provide care directly, it was found that: women were much more likely to receive antenatal care (71.8% compared to 39.3% at baseline), postnatal care visits doubled, use of modern contraceptive methods increased to 45% from 23.9% and attendance at birth by trained birth attendants to deliver emergency obstetric care increased almost 10-fold from 5.1% at baseline to 48.7% (Mullany et al., 2010; Mullany et al., 2008).

In the Krause et al. (2006) study of emergency obstetric care 11 hospitals and 12 health care clinics received some kind of infrastructure support (including new rooms, reorganization of patient flow, renovation of water systems or additions of solar panels and generators for electricity), training for staff, and hiring of additional staff if needed. Overall, it was found that with the provision of these services the number of hospitals that were able to provide comprehensive emergency obstetric care increased from 3 to 10 and from 2 to 10 clinics (Krause et al., 2006). Additionally, it was observed that the number of facility deliveries increased and the number of obstetric complications managed also greatly increased (Krause et al., 2006).

General Sexual and Reproductive Health

Three articles broadly assessed the implementation of the MISP in 3 different countries (Krause, Heller & Tanabe, 2011; Krause, Williams, Onyango, Sami, Doedens, Giga, Stone & Tomczyk, 2015; Women's Commission for Refugee & United Nations Population Fund, 2004). One discussed a program aimed at educating adolescents on reproductive health in Columbia, and another evaluated a program aimed at improving reproductive health services in the Mae Tao Clinic that provides health care services to internally displaced people from Burma along the Thailand-Burma border (Bosmans, Gonzalez, Brems & Temmerman, 2012; Sullivan, Maung & Sophia, 2004).

All articles evaluating the MISP found major gaps in implementation. Considering the focus area of GBV specifically, the MISP evaluation in Haiti found that prevention and response activities were extremely weak at the community level (Krause, Heller & Tanabe, 2011). The evaluation also identified several risk factors for GBV, including: insufficient lighting, communal latrines and bathing facilities that had no privacy were all identified as concerns (Krause, Heller & Tanabe, 2011). The MISP evaluation in Jordan found that all camps evaluated had insufficient measures in place to prevent sexual violence, and women in all camps often reported feeling unsafe and had concerns about insufficient lighting, especially at night (Krause et al., 2015). More so, the MISP evaluation in Chad found that women often reported attacks and experiences of sexual violence when trying to collect firewood (Women's Commission for Refugee & United Nations Population Fund, 2004). Additionally, it was found in all but one camp in the Jordan evaluation that clinical supplies for the management of rape were unavailable (Krause, Heller & Tanabe, 2011; Krause et al., 2015; Women's Commission for Refugee & United Nations Population Fund, 2004). Furthermore, Haiti was the only country able to offer any family planning services, although their supply of condoms did dwindle as the response went on (Krause, Heller & Tanabe, 2011; Krause et al., 2015; Women's Commission for Refugee & United Nations Population Fund, 2004). It was also found in all three country settings that the referral system for obstetric emergencies was insufficient and medical facilities were often unable to handle obstetric emergencies; clean delivery kits were also unavailable in all three settings (Krause, Heller & Tanabe, 2011; Krause et al., 2015; Women's Commission for Refugee & United Nations Population Fund, 2004). Finally, while some key informants in each country setting were aware of what MISP stood for and entailed, many still believed that reproductive health activities should not be performed until the CHE setting had become more stable, and

coordination of reproductive health activities was often insufficient with no organization or cluster leading the effort (Krause, Heller & Tanabe, 2011; Krause et al., 2015; Women's Commission for Refugee & United Nations Population Fund, 2004).

In the Bosmans et al. (2004) article, where Columbian refugees participated in a program implemented by the United Nations Population Fund and the government of Columbia, it was found that adolescents participating in the education program had a much better understanding of ways to prevent STIs/HIV/AIDs and prevent unwanted pregnancy (Bosmans et al., 2012). Furthermore, with the use of different forms of interactive theatre it was found that the program was able to also help both male and female adolescents gain a better understanding of GBV and the ways to prevent it (Bosmans et al., 2012). Additionally, both adolescent girls and boys showed increased uptake of condom use after the intervention, although it was noted that health facilities struggled to keep up with the newly created demand (Bosmans et al., 2012).

Finally, examining the Sullivan, Maung & Sophia (2004) article on increasing reproductive services offered at the Mae Tao Clinic, it was reported by participants that the sexual and reproductive care they received at the clinic became dramatically more comprehensive with the addition of antenatal care, deliveries, family planning and treatment and prevention of STIs/HIV/AIDs to the clinic services. All participants interviewed after receiving care at the clinic reported an increase in the providers' willingness to counsel and advise patients about family planning, HIV/AIDS and STI prevention and treatment, and GBV prevention (Sullivan, Maung & Sophia, 2004). Furthermore, it was reported through observation that follow-up care for HIV/STI testing and antenatal visits also greatly increased in the clinic (Sullivan, Maung & Sophia, 2004).

Discussion

While examining the results of these studies and understanding the successes of previous sexual and reproductive health programs in CHE settings is vital to understanding the most effective ways to meet the needs of this population of people, it is equally important to understand the limitations of these studies before recommendations for future programs can be considered.

Limitations

The first and biggest limitation was that only 20 articles were identified as having met the inclusion criteria of the review. This is in part due to the fact that research in sexual and reproductive health in humanitarian emergencies is still a newer and growing field; sexual and reproductive health has only been considered a priority area of humanitarian emergency response efforts for a little over two decades and much of the literature in the field discusses potential programs or programs currently being carried out with plans for evaluations in the future. Furthermore, the focus areas within sexual and reproductive health (GBV, HIV/AIDS & STIs, family planning, and maternal health care) are often considered sensitive topics to discuss, and with the environment of complex humanitarian emergencies already making it difficult to collect information during a response effort, it may be even harder to encourage refugees to discuss such sensitive issues as sexual and reproductive health. Additionally, it is important to consider the strict nature of the inclusion and exclusion criteria and that because this study was being conducted by one individual relying on the Emory library system there were some articles that may have been relevant but were unable to be retrieved because of limited resources.

More so, when considering limitations, it is important to consider the caliber of the research carried out in these evaluation studies. Many of the studies relied on focus groups and

in-depth interviews to gather their evaluation data, and while considered respected research techniques to gathering information on sensitive subjects, these method still leave room for bias as data may not be generalizable to whole populations within camps and participants may not share all relevant information or try to appease those conducting the interviews and focus groups. Furthermore, a number of the studies also relied on observed differences and had no pre-intervention data to compare to; while observational differences can acknowledge obvious increases or decreases in individuals seeking services without pre-intervention data, there is no way to truly evaluate the impact of a program with these types of data. Additionally, when looking at the types of interventions conducted many focused on knowledge providing or education related activities, and while these programs often proved effective, there were few interventions focusing on other program designs, including the scale up of services in health facilities; as education programs often lead to a greater demand of services and supplies it would be important in the future to consider the capacity of health facilities and hospitals to fulfill this increased demand and potentially add a scale up of services component into the education intervention. Finally, it is important to note that only 5 studies contained any statistical evidence, further providing evidence to the claim that more detailed research is needed to be conducted in this field of study.

Recommendations

When examining all the evidence presented in this systematic review, several recommendations for future sexual and reproductive health programs can be made. First, looking at several studies on the entire MISP it was not unusual to find that fewer than half of field staff working in an emergency had heard of the MISP and even fewer were familiar with the MISP objectives and activities (Onyango, Hixson & McNally, 2013). More so, it was not

unusual for humanitarian staff workers to wait until the emergency phase of a CHE has passed before conducting sexual and reproductive health activities (Onyango, Hixson & McNally, 2013). This lack of awareness must change. For the past two decades sexual and reproductive health has been cited as a priority area of focus that must be considered in the emergency phase of a CHE and it is vital that the humanitarian workers responding to these emergencies make it one. Furthermore, while the MISP is only one tool (but often the most common tool) used to address sexual and reproductive health in emergencies, it is important that humanitarian staff understand the key areas of focus identified in the MISP (GBV, HIV/AIDS & STIs, maternal care and family planning) as these are truly the areas that have the greatest impact on sexual and reproductive health and these are the areas that sexual and reproductive health care programs and interventions are often built upon. Finally, to ensure that sexual and reproductive health is made a priority area in the initial response phase in a CHE it is vital that lead agencies and reproductive health coordinators that will be in charge of managing sexual and reproductive health services within the emergency are identified immediately so coordination of services can begin prevent gaps and overlaps in services from occurring (Onyango, Hixson & McNally, 2013).

Recommendations can also be made for the specific focus areas within sexual and reproductive health. First, considering family planning, there are still too many CHE settings where women do not have access to a full range of family planning options; more specifically, it is often contraceptive pills and condoms that are most frequently offered and long-term acting reversible contraceptive methods (LARC) like the implant and intrauterine device (IUD) that are neglected (IRC, 2015). This is an especially important finding to consider when designing family planning programs for CHEs as numerous studies have found that in many settings

women are actually more likely to uptake LARC methods when offered a full range of options (Curry, Rattan, Huang & Noznesky, 2015). Additionally, it is extremely important that when education on family planning is provided that it is ensured that health facilities have the supplies needed to meet the demand generated; in many education focused interventions demand for condoms is generated, but health facilities often ran out of stock and did not have enough condoms to meet the needs of the people they were serving (Casey et al., 2007; McGinn, 2004). More so, there are still too many programs focused only on offering family planning services to married women or women that already have children and too many programs that assume because of the religious and cultural practices of a population that family planning is not desired; family planning is a vital reproductive right for all women and must be offered to all women regardless of their backgrounds or beliefs (IRC, 2015).

Moving on to the focus area of gender-based violence, several recommendations can be made. First, it was found by several studies that sensitizing the community to the gender-based violence and creating an environment where norms of violence can be challenged is essential to not only preventing gender-based violence, but also to ensuring that individuals feel comfortable reporting it within their communities (Henttonen et al., 2008). Additionally, studies have found that it is not uncommon for health facilities not to have trained staff members dedicated to treating and counseling survivors of gender-based violence; gender-based violence is an extremely sensitive issue that occurs in every CHE setting and requires trained professionals in the community available to treat and help survivors and it must be considered a priority to have trained staff available (Henttonen et al., 2008; Spangaro, Adogu, Ranmuthugala, Davies, Steinacker & Zwi, 2013). Furthermore, as with family planning, it has been found that health facilities often lack the medical supplies necessary to treat gender-based violence victims; drugs

for the treatment of STIs, emergency contraceptives, and post-exposure prophylaxis for HIV prevention should all be consistently available for patients that require and request it (Henttonen et al., 2008). Finally, studies have also found that health facilities often lack the resources needed to ensure confidentiality for GBV victims; without the assurance that their visits to health facilities will remain confidential many GBV victims will not seek services or assistances (Henttonen et al., 2008).

Thirdly, considering the area of HIV/AIDS and STIs the main recommendations made center on making sure the community is aware of symptoms and transmission methods. As the systematic review revealed, education programs informing communities of symptoms and transmission methods of HIV/AIDs and STIs have proven very effective and it is especially important in an environment where the population closely interacts with each other and where transactional sex may be occurring that individuals are aware of the risks, prevention methods and treatments (Casey et al., 2007; (Chen et al., 2008; Woodward et al., 2011). More so, as mentioned previously, it is extremely important that prevention methods like condoms are available to those that are seeking them (Casey et al., 2007; (Onyango, Hixson & McNally, 2013). It is also equally important that treatment be available at all times in health facilities for STIs and for HIV/AIDS (Casey et al., 2007). Finally, it is vital that all sexual and reproductive health programs ensure that safe blood transfusions can occur when necessary and that materials are available to medical professionals to ensure observation of standard precautions (Onyango, Hixson & McNally, 2013).

Finally, when considering the focus area of maternal health, the recommendation is made that future sexual and reproductive programs should focus on ensuring that appropriate supplies and referral systems are in place (Onyango, Hixson & McNally, 2013). Having clean delivery

kits is extremely important to ensuring that safe deliveries can occur in health facilities, and in many areas pregnant women have limited or no access to these kits, often because there is usually a lack of sufficient supply (Onyango, Hixson & McNally, 2013). Additionally, it is extremely important that some kind of organized referral system exists to refer women experiencing obstetric emergencies to the nearest health facility that can manage that emergency; building upon that recommendation, it is also extremely important to have identified health facilities with trained medical professionals that are available to manage obstetric emergencies at all times (Krause, Meyers & Friedlander, 2006).

Conclusion

The findings of this systematic review illustrate that while sexual and reproductive health has come a long way over the past two decades, there is still much more that needs to be done. Not only is additional research needed on sexual and reproductive health programs currently being implemented, but more action is needed to make sexual and reproductive health programs a reality in the earliest stages of response to a complex humanitarian emergency. Sexual and reproductive health has been declared a priority focus area for humanitarian actors in a CHE and a right for all refugees, but as this systematic review demonstrates, without further steps taken by humanitarian actors to ensure that gaps in sexual and reproductive health programs are filled, refugees will continue to suffer and struggle to have all their sexual and reproductive health needs met.

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