RLI Working Paper No. 60

REFUGEE LAW INITIATIVE
SCHOOL OF ADVANCED STUDY UNIVERSITY OF LONDON

Menstrual Hygiene Management in the Refugee Context: Learning from Piloted Interventions in East Africa

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January 2022

Abstract

Menstruation and menstrual hygiene management (MHM) are issues that have long been shrouded in shame and silence. Poor access to safe and dignified MHM impacts the ability of women and girls to reach their full physical, social, and psychological potential and significantly effects quality of life. However, since the turn of the millennium, MHM has been gaining traction in the humanitarian world. The emergence of MHM in policies and guidelines has been accompanied by a limited number of piloted projects implemented in East Africa, with the goal of testing the feasibility of MHM activities in refugee camp contexts. To situate the pilot project findings in existing knowledge, this research considers the issues of health, sanitation, education, and gender both in low-income and in displacement settings. It also considers MHM against the backdrop of sociocultural factors, such as period shaming, taboos, and misconceptions. Similarly, the presence of MHM in international frameworks and operational guidelines is explored.

This research uses an MHM Toolkit, widely appreciated as the frontrunner in its field, to conduct a comparative narrative analysis to evaluate learnings from four piloted MHM projects against the Toolkit guidance. It identifies and explores synergies and gaps and allows for conclusions to be drawn regarding recommendations for future toolkits, such as better training for refugee camp staff or the restructuring of MHM material distributions. On a higher level, the research finds that further focus should be placed on scaling up projects and addressing the subsequent sustainability and funding challenges. There is a need to magnify the focus from distribution of menstrual materials to scalable long-term strategies. Only then can MHM truly be considered at higher levels of programming, policy, and funding, comprehensively addressing women and girls' rights to manage menstruation in a safe and dignified way.

Keywords

Menstruation, Menstrual Hygiene Management, Refugee Health, MHM Toolkit

Contents

1. Introducing Menstrual Hygiene Management

Every day, approximately 800 million women and girls around the world menstruate. Roughly half of the global female population, around 26% of the overall population, are of reproductive age.[1] On average, women menstruate each month for around two to seven days, which totals around seven years during their lifetime. Menstruation is a fundamental and normal part of human life and yet, for so many, it is a subject stooped in stigmatisation, silence, and shame. As a result, the practical challenges of managing menstruation are amplified by various socio-cultural factors.[2] A lack of information about menstruation leads to damaging misconceptions and discrimination, as well as poor management of menstrual health. Around the world, millions of menstruating women and girls face inadequate access to menstrual health and hygiene information, safe and private water, sanitation, and hygiene (WASH) facilities and appropriate menstrual materials and supplies.[3]

Menstrual Hygiene Management (MHM) is an increasingly widely used term for addressing the specific needs of menstruating women and girls. Safe and dignified MHM is defined by the WHO and United Nations International Children's Emergency Fund (UNICEF)'s Joint Monitoring Programme for Drinking Water, Sanitation, and Hygiene as *"women and adolescent girls […] using clean menstrual management materials to absorb or collect blood that can be changed in privacy as often as necessary for the duration of the menstruation period, using soap and water for washing the body as required, and having access to facilities to dispose of used menstrual management materials".*[4] To this definition, Sommer, Schmitt, and Clatworthy add the aspect of education in "*access to practical information on MHM, for adolescent girls in particular*".[5]

Adequate MHM is fundamental to the health and well-being of all those who menstruate. Where menstruation cannot be managed properly, it poses significant risks to the ability to reach full physical, psychological, and social potential.[6] The substantial barriers to comprehensive MHM include lack of information, sanitary items and waste disposal systems, overcrowded public WASH facilities, as well as restrictive cultural beliefs and social taboos.[7] Menstruation has been directly linked to girls missing school during menstruation or even dropping out entirely.[8] Consequences of such can include increased risk of exposure to sexual and gender-based violence (SGBV), child marriage, child labour, prostitution, sexual health issues or early pregnancy.[9]

In emergency contexts, the challenges of safe period management are exacerbated.[10] Globally, over 26 million women and girls are displaced[11]. Forced displacement results in a variety of factors and external influences that compound MHM issues. These include a partial or total loss of normal coping mechanisms, decrease in socioeconomic status, a lack of access to basic sanitation facilities and menstrual hygiene products, as well as facing situations that demand prioritisation of crucial needs.[12] The challenges of MHM are

1 World Bank, 2020. Periods Don't Stop for Pandemics - Neither Will Our Efforts to Bring Safe Menstrual Hygiene to Women and Girls. [Online] Available at: https://www.worldbank.org/en/news/feature/2020/05/28/menstrual-hygiene-day-2020 [Accessed 27 December 2020].

2 Tellier, M. et al., 2020. Practice Note: Menstrual Health Management in Humanitarian Settings. In: Bobel, C. et al. eds. The Palgrave Handbook of Critical Menstruation Studies. Singapore: Palgrave Macmillan, Chapter 45.

3 Sumpter, C. & Torondel, B., 2013. A Systematic Review of the Health and Social Effects of Menstrual Hygiene Management. *PloS ONE*, 8(4), pp. 1-15.

4 WHO & UNICEF, 2016. Joint Monitoring Programme for Water Supply and Sanitation. Meeting Report Expert Group Meeting on Monitoring WASH in Schools in the SDGs. s.l., (p.16).

5 Sommer, M., Schmitt, M & Clatworthy, D., 2016. What is the scope for addressing mentrual hygiene management in complex humanitarian emergencies? A global review. *Waterlines*, 35(3), pp. 245-264 (p.247).

6 Viscek, N., 2020. Menstrual Hygiene Management in the Context of Displacement: Challenges and Next Steps. *Conflict and Health*, 11(1), pp. 65-68.

7 Tellier et al., [2]

8 van Eijk, A. M. et al., 2016. Menstrual hygiene management among adolescent girls in India: a systematic review and meta-analysis. *British Medical Journal*, 6(e010290), pp. 1-12.

9 Plan International, 2017. Refugee Girls Must Not Fear Their Periods. [Online] Available at: https://plan-international.org/blog/2017/06/refugee-girls-must-not-fear-their-periods. [Accessed 27 December 2020].

10 Chandra-Moli, V. & Patel, S. V., 2017. Mapping the knowledge and understanding of menarche, menstrual hygiene and menstrual health among adolescent girls in low- and middle-income countries. *Reproductive Health*, 14(30), pp. 1-16.

11 Columbia Public Health, 2020. Menstruation and Emergencies. [Online] Available at: https://www.publichealth.columbia.edu/research/gate/menstruation-emergencies [Accessed 27 December 2020].

12 VanLeeuwen, C. & Torondel, B., 2018. Improving menstrual hygiene management in emergency contexts: literature review of current perspectives. *International Journal of Women's Health*, Volume 10, pp. 169-186.

also influenced by changes in the physical and social environment and are unique to an individual's stage of displacement and setting, be this during transit, in informal rural settlements, urban settings or established camps.[13] This research specifically focuses on MHM challenges and solutions in refugee camps in Burundi and Uganda. In refugee camps, WASH facilities are characteristically overcrowded and lack privacy. There is often inadequate access to basic sanitary items, such as pads, underwear, and soap, especially where acute emergencies force women and girls to leave their homes without many essential belongings.[14] Living in a refugee camp, where education opportunities are likely to be limited, for pubescent girls who may experience menarche, their first menstrual cycle, in the camp, basic information on MHM can be scarce.[15]

Both the topics of MHM in general and in displacement settings are considerably under-researched fields.[16] Existing studies on delivering MHM interventions in emergency contexts are almost unanimous in their findings of a lack of systematic documentation and dissemination of lessons learned from practical interventions. In recent years, there have been growing calls from donors, non-governmental organisations (NGOs) and governments, among others, for comprehensive approaches to integrating MHM interventions into emergency responses to displacement situations. Given the nature of humanitarian emergency responses, which focus initially on life-saving measures, determining the appropriate time, structure and coordination of an MHM intervention is complex.[17] Since 2000, operational guidelines have increasingly aimed to address this challenge, but research continues to highlight the necessity for MHM mainstreaming in cross-sectoral response planning.[18]

Limited empirical research, as well as academic literature, has sought to highlight certain challenges of MHM interventions, such as insufficient monitoring and evaluation (M&E) documentation.[19] A lack of clarity as to which sectors have responsibility to implement MHM activities in refugee camps is prevalent, as is a lack of guidance on effective cross-sectoral communication and coordination.[20] Further academic research into both practical realities and theoretical guidance concerning the integration of a comprehensive MHM approach into emergency responses to displacement situations is paramount. It is "*only through improving the resources available and enhancing this evidence base that MHM can be perceived as an integral and routine component of any humanitarian response*".[21]

13 Viscek, [6]

14 VanLeeuwen & Torondel, [12]

15 Hawkey, A. J., Ussher, J. M., Perz, J., Metusela, C., 2017. Experiences and Constructions of Menarche and Menstruation Among Migrant and Refugee Women. *Qualitative Health Research*, 27(10), pp. 1473-1490.

16 Sumpter & Torondel, [3]

17 Sommer, M., 2012. Menstrual hygiene management in humanitarian emergencies: Gaps and recommendations. *Waterlines*, 31(1), pp. 83-104.

18 Sommer et al., [5]

19 VanLeeuwen & Torondel, [12]

20 Kemigisha, E., Masna, R. & Wendo, M., 2020. A Qualitative Study Exploring Menstruation Experiences and Practices among Adolescent Girls Living in the Nakivale Refugee Settlement, Uganda. *International Journal of Environmental Research and Public Health*, 17(18), pp. 1-11.

21 Sommer et al, [5] (p.245)

2. Research Methodology, Ethics, and Limitations

This research seeks to contribute to the field of MHM research in displacement contexts in its analysis of piloted MHM projects in four refugee camps, three in Uganda and one in Burundi. The narratives of these pilot interventions are comparatively analysed against guidance from an MHM toolkit published in 2017 by Columbia University and the International Rescue Committee (IRC). The *Toolkit for integrating menstrual hygiene management (MHM) into humanitarian response: the full guide* (herein the Toolkit) provides humanitarian actors with operational guidance on the implementation of MHM interventions in emergency contexts.[22] As desk-based research, the contents of the pilot projects, as documented in public evaluation reports, are analysed against the theoretical guidance of the Toolkit. A comparative matrix is used to extract findings related to project activities, outcomes, best practices, and lessons learned. This enables the identification of synergies and gaps between practical projects and theoretical guidance. The research also aims to define recommendations to improve future toolkits. As almost all publicly documented interventions find themselves in the piloting stages, this research also seeks to address the general lack of M&E data on MHM implementation models in refugee settings, following VanLeeuwen and Torondel's concept that "*evidence-based research should feed improvements for MHM guidelines*".[23]

The following questions guide the research:

1. To what extent do pilot MHM interventions in selected refugee camps reflect the guidance of the Toolkit?
2. What is the scope for the identification of synergies, gaps, or suggestions for improvement to future toolkits?

The four pilot projects were selected via consultation of the online academic databases and search engines Google, Google Scholar, ReliefWeb, PubMed, and ResearchGate on separate occasions in October 2020. Search criteria included only projects that had MHM at the core of their objectives and projects that were implemented in refugee camps. Furthermore, only projects implemented after 2000 in East Africa were considered. When applying searches such as "MHM; project; refugee", PubMed, Google Scholar and ResearchGate did not reveal any documentation that fit the criteria. A similar search on ReliefWeb revealed one MHM project in Burundi, which was subsequently selected for this research. Finally, Google highlighted a very limited number of results, from which the remaining three projects were selected. The projects selected for this research were chosen for their ability to fulfil the search criteria, as well as being some of the only available projects that did so. These findings support the academic literature that details a lack of practical documentation of MHM interventions, especially peer reviewed, particularly in displacement contexts.

Since the Toolkit's publication, another study has been conducted to pilot test and evaluate this Toolkit in three refugee camps in Tanzania.[24] However, the purpose of this research is not an evaluation of the implementation of the Toolkit, but rather to conduct an independent evaluation of different MHM intervention approaches, and to compare these to the guidance in the Toolkit, without the Toolkit itself specifically having influenced project outcomes.

This research was approved by the Research Ethics Team at the University of London (reference number SASREC_2021-658-MA0. By using secondary data, the burden on respondents is minimised, meaning vulnerable groups are not over researched. This research maintains the anonymity of participants, as their identities are coded in the original data, confidentiality is not breached and their consent to the original studies can be reasonably presumed.

Limitations of this research arise in relation to the narrow base of documented MHM projects, meaning that some project reports used in this study are unaudited. Auditing of reports is, however, mostly used as

22 Columbia University & IRC, 2017. A toolkit for intergrating menstrual hygiene management (MHM) into humanitarian response: the full guide. [Online] Available at: https://reliefweb.int/sites/reliefweb.int/files/resources/mhm-emergencies-toolkit-full_0.pdf. [Accessed 29 December 2020].

23 VanLeeuwen & Torondel, [12] (p.184)

24 Sommer, M. et al., 2018. Pilot testing and evaluation of a toolkit for menstrual hygiene management in emergencies in three refugee camps in Northwest Tanzania. *Journal of International Humanitarian Action*, 3(6), pp. 1-14.

a financial accountability mechanism.[25] The 'informal' characteristic of some reports does not appear detrimental to their quality and as such they should not be overlooked as valuable data sources. Sumpter and Torondel find that in "*a relatively poorly researched field such as MHM there is a strong possibility that the best knowledge lies in the hands of those implementing programs, working at non-governmental organisations or in informal research*".[26]

The four projects did not all run for the same amount of time, but were, however, all reviewed three to four months after implementation took place. Similarly, all projects were in the pilot phase, thus reducing the likelihood of MHM-related structures and systems (for example pre-existing distributions of MHM materials) influencing the outcomes of the projects. Finally, the target groups of this research are only a small representation of refugees in Sub-Saharan Africa. MHM interventions further afield in other regions are not represented in the analysis, nor are other types of displaced populations, for example internally displaced persons. This said, all MHM interventions will vary when tailored to the preferences and practices of each target population. In this way, the Toolkit was designed for universal implementation and itself does not specify target groups.

25 Wenar, L., 2006. Accountability in International Development Aid. *Ethics and International Affairs*, 20(1), pp. 1-23.

26 Sumpter & Torondel, [3] (p.13)

3. Current State of Knowledge on MHM

3.1 MHM in Low-income Settings

Low-income countries (LICs) are defined as those with a per capita gross national income (GNI) of $1,035 or less, and lower-middle-income countries (LMICs) as those with a GNI per capita of $1,036 to $4,045.[27] Access to safe and dignified MHM in LICs and LMICs is marred by a myriad of challenges, ranging from poor WASH facilities, lack of hygienic menstrual materials, cultural taboos and insufficient access to health services to address problems related to menstruation.[28] Between 2000 and 2015, a systematic review and meta-analysis studied knowledge, practices and limitations of MHM experienced by over 97,000 adolescent girls in India.[29] Here, numerous studies showed girls in resource-poor areas across India facing social, educational and health-related challenges directly associated with poor MHM. Only one in eight girls reported that they encounter no barriers at all in managing their periods.[30] Further reviews, primarily focused on Sub-Saharan Africa and South Asia, identify the main challenges for adult women as economic barriers to buying menstrual products, inadequate WASH facilities, fear of leaks and stains and misconceptions leading to unhygienic practices.[31]

3.1.1 Harmful Cultural Taboos and Restrictions

Qualitative studies report that harmful taboos compound the physical challenges of MHM, both in preventing women and girls from seeking help, and in restricting their daily activities during menstruation.[32] Meta-data from India highlights the most common forbidden activities as visits to places of worship, touching religious items or praying.[33] Research in Uganda found that stress in dealing with menstruation is linked to feelings of shame, not only in those who are menstruating but also "*in the minds of those around them*".[34] It is to say that restrictions placed on menstruating women and girls often come from external sources, rather than the individuals themselves.[35]

Many traditional religious beliefs frame menstruation as ritually unclean. In one research paper, Indo-Fijian women of Hindu faith reported that, during menstruation, women and girls should refrain from cooking food for their husband if he is a priest or touching food to be taken to the temple. In rural settings in Papua New Guinea, the same study found beliefs that food prepared by menstruating women would cause men and boys to age faster or cause them to fall ill.[36] In some areas of Nepal, as part of the *Chhaupadi* culture, it is common for women and girls to be exiled to a 'menstruation hut' – a shed-like dwelling - where hazards include lack of ventilation, exposure to the cold, animal attacks or sexual assault and rape.[37] Examples such as these demonstrate how socio-cultural factors that associate menstruation with danger or shame have negative impacts on women's health as contributors to morbidity or even mortality.[38]

27 World Bank, 2021. Data: World Bank Country and Lending Groups. [Online] Available at: https://datahelpdesk.worldbank.org/knowledgebase/articles/906519-world-bank-country-and-lending-groups [Accessed 19 February 2021].

28 Elledge, M. F., Muralidharan, A., Parker, A., Ravndal, K. T., Siddiqui, M., Toolaram, A. P., Woodward, K. P., 2018. Menstrual Hygiene Management and Waste Disposal in Low and Middle Income Countries-A Review of the Literature. *International Journal of Environmental Research and Public Health,* 15(11) pp. 1-20.

29 Van Eijk, [8]

30 ibid.

31 Kuhlmann, A. S., Henry, K. & Wall, L. L., 2017. Menstrual Hygiene Management in Resource-Poor Countries. *Obstetrical and Gynecological Survey*, 72(6), pp. 356-376.; Chandra-Moli & Patel [10]

32 Sahin, M., 2015. Tackling the stigma and gender marginalization related to menstruation via WASH in school programmes. *Waterlines*, 3(4), pp. 212-216. ; Sommer, M. & Sahin, M., 2013. Overcoming the taboo: advancing the global 27. agenda for menstrual hygiene management for schoolgirls. *American Journal of Public Health*, Volume 103, pp. 1556-1559.

33 Van Eijk, [8]

34 Tellier et al, [2] (p.599)

35 Miiro, G. et al., 2018. Menstrual Health and School Absenteeism among Adolescent Girls in Uganda (MENISCUS): A Feasibility Study. *BMC Women's Health*, 18(1).

36 Mohamed, Y., Durrant, K., Huggett, C. & Davis, J., 2018. A qualitative exploration of menstration-related restrictive practices in Fiji, Solomon Islands and Papua New Guinea. *PLoS ONE*, 13(12), pp. 1-19.

37 Amatya, P. et al., 2018. Practice and lived experience of menstrual exiles (Chhaupadi) among adolescent girls in far-western Nepal. *PLoS ONE*, 13(12), pp. 1-17.

38 Ranabhat, C. et al., 2015. Chhaupadi Culture and Reproductive Health of Women in Nepal. *Asia Pacific Journal of Public Health*, 27(7), pp. 785-795.

3.1.2 Education, WASH and Waste Disposal

The United Nations (UN) Sustainable Development Goals (SGDs) hail women and girls' education as a cornerstone for social and economic development.[39] MHM is inherently intertwined with girls' education and empowerment and plays a fundamental role in levels of school attendance.[40] Results from 64 studies in India found that a quarter of adolescent girls miss school during menstruation, with the primary reasons identified as difficulties changing menstrual materials at school, fear of staining clothes, physical discomfort or pain, and restrictions placed upon them by teachers or family members. Notably, there was a significant increase in school absence for girls using a cloth to soak up menstrual blood.[41] Furthermore, WASH facilities were, in most cases, described as inadequate.[42] Notably, absenteeism did not decrease over time, for example as girls became more familiar with MHM, but was rather associated with causes beyond the immediate control of the individual.[43]

The same meta-analysis found that a third of girls that attended school during menstruation changed their absorbent materials at school. At home, around half of the girls had a toilet, with a significant difference recorded between urban and rural settings.[44] This has considerable impacts on abilities to manage MHM, for example having a place to privately change menstrual materials. Some studies noted that hygiene during menstruation was poor, particularly in rural areas, with the primary issues recorded as lack of privacy, physical discomfort, water scarcities, lack of space for bathing or a fear that bathing during menstruation may cause fertility problems.[45] Furthermore, long walks or other forms of travel to get to school are associated with a higher risk of leakages and stains.[46] Mobility restrictions associated with period shaming, such as prolonged absence at school, have long-term effects on economic and health outcomes.[47] The same concept may influence women's participation in the workforce, which was proven to have a negative effect on country-level economic growth.[48]

3.1.3 Knowledge and Varying Perceptions on MHM

Many girls in LMICs enter menarche with knowledge gaps or misconceptions surrounding menstruation, as well as being unsure of how to access further information. Research also shows that "*the adults around them, including parents and teachers, are themselves ill-informed and uncomfortable discussing sexuality, reproduction and menstruation*".[49] In India, 41 studies based on knowledge and perception of MHM found that around half of adolescent girls considered menstruation to be normal, whilst only a quarter reported that they were aware that the uterus is the source of bleeding. Sources of knowledge were identified as mothers (54%), friends (24%), relatives including sisters (14%) and teachers, media, and health workers (<10%). From 88 studies on pre-menarche awareness, 48% of girls reported that they were aware of menstruation prior to menarche.[50] However, significant differences were recorded according to region, setting, and year of study. Notably, awareness in slum settings was considerably lower.[51] In rural Nepal, a study

39 United Nations, 2016. SDG 4: Ensure inclusive and equitable quality education and promote lifelong learning opportunities for all. [Online] Available at: https://www.unwomen.org/en/news/in-focus/women-and-the-sdgs/sdg-4-quality-education [Accessed 12 January 2021].

40 Kuhlmann et al., [31]

41 Van Eijk, [8]

42 Thakur, H., Aronsson, A. & Bansode, S., 2014. Knowledge, practices, and restrictions related to menstruation among young women from low socioeconomic community in Mumbai, India. *Front Public Health*, 2(72), pp. 1-7.; Anand, E., Singh, J. & Unisa, S., 2015. Menstrual hygiene practices and its association with reproductive tract infections and abnormal vaginal discharge among women in India. *Sexual and Reproductive Healthcare*, 6(4), pp. 249-254.

43 Sommer, M., 2010. Where the education system and women's bodies collide: the social and health impact of girls' experiences of 28. menstruation and schooling in Tanzania. *Journal of Adolescence*, 33(4), pp. 521-529.; Bodat, S., M., G. M. & Majumdar, J. R., 2013. School absenteeism during menstruation among rural adolescent girls in Pune. *National Journal of Community Medicine*, Volume 4, pp. 212-16.

44 Van Eijk, [8]

45 Narayan, K. A., Srinivasa, D. K. & Pelto, P. J., 2001. Puberty rituals reproductive knowledge and health of adolescent schoolgirls in south India. *Asia-Pacific Population Journal*, Volume 16, pp. 225-238.; Chothe, V., Kubchandani, J. & Seabert, D., 2014. Students' perceptions and doubts about menstruation in developing countries: a case study from India. *Health Promotion Practice*, Volume 15, pp. 319-326.

46 Kuhlmann et al., [31]

47 Mohamad et al., [36]

48 OECD, 2012. Equality in Education, Employment and Entrepreneurship: Final Report to the MCM. Meeting of the OECD Council and Ministerial Level, Paris: OECD.

49 Chandra-Moli & Patel, [10] (p.610)

50 Van Eijk, [8]

51 Ade, A. & Patil, R., 2013. Menstrual Health and Practices of Rural Adolescent Girls of Raichur. *International Journal of Biological and Medical Research*, 4(30), pp. 14-17.; Salve, S. B., Dase, R. K. & Mahajan, S. M., 2012. Assessment of knowledge 55. and practices about menstrual hygiene amongst rural and urban adolescent girls – a comparative study. *International Journal of Recent Trends in Science and Technology*, Volume 3, pp. 65-70.

conducted in 2007 found that 82% of 150 adolescent girls believed that menstruation was a curse, with only 6% recognising it as a physiological process.[52] In both India and Nigeria, studies found that levels of education had significant impact on MHM knowledge.[53]

Similarly, when studying adult responses to adolescent girls' needs, results from Nigeria showed that the education levels of parents had significant effects on levels of knowledge in pre-menarcheal girls. Parents with a tertiary-level education were most likely to have taught their children what to expect and how to manage it.[54] In Kenya, a study found that teachers "*did not perceive menstrual education as part of their role nor did they feel properly prepared to share information with their students*".[55] Furthermore, many teachers, of whom the majority were male, felt uncomfortable discussing menstruation.[56] The unwillingness of adults to share experiences and the passing on of misconceptions often leave girls unprepared for menarche and fuels mental and social impacts such as fear, anxiety, and stigmatisation, as well as the physical subsequent consequences of poor MHM.[57]

3.2 Low-income Settings: Attributing Characteristics to Refugee Populations

Whilst various grey literature contributions exist on MHM in displacement settings, there is a notable lack of peer-reviewed material in medical journals and other academic databases. However, research on MHM in low-income and resource-poor areas is far more established. Around 85% of the world's refugees are hosted in developing countries, with 28% hosted by the world's least developed countries.[58] Uganda, classified as an LIC with a GNI per capita of only $780, is the world's fourth largest refugee hosting nation, with 1.4 million refugees.[59] In Uganda and other refugee hosting countries in a similar stage of economic development, local communities often experience high levels of poverty. Refugee camps are more likely to be in more remote, rural, and often poorer areas of any given host country.[60] In the Kigoma region of Tanzania, for example, three refugee camps host Burundian refugees in the country's poorest region, where the largest percentage of the population are subsistence farmers. A report from this region summarised that in local communities "*economic typologies have characteristics similar to the categories […] for refugees*".[61] As previously highlighted, women and girls from rural areas face greater challenges in MHM and girls attending public schools, which typically serve families of a lower socioeconomic status, have lower awareness and resources to manage menstruation.[62] On the understanding that the majority of refugee camps are found in rural areas in the developing world, comparisons can be drawn between low-income and refugee populations. In other words, it is expected that many of these characteristics and challenges of MHM in low-income settings also hold true for many refugee communities.

3.3 Health, Sanitation and Gender in Situations of Displacement

3.3.1 Refugee Health in Camps

During the different stages of forced migration, diverse factors may impact the health and health needs of

52 Adhikari, P., Kadel, B., Dhungel, S. I. & Mandal, A., 2007. Knowledge and practice regarding menstrual hygiene in rural adolescent girls of Nepal. *Kathmandu University Medical Journal*, 5(3), pp. 382-386.

53 Bobhate, P. & Shrivastava, S., 2011. A cross sectional study of knowledge and practices about reproductive health among female adolescents in an urban slum of Mumbai. *Journal of Family Reproductive Health*, 5(4), pp. 117-124.; Oche, M. O., Umar, A. S., Gana, G. J. & Ango, J. T., 2012. Menstrual health: the unmet needs of adolescent girls' in Sokoto, Nigeria. *Scientific Research and Essays*, 7(3), pp. 410-418.

54 Aniebue, U. U., Aniebue, P. N. & Nwankwo, T. O., 2009. The impact of pre-menarcheal training on menstrual practices and hygiene of Nigerian school girls.. *The Pan African Medical Journal*, 2(9).

55 Chandra-Moli & Patel, [10] (p.616)

56 McMahon, S. A. et al., 2011. 'The girl with her period is the one to hang her head' Reflections on menstrual management among schoolgirls in rural Kenya. *BMC International Health and Human Rights*, 11(7).

57 Chandra-Moli & Patel, [10]

58 UNHCR, 2020. Refugee Statistics. [Online] Available at: https://www.unhcr.org/refugee-statistics/ [Accessed 27 February 2021].

59 World Bank, [27]

60 UNHCR, 2012. UNHCR Global Trends 2011. [Online] Available at: https://www.unhcr.org/4fd6f87f9.html [Accessed 28 February 2021].

61 UNHCR, 2018. Socio-Economic assessment in the refugee camps and hosting districts of Kigoma Region, Dar es Salaam: UNHCR. (p.3)

62 Kuhlmann et al., [31]

displaced populations. For health workers providing care to these populations, the challenges are complex. In some cases, health needs are longstanding and manifested themselves before displacement occurred. In others, needs arise during the displacement journey or settlement at the destination. Displaced populations often comprise of different generational groups, which present additional challenges to health care providers.[63] From the onset of a crisis through to the stabilising of a situation or integration process, primary health care (PHC) is a must. Depending on the context, availability of resources and operational feasibility, this will vary in scope and form, for example mobile health clinics, community health outreaches, or support for existing PHC facilities.[64] Essential PHC should cover trauma care, child health including immunisation and nutrition, communicable diseases, sexual and reproductive health, non-communicable disease, mental health and environmental health.[65] In this way, PHC is focused on comprehensive and interrelated aspects of health and wellbeing, both mental and physical.[66] These domains must also be addressed in community care, secondary and tertiary health care.

The World Health Organisation (WHO) reports that among newly arrived refugees the "*most common health conditions* [are] *hypothermia, burns, gastrointestinal illnesses, cardiovascular events, pregnancy- and delivery-related complications, diabetes and hypertension*".[67] WASH facilities may be insufficient in number and quality and overcrowding can lead to quick outbreaks of communicable diseases. Poor sanitary conditions, as well as inadequate plumbing and waste disposal systems are also detrimental to personal hygiene.[68] Prostitution and sexual violence in camps increase rates of sexually transmitted diseases.[69] Insufficient shelter in extreme temperatures pose risks to health, as well as forcing camp inhabitants to resort to unsafe activities, such as lighting fires close to or in tents to keep warm. Resultant smoke inhalation can cause respiratory complications, lung cancer and cardiovascular diseases.[70] Similarly, skin complaints, such as insect bites and sunburn, as well as dehydration have been found to be extremely prevalent in camp settings.[71]

Furthermore, mental health issues can arise both in the form of trauma associated with the cause of flight, as well as the difficulties of camp life itself, for example stressful and lengthy asylum or relocation procedures, prolonged unemployment, discrimination, separation from family or loneliness.[72] Similarly, the security situation in camps may be compromised by riots, demonstrations, or violent behaviour from camp residents, security personnel or surrounding host communities. Violence and brutality experienced inside camps has been found to have clear impacts on inhabitants' physical and mental health. In the Calais refugee camp in France, a report in April 2016 found that fear of police violence, including physical assault or tear gas, was the main reason for people feeling unsafe in the camp.[73]

3.3.2 The Role of the WASH Sector

WASH interventions in refugee camps are inherently linked to health and health issues.[74] Insufficient clean water, along with inadequate sanitation and hygiene facilities, lead to an increased risk of potentially fatal water-borne diseases such as cholera and schistosomiasis, as well as diarrhoea. These factors are linked to drinking water from unsafe suppliers and open defecation close to water sources.[75] The WASH sector is

63 Thomas, S. L. & Thomas, S. D. M., 2004. Displacement and Health. *British Medical Bulletin*, Volume 69, pp. 115-127.

64 van Loene, T. et al., 2018. Primary care for refugees and newly arrived migrants in Europe: a qualitative study on health needs, barriers and wishes. *European Journal of Public Health*, 28(1), pp. 82-87.

65 Joshi, C., Russell, G. & Cheng, I., 2013. A narrative synthesis of the impact of primary health care delivery models for refugees in resettlement countries on access, quality and coordination. *International Journal for Equity in Health*, 12(88).; IOM, 2021. Health Response to Crisis Situation. [Online] Available at: https://www.iom.int/health-response-crisis-situation [Accessed 10 January 2021].

66 Thomas & Thomas, [66]

67 WHO, 2016. Refugee crisis. Situation update 3. [Online] Available at: www.euro.who.int/__data/assets/pdf_file/0016/305503/Refugee-Crisis-situation-update-report-n3.pdf?ua=1. [Accessed 11 January 2021]. (p.2)

68 Jervelund, S. S., Nordheim, O., Stathopoulou, T. & Eikemo, T. A., 2019. Non-communicable Diseases among Refugee Claimants in Greek Refugee Camps: Are Their Health-care Needs Met?. *Journal of Refugee Studies*, 32(1), pp. 36-51.

69 Walther, L., Fuchs, L. M., Schupp, J. & von Scheve, C., 2020. Living Conditions and the Mental Health and Well-being of Refugees: Evidence from a Large-scale German Survey. *Journal of Immigrant and Minority Health*, Volume 22, pp. 903-913.

70 Jervelund et al., [71]

71 Daynes, L., 2016. The health impacts of the refugee crisis: a medical charity perspective. *Clinical Medicine*, 16(5), pp. 437-440.

72 Shannon, P. J., Wieling, E., Simmelink-McCleary, J. & Becher, E., 2014. Beyond Stigma: Barriers to Discussing Mental Health in Refugee Populations. *Journal of Loss and Trauma*, 20(3), pp. 281-296.

73 Daynes, [74]

74 Tellier et al., [2]

75 Ahmed, S. S., 2016. A Study of Maintaining and Improving the WASH Services Provided by Local and International Agencies in Selected Refugee Camps in Kurdistan Region, Iraq. *European Journal of Sustainable Development*, 5(3), pp. 68-76.

one of the most important elements of refugee camp management and works closely with public health, nutrition, and site planning clusters, among others, to establish a range of interventions.[76] In emergency situations, WASH also functions to address important protection risks. These include protection of women and children who are at risk of sexual violence when forced to walk long distances to water points or when defecating in the open, protection from public health and nutrition risks associated with water-borne disease and malnutrition, and protection from unsafe coping mechanisms, such as procuring water from unreliable sources.[77] The responsibilities of the WASH sector in refugee camps extends far beyond the immediate needs that it addresses to offer a range of protection mechanisms, that can present risks to health, safety and well-being when insufficiently addressed.

3.3.3 Refugee Women's Health and Disproportionate Burdens

In conflict settings, where societal support systems and access to healthcare break down, this "*disproportionately affects the morbidity, mortality, and wellbeing of women, newborns, children, and adolescents*". The main areas in which women are affected by such disproportionality are "*antenatal care, basic* [and] *comprehensive emergency obstetric and newborn care*".[78] A study found that displaced women "*bear substantial morbidity and mortality*" in the forms of "*malnutrition, physical injuries, infectious diseases, poor mental health, and poor sexual and reproductive health*".[79] Notably, the articles referenced here do not explicitly address menstruation or MHM.

Lack of routine care for pregnant women puts both them and their unborn child at risk. Furthermore, lack of access to emergency care can be life-threatening.[80] In terms of maternal mortality, children whose mothers die are more likely to die within 1-2 years of their mother's death.[81] In any population, displaced or not, up to 15% of deliveries will develop into a life-threatening situation requiring urgent medical care.[82] A retrospective review of surgical services delivered by *Médecins sans frontières* (MSF) in six conflict settings identified that 30% of 4,630 surgical interventions were obstetric emergencies, for example emergency caesarean sections. In comparison, only 22% were due to violent injury.[83] Family planning also plays a critical role in improving maternal and child survival. Displaced women and adolescents are often faced with a lack of such services, which are typically only introduced once a situation has stabilised. They may not be able to continue with usual contraceptive methods, due to losing them during flight or disruption to health services.[84] Family planning reduces the chance of unwanted pregnancies and helps to avoid unsafe abortions, which is the third biggest cause of maternal mortality worldwide.[85] Correspondingly, in situations of displacement, families may also want to delay childbearing until their situation stabilises, security has improved, and their livelihoods are more dependable.[86]

Sexual violence is a further medical emergency observed among displaced populations and is one that can have both short- and long-term consequences for physical and mental health.[87] During conflict, SGBV including rape is used a weapon to humiliate and terrorise communities. A breakdown in law and order increases the risk that such crimes will not be prosecuted. Moreover, displaced families may be separated during flight, leaving women or girls to travel alone, thus increasing their risk of being assaulted at vari-

76 Sphere, 2011. The Sphere Project: Humanitarian charter and minimum standards in humanitarian response. 3 ed. Oxford: Oxfam Publishing.

77 UNHCR, 2017. WASH, Protection and Accountability. [Online] Available at: http://wash.unhcr.org/download/wash-protection-and-accountability/ [Accessed 9 February 2021].

78 Singh, N. S. et al., 2021. Delivering health interventions to women, children, and adolescents in conflict settings: what have we learned from ten country case studies?. *The Lancet*, 397(10273), pp. 533-542. (p.533)

79 Bendavid, E. et al., 2021. The effects of armed conflict on the health of women and children. *The Lancet*, 397(10273), pp. 522-532. (p.522)

80 Metusela, C. et al., 2017. "In My Culture, We Don't Know Anything About That": Sexual and Reproductive Health of Migrant and Refugee Women. *International Journal of Behavioural Medicine*, 24(6), pp. 836-845.

81 WHO, 2015. Maternal Health: Death during Pregnancy and Childbirth. [Online] Available at: https://www.who.int/news-room/q-a-detail/maternal-health-death-during-pregnancy-and-childbirth [Accessed 10 January 2021].

82 MSF, 2014. Forced to Flee: Women's Health and Displacement. [Online] Available at: https://www.msf.org/sites/msf.org/files/iwd_briefing_paper_en.pdf [Accessed 10 January 2021].

83 Chu, K., Trelles, M. & Ford, N., 2010. Rethinking surgical care in conflict. *The Lancet*, 375(9711), pp. 262-263.

84 Cleland, J., Bernstein, S. & A., F., 2006. Family planning: the unfinished agenda. *The Lancet*, 368(9549), pp. 1810-1827.

85 MSF, [86]

86 Tellier et al., [2]; Population Reference Bureau, 2002. Meeting the Reproductive Health Needs of Displaced People. [Online] Available at: https://www.prb.org/meetingthereproductivehealthneedsofdisplacedpeople/ [Accessed 10 January 2021].

87 Hynes, M. & Cardozo, B. L., 2000. Sexual Violence Against Refugee Women. *Journal of Women's Health and Gender Based Medicine*, 9(8), pp. 819-823.

ous stages.[88] For example, at border crossings, women risk assault from border guards and traffickers who abuse their positions of power. In refugee camps, women may be forced into prostitution to support their families, sexually assaulted when moving through the camp, particularly at night, when collecting wood, water or using the latrines, or sexually exploited by others in a higher position of power.[89] In this way, possible motivations behind SGBV can be attributed to power dynamics and gender submission, a concept explored in the following chapter.[90] In a study of Ethiopian and Eritrean refugees, it was found that violence against men included beatings, imprisonment or being killed, whereas violence against women was almost always of a sexual nature.[91] This particular vulnerability to SGBV strongly supports the argument for the need for gender specific protection mechanisms.[92]

3.3.4 The Interplay of Gender and Power Structures

In discussing issues such as SGBV and power structures, it is important to understand the way in which societal constructs frame women in terms of gender, gender identity and gender roles. Whilst the terms 'sex' and 'gender' are frequently interchanged, they have fundamentally different definitions. The term 'sex' is defined as the biological characteristics of females and males, for example hormones, reproductive organs, or chromosomes.[93] 'Gender', on the other hand, is much more difficult to define but widely understood as a social construct that is shaped by norms, roles, relationships, and behaviours that are attributed to men and women in any given society. Gender is considered a fluid concept that changes over time and from society to society. Two additional facets of gender for consideration are gender identity, which is an individual's own self-defined categorisation of their own identity and experience with gender, and gender role, which reflects the external influence of a certain society and a person's denominated place within it.[94] Gender is "*informed by economic and political power, 'voice' (representation of views and influence in the society), divisions of labour, cultural norms and external pressures*".[95] It should not be understood as a study of one sex in isolation, but rather the interaction of the sexes within a hierarchical concept, which determines the place of women and men within the power structure. As with gender itself, power structures are also fluid constructs.[96]

In the case of displacement, power structures between men and women, as well as between refugees and those in positions of power, are vulnerable to shifts. Power structures in this context are understood as "*hierarchies of status, decision-making, rule making and enforcement, resource access and control*".[97] Following this definition, power structures in refugee camps can determine a variety of elements, such as equitable access to resources, for example non-food items (NFI), or participation in decision-making processes.[98] Where women are labelled with gender roles, in which they are less active in decision-making or restricted in resource access within camp settings, they become necessary recipients of gender-specific protection. Low levels of participation in decision-making translates to a lack of power, which can fuel "*economic and health related vulnerability*".[99] Callamard asserts that "*the absence of women's organisations and women's voices within the power structures of the camp lead to the increasing confinement of women to the domestic sphere and downgrading of their status in gender relations*".[100] Where a camp does not have mechanisms in place for refugee women's participation it can be argued that its organisational bodies are complicit in the branding

88 Tellier et al., [2]

89 Hynes & Cardozo, [91]; MSF, [86]

90 Metz, J. & Myers, K., 2021. 'Rape is a man's issue:' gender and power in the era of affirmative sexual consent. *Journal of Gender Studies*, 30(1), pp. 52-65.

91 McSpadden, L. A. & Moussa, H., 1993. I have a name: the gender dynamics in asylum and in resettlement of Ethiopian and Eritrean refugees in North America. *Journal of Refugee Studies*, 6(3), pp. 203-23.

92 Hynes & Cardozo, [91]

93 Oliffe, J. & Greaves, L. J., 2011. Designing and Conducting Gender, Sex, and Health Research. 1 ed. Los Angeles: SAGE Publications, Inc.

94 Lindqvist, A., Gustafsson, M. & Renström, E. A., 2020. What is gender, anyway: a review of the options for operationalising gender. *Psycology and Sexuality*, 10 February, pp. 1-13.

95 McLean, H., 1999. Gender and power-structures in refugee camps. *Asia Pacific Press*, Volume CEM99-9, pp. 1-15. (p.4)

96 Lünenborg, M., 2015. Governing in the gendered structure of power . In: J. Wilson & D. Boxer, eds. Discourse, Politics and Women and Global Leaders. Amsterdam: John Benjamins Publishing Company, pp. 275-292.

97 Mc Lean, [99] (p.4)

98 Singh, N. S. et al., 2021. Research in forced displacement: guidance for a feminist and decolonial approach. *The Lancet*, 397(10274), pp. 560-562.

99 Mc Lean, [99] (p.10)

100 Callamard, A., 1996. Flour is power: the gendered division of labour in Lisongwe Camp. In: Giles, W., Housse, H. & van Esterik, P. eds. Development and Diaspora: gender and the refugee experience. Canada: Artemis Enterprises. (p.178)

of women as powerless.[101] However, women's empowerment must be done in a sensitive manner, as in some cases forcing participation may be considered culturally inappropriate.[102]

3.4 MHM and Period Shame as Sociocultural Concepts

Period-shame is rooted in gender inequality and for many women and girls, particularly in lower-income settings, menstruation is encumbered by feelings of embarrassment, shame, discomfort, and inconvenience.[103] Cultural taboos and stigma surrounding both menstruation and menarche leads to a culture of silence and limited information, in which such topics should not be discussed in public nor sometimes even in private.[104] Beliefs in numerous cultures and societies may prevent menstruating women and girls from participating in daily activities. Restrictive practices associated with menstruation include both those "*self-imposed or imposed by others, and are influenced by socio-cultural, religious or traditional beliefs and norms*".[105] These function to isolate and stigmatise women and girls throughout their lifecycle and can have lasting physical and psycho-social impacts.[106]

An example of this is seen where many women in low-resource settings are too embarrassed to dry the cloth used to soak up menstrual blood in the sun, meaning the cloth remains damp resulting in a high risk of reproductive tract infections and skin irritation.[107] Studies also report that women and girls are often embarrassed to be seen with menstrual products, with many making a great effort to conceal their menstrual status.[108] Through the reiteration of negative cultural and social constructions that label a woman's body as flawed and diseased during menstruation, harmful concepts are further perpetuated. Social constructs that label menstruation as an "*undesirable bodily event*" are inherently linked to period shaming.[109]

3.5 Interlinking Issues: Exploring Approaches to SGBV Guidelines and Programming

An average of one in three women globally experience some form of sexual violence or intimate partner violence during their lifetime, for example rape, sexual abuse, dowry-related abuses or forced pregnancy, among others.[110] The risk of SGBV is exacerbated by displacement and conflict settings and can occur at various stages of flight, as previously seen.[111] In comparison to MHM, there is far wider-ranging published guidance on the integration of SGBV interventions in humanitarian emergencies. A search on the public humanitarian platform ReliefWeb on 23 February 2021 returned 35 results when the filter "content format: manual and guideline" for the terms 'sexual and gender-based violence; refugee' was applied. Of the 35, 15 directly referenced SGBV or GBV (gender-based violence) in their titles. Examples include the UNPFA's *Minimum Standards for Prevention and Response to Gender-based Violence in Emergencies* and IRC's *Guidelines for Mobile and Remote Gender-Based Violence Service Delivery*.

101 Mc Lean, [99]

102 Callamard {104]

103 Salve, [54]; UNICEF, 2018. Keeping girls in school by helping them manage their periods. [Online] Available at: https://www.unicef.org/southsudan/stories/keeping-girls-school-helping-them-manage-their-periods [Accessed 16 December 2020].

104 Sahin, [32]

105 Mohamed et al., [36] (p.2)

106 Crawford, M., Menger, L. M. & Kaufman, M. R., 2014. 'This is a natural process': managing menstrual stigma in Nepal. *Culture, Health and Sexuality*, 16(4), pp. 426-439.

107 Narayan et al., [45]

108 Martin, E., 1992. The Woman in the Body: A Cultural Analysis of Reproduction. Boston, MA: Beacon Press.

109 McHugh, M., 2020. Menstrual Shame: Exploring the Role of 'Menstrual Moaning'. In: Bobel, C., Winkler, I. T., Fahs, B., Hasson, K. A., Kissling, E. E. & Roberts, T-A., eds. The Palgrave Handbook of Critical Menstruation Studies. Singapore: Palgrave Macmillan, pp. 409-422. (p.411)

110 Roupetz, S. et al., 2020. Continuum of sexual and gender-based violence risks among Syrian refugee women and girls in Lebanon. *BMC Women's Health*, Volume 20176, pp. 1-14.; Vu, A. et al., 2014. The Prevalence of Sexual Violence among Female Refugees in Complex Humanitarian Emergencies: a Systematic Review and Meta-analysis. *PLoS Currents*, 18(6).

111 Nightingale, V. R. et al., 2017. Sexual and Gender-Based Violence Attitudes and Experiences among Nine Sub-Saharan African Militaries. *Current HIV Research*, 15(2), pp. 116-127.

In addition to these resources, UNHCR makes specific reference to the Inter-Agency Standing Committee (IASC)'s *Guidelines for Gender-based Violence Interventions in Humanitarian Settings*. The latter provides a series of so-called 'action sheets', categorised by sector and cross-cutting function, on elements such as how to implement a confidential complaints mechanism.[112] The guidelines emphasise the importance of interventions at every stage of a response and the significance of involving different sectors, as well as encouraging the active participation of women and girls in planning and implementation.[113] An integrative review of the effectiveness of these guidelines in GBV prevention in refugee populations found that both the IASC guidelines, as well as a range of further GBV prevention guidelines and programmes were being implemented by humanitarian actors in a variety of refugee settings.[114] That said, evaluations at ground level, for example a study of the implementation of IASC guidelines during the Syrian refugee crisis in the Kurdistan Region of Iraq, Jordan, Lebanon and Northern Syria by the International Medical Corps (IMC), found that guidelines were "*not well known nor being used in programmatic practice*". Furthermore, "*the minimum standards for GBV prevention and response […] are not incorporated consistently in regional and country-specific strategic documents*".[115]

In the case of these SGBV guidelines, ground level evaluations reveal a discrepancy between their surface implementation and the practical realities of their use in emergency programming. Considering this, further evaluation efforts of GBV prevention guidelines and efforts are required to "*justify continuation or revision of recommended GBV activities/programmes being implemented in diverse humanitarian settings*".[116] This way, the aforementioned evaluations of the GBV guidelines share synergies with the objectives of this research. Even though MHM interventions at ground level is an under researched field, interlinking issues, such as the realities of SGBV interventions provide examples that can guide further MHM research.

112 IASC, 2005. Guidelines for Gender-based Violence Interventions in Humanitarian Settings. [Online] Available at: https://www.unhcr.org/protection/women/453492294/guidelines-gender-based-violence-interventions-humanitarian-settings-inter.html [Accessed 23 February 2021].

113 Tappis, H., Freeman, J., Glass, N. & Doocy, S., 2016. Effectiveness of Interventions, Programs and Strategies for Gender-based Violence Prevention in Refugee Populations: An Integrative Review. *PLoS ONE*, 19(8).

114 ibid.

115 IMC, IRC & UNFPA, 2015. Evaluation of Implementation of 2005 IASC Guidelines for Gender-based Violence Interventions in Humanitarian Settings in the Syria Crisis Response. [Online] Available at: https://reliefweb.int/report/syrian-arab-republic/evaluation-implementation-2005-iasc-guidelines-gender-based-violence [Accessed 24 February 2021]. (p.5)

116 Tappis et al., [117] (p.2)

4. Situating MHM Knowledge within International Frameworks

4.1 MHM Presence on Public Platforms

A search for the term 'menstrual hygiene management' on ReliefWeb on the 23 February 2021, produced 17 results when the filter 'content format: manual and guideline or evaluation and lessons learned' was applied. All results were English language documents published between 2014 and 2020, with six being published in 2020. Of the 17, six directly referenced MHM in their titles, seven referenced WASH and the remaining four targeted more general essential services and assistance. A similar search of the same databases, conducted four years earlier, identified a total of 11 guidelines that directly or partly referenced MHM.[117] Whilst not an empirical representation of progress, this suggests a slow development in documentation of MHM and an increase in its 'reportability' in more recent years. Similarly, a search of PubMed in 2015, as part of a meta-analysis of MHM in resource-poor countries, using the terms 'hygiene', 'menstrual hygiene products', and 'menstruation', identified 68 articles focusing on MHM in low- or middle-income countries. Here, only 10 of the 68 articles were published before 2000, which is again an indication of the traction that the topic has been gaining in the last two decades.[118]

4.2 Emergence in International Normative Frameworks

Prior to 2012, there was almost no reference made to MHM in international human rights fora.[119] In 2012, the Special Rapporteur on the right to safe water and sanitation referred to MHM as a human right.[120] In 2014, Jyoti Sanghera, Section Chief at the UN Human Rights Office, highlighted the importance of MHM in allowing women and girls to enjoy economic, social and cultural rights, announcing on World Menstrual Hygiene Day that the "*stigma around menstruation and menstrual hygiene is a violation of several human rights, most importantly of the right to human dignity*".[121] In 2016, the Committee on Economic, Social and Cultural Rights (CESCR) made explicit reference to the fact that "*adequate sanitation facilities that also meet women's specific hygiene needs, and materials and information to promote good hygiene are essential elements of a safe and healthy working environment*".[122] However, whilst many of the aforementioned cases make considerations for MHM, the general tone is observably superficial, with no description of specific working conditions.

Regarding international conferences and goals, the WHO/UNICEF Joint Monitoring Programme on WASH in 2016 advocated for an explicit mention of MHM in the SGDs.[123] Indeed, the SDGs do make implied reference to MHM-relevant topics. For example, SDG 6.2 (access to adequate sanitation and hygiene) highlights the need to pay "*special attention to the needs of women and girls*".[124] SDG 4.1 (primary and secondary education opportunities for both sexes) mentions the need for "*single-sex sanitation facilities*".[125] Additionally, SDGs 3.7 (access to sexual and reproductive health services), 5.6 (sexual and reproductive health and reproductive rights) and goal 8 (economic growth and employment) are all considered to be closely related to MHM.[126] Other goals also interact with MHM, such as those pertaining to innovation, sustainability and general inequality, for example the disposal of menstrual hygiene materials or the challenges for poor

117 VanLeeuwen & Torondel, [12]

118 Kuhlmann et al., [31]

119 Boosey, R. & Wilson, E., 2014. A Vicious Cycle of Silence: What are the implications of the menstruation taboo for the fulfilment of women and girls' human rights and, to what extent is the menstruation taboo addressed by international human rights law and human rights bodies?, Sheffield: Sheffield School of Health and Related Research Report Series No.29.

120 WASH United, 2012. Stigmatization in the Realisation of the Right to Water and Sanitation: Submission for the report of the Special Rapporteur on the human right to safe drinking water and sanitation, Berlin: WASH United.

121 Sanghera, J., 2014. Every woman's right to water, sanitation and hygiene [Interview] (28 May 2014). (p.1)

122 CESCR, 2016. General Comment No.23 on the Right to just and favourable conditions of owrk (article 7 of the International Covenant on Economic, Social and Cultural Rights. s.l., UN Doc: E/C.12/GC/23 para.5. (p.8)

123 WHO & UNICEF, [4]

124 United Nations, 2015. Resolution adopted by the general assembly on 25 September 2015, Geneva: United Nations. (p.18)

125 ibid. (p.17)

126 Viscek, [6]

women and girls in accessing costly hygiene products.[127]

4.3 Building Blocks: Other Operational MHM Guidelines

The first operational guidelines that referenced MHM, particularly as part of emergency responses, have their origins in the humanitarian world.[128] In 2011, The Sphere Project published its internationally cited *Humanitarian Charter and Minimum Standards for Humanitarian Response*, which primarily details the inclusion of MHM in WASH interventions.[129] Here, guidelines for the provision of sanitary materials, menstrual waste disposal, as well as privacy and cleanliness of latrines or toilets are detailed. It addresses the need to provide women with underwear and other NFI, such as soap and a washing basin. Furthermore, it advocates for the consultation with women as to preferred sanitary materials and for their inclusion in designing sanitation approaches. However, the standards stop short of addressing cross-sectoral responsibilities in MHM integration and do not provide specific details on how to carry out consultations with women and adolescent girls, which may fall outside of its scope as standards and not guidelines.[130] Similarly, UNFPA's *Adolescent Sexual and Reproductive Health Toolkit for Humanitarian Settings,* published in 2009, sets minimum standards for the provision of menstrual items to adolescent girls, along with the guidance that MHM should be incorporated into puberty education curricula.[131] The report also emphasises the need for consultation with girls during the planning of said interventions.[132]

In 2014, Columbia University and UNICEF launched the process *MHM in Ten 2014-2024*. This MHM-specific initiative has five key priorities, including "*building the evidence base, guidelines for MHM in schools, cross-sectoral advocacy, allocating responsibilities and budgets, and integrating the education system*".[133] In 2013, the Water Supply and Sanitation Collaborative Council (WSSCC), in collaboration with UN Women, developed several case studies on MHM interventions, mainly in Africa and South Asia, which have contributed to the development of guidelines at country level.[134] In both cases, however, it has been noted that these do not constitute "*overall conceptual frameworks or theory of change*".[135] Whilst this is not an exhaustive list of MHM guidelines or standards in existence prior to the publishing of the Toolkit, in a field which is particularly "*coordination-sensitive*", there is very little evidence of comprehensive mechanisms for cross-sectoral synergies and strategy.[136] Moreover, only very few of the standards and guidelines specifically make reference to emergency or displacement contexts.

4.4 Considering the Challenges of MHM Interventions

4.4.1 Coordination, Consultation and Leadership

Finding a sector lead for an MHM response is of particular importance to ensure that its different components do not fall through the cracks or fail to benefit from funding or staffing opportunities.[137] Considering this, "*the majority of the literature suggested that WASH take the lead on MHM in close collaboration with oth-*

127 Tellier, S. & Hyttel, M., 2018. Menstrual Health Management in East and Southern Africa: a Review Paper, s.l.: UNFPA.

128 Sommer et al., [5]

129 Sphere, [80]

130 Sommer, [17]

131 UNFPA, 2009. Meeting adolescent sexual and reproductive health needs. Adolescent Sexual and Reproductive Health Toolkit for Humanitarian Settings. [Online] Available at: www.unfpa.org/webdav/site/global/shared/documents/publications/2009/adol_toolkit_humantarian.pdf [Accessed 4 January 2021].

132 Sommer, [17]

133 Columbia University & UNICEF, 2014. MHM in Ten: Advancing the MHM Agenda in WASH in Schools. [Online] Available at: www.unicef.org/wash/schools/files/MHM_in_Ten_2014_Meeting_Report.pdf [Accessed 4 January 2021]. (p.5)

134 WSSCC, 2013. Improving the lives of Women and Girls: WSSCC's work in Menstrual Health Management. [Online] Available at: https://www.wsscc.org/media/news-stories/improving-lives-women-and-girls-wssccs-work-menstrual-hygiene-management

135 Tellier & Hyttel, [131] (p.8)

136 ibid.

137 Sommer et al., [5]

er relevant sectors".[138] Water supply, latrines, and bathing areas constitute some of the most fundamental MHM structures. The protection sector, due to their experiences and expertise working with the target group on sensitive topics and mainstreaming other interlinking issues, such as SGBV, should not be forgotten. The education sector should also collaborate with the WASH sector to establish MHM-friendly facilities in schools, as well as disseminating MHM education and distributing materials, which requires the sensitisation of teachers.[139] The NFI sector plays an important role in the provision of menstrual materials and supplies. Similarly, the health sector provides care for menstruation related issues, for example women experiencing post-partum heavy menstrual bleeding or fertility issues, as well as problems arising from poor MHM, such as itching, reproductive tract infections or thrush. The shelter sector (e.g., in the case of individual household latrines) and camp coordination and camp-management (CCCM) (e.g., lighting for night-time latrine use) also have auxiliary roles.[140]

Existing documentation recognises that consultation with girls and women on preferences, practices and cultural specificities is paramount to designing appropriate interventions. The need to understand these elements, not just within groups of different nationalities but also ethnicities, ages and positions within society, and the need to tailor MHM interventions to these variations, is abundantly clear.

4.4.2 Gaps between Policy and Practice

A lack of adequate M&E of MHM interventions permeates literature that seeks to explore why the topic is so under documented. A review by Sommer, Schmitt, and Clatworthy in 2016 highlights issues surrounding MHM-relevant indicators. Firstly, there is often a hesitancy to introduce new MHM-specific indicators into acute emergency situations in which responders are already overwhelmed by a demand to collect various indicators in key response areas. In this particular review, UN advisor in the WASH sector reported that, "*there is a tendency to have indicator overload [...] with all these wonderful indicators, but no one collects the data*".[141] Secondly, there are certain 'proxy indicators' that reflect relevant MHM data, such as gender-segregated latrines or hygiene related NFI, that are not always labelled as 'MHM indicators' but are nonetheless hugely relevant. The challenge is, therefore, either the adaption of current indicators to serve MHM purposes, or the integration of new MHM indicators into previously established M&E systems.[142] Research also finds that many individual organisations have their own internal indicators, which are not always shared, even among collaborators in the same refugee camp.[143] Published aid organisation reports or informal activity reports often do not provide detailed descriptions of best practices or lessons learned.[144] There is still much work to be done in terms of building an evidence base to feed the further improvements to MHM interventions. Suggestions for such mechanisms to broaden this evidence base include research consortia or the mapping of individual MHM studies in systematic reviews, although this is yet to be undertaken.[145]

4.5 Introducing the MHM Toolkit

The *Toolkit for integrating Menstrual Hygiene Management (MHM) into humanitarian response* is widely accepted as the frontrunner in its field as the most comprehensive and extensive of any MHM operational guidelines to date. Its aim is to provide *"streamlined guidance to support organizations and agencies seeking to rapidly integrate MHM into existing programming across sectors and phases".*[146] Alongside 14 core topics, the guide offers key assessment questions, activity design considerations, M&E and feedback resources, case studies from around the world, as well as suggestions of additional resources. In addition to collaboration with 27 leading organisations from the humanitarian sphere and other humanitarian practitioners

138 VanLeeuwen & Torondel, [12] (p.181)
139 Tellier & Hyttel, [131]
140 Sommer et al., [5]
141 ibid. (p.256)
142 ibid.
143 VanLeeuwen & Torondel, [12]
144 Sommer, [17]
145 Tellier & Hyttel, [131]
146 Colombia University & IRC, [22] (p.4)

and organizations, displaced adolescent girls and women were also key contributors.[147]

The toolkit is designed as a cross-sectoral tool and presents the hierarchy of responsibility within a response, with WASH identified as a likely lead and several further sectors as key to successful implementation at various stages. Both the WASH and Protection sectors are key at all stages of implementation, as well as significant contributions from CCCM. According to the Toolkit, a complete MHM response includes the various elements of three essential components. The first component makes a distinction between MHM materials, referring specifically to items used to soak up menstrual blood, and supplies, such as additional supportive materials for washing or drying. Again, the demand for high-levels of cross-sectoral coordination is observable. All three components run throughout the different chapters of the Toolkit.

147 VanLeeuwen & Torondel, [12]

5. Principal Research Outcomes

5.1 Introducing the Pilot Projects

The following projects with a core focus on MHM were carried out in East African refugee camps between 2013 and 2018. The following description of their primary features justifies their selection for this research.

Improving Menstrual Hygiene in Emergencies in Mungula Refugee Settlement, Uganda

The International Federation of the Red Cross and Red Crescent Societies (IFRC)'s pilot project *Improving Menstrual Hygiene Management in Emergencies* was implemented in 2014 in Mungula Refugee Camp in Uganda. The intervention was fuelled by the drive to "*generate much-needed evidence in the area of Menstrual Hygiene Management (MHM) in emergency settings*".[148] Indeed, the subsequent review of the project formed part of wider operational research addressing MHM in refugee camps in Somalia and Madagascar. The camp itself is in the Adjumani District in northern Uganda and in January 2021 was recorded as hosting 6,612 individuals.[149] In terms of concrete project activities, the team procured and distributed 1,000 washable hygiene kits, disseminated knowledge to beneficiaries of the MHM materials, as well as to camp staff on how to incorporate MHM into WASH emergency responses. The target group in Mungula I/II Refugee Settlement were South Sudanese women and adolescents, mainly Dinka, who were recently arrived in Mungula.[150] Around 120,000 refugees in Uganda are part of the Dinka population, the largest ethnic group in South Sudan. In the Dinka culture, if a woman is menstruating, she is forbidden give food to elders, cannot drink milk, and cannot be near the fire, and so cannot cook.[151]

MHM pilot intervention in Rhino Camp Refugee Settlement, Uganda

With a similar target group to those in Mungula, WoMena Uganda and international NGO ZOA's *MHM pilot intervention* was carried out over a six-month period in Rhino Refugee Settlement in Arua District, northern Uganda in 2017. During the period of implementation, Rhino was host to an estimated 86,770 people, of whom almost all were of South Sudanese origin. The target group was split into two groups, girls in four primary schools and their mothers and adult guardians. Secondary target groups included support staff and other peers, such as boys and men, who were targeted in trainings and information meetings. Differing slightly from Mungula, the intervention focused on the distribution of reusable pads as well as menstrual cups. Additionally, training on menstruation and use of MHM materials, as well as training for ZOA staff and other actors within the camp, including UNHCR personnel was offered. Following these activities, the aspirations for the project were that "*the suitability and advantages of the menstrual cup and reusable pads in both high and low-income settings can be replicable to a humanitarian setting*".[152]

Piloting menstrual hygiene management (MHM) kits for emergencies in Bwagiriza Refugee Camp, Burundi

Focusing on refugee beneficiaries of a different nationality, in this case from the Democratic Republic of the Congo (DRC), IFRC's 2012 project *Piloting menstrual hygiene management kits for emergencies* was implemented in Bwagiriza Refugee Camp in Ruyigi province, eastern Burundi. During the period of implementation, Bwagiriza was hosting over 9,900 Congolese refugees, despite having capacity for only 8,000.[153] As with the previous projects, the primary focus was on providing 2,000 women and adolescent girls, who were randomly selected from all 20 sectors of the camp, with menstrual materials and supplies. 1,000 received disposable hygiene kits and 1,000 reusable/washable kits, as well as instructions on their use and

148 Poulson, C., 2017. HIF Evaluation Case Study: IFRC Menstrual Hygiene Management in Emergencies, London: IPE Triple Line. (p.1)

149 UNHCR, 2021. Uganda - Refugee Statistics January 2021 - Adjumani. [Online] Available at: https://data2.unhcr.org/en/documents/download/84748 [Accessed 27 February 2021].

150 Poulson, [153]

151 IFRC, 2017. Understanding the Menstrual Hygiene Practices of Somali and South Sudanese Refugees. [Online] Available at: https://www.elrha.org/project-blog/understanding-menstrual-hygiene-practices-somali-south-sudanese-refugees/ [Accessed 9 January 2021].

152 WoMena & ZOA, 2018. Menstrual Health in Rhino Camp Refugee Settlement, West Nile, Uganda: Pilot Intervention Report, Copenhagen; Kampala: WoMena. (p.11)

153 UNHCR, 2012. Burundi struggles to cope with Congolese influx. [Online] Available at: https://www.unhcr.org/news/latest/2012/10/5087e9c66/burundi-struggles-cope-congolese-influx.html [Accessed 17 January 2021].

safe MHM practices. Camp staff, for example from IRFC, also participated in MHM capacity building sessions. The intended outcomes of the project were centred around "*understanding the needs of women and adolescent girls around menstruation in a humanitarian emergency context*".[154]

Pilot Study Findings on the Provision of Hygiene Kits with Reusable Sanitary Pads in Kyaka II, Rwamwanja and Nakivale Refugee Settlements, Uganda

As the final pilot project, UNHCR Sub-office Mbarara, in collaboration with social enterprise AFRIpads, implemented its *Provision of Hygiene Kits with Reusable Sanitary Pads Project* over a three-month period in 2018. This fourth project was based in three refugee settlements in southwest Uganda, Kyaka II, Rwamwanja and Nakivale. In all three locations, the concrete objective was "*testing the appropriateness and acceptability of reusable sanitary pads in the southwestern refugee context, specifically among schoolgirls*".[155] Similar to Bwagiriza, here most refugees originated from the DRC. In Nakivale, the first of the three target camps, the population was slightly more varied, with refugees from Burundi, Rwanda, South Sudan, Ethiopia and Somalia. The target group was slightly different to Mungula, Rhino and Bwagiriza, focusing only on primary and secondary schoolgirls. As with previous projects, primary activities included MHM training as well as instruction on menstrual material use accompanied the distribution of hygiene kits containing menstrual materials and supplies.

5.2 Project Narratives

For all projects, as can be observed below (table 1), project planning, implementation and endline M&E were conducted along similar paths. All four projects focused on activities reflecting Components 1 and 3 of the Toolkit. These are 'MHM materials and supplies' and 'MHM information'. Notably, there is an absence of Component 2, 'MHM supportive facilities', in all of the four projects' activities.

154 IFRC, 2013. Menstrual Hygiene: What's the Fuss? Piloting menstrual hygiene management (MHM) kits for emergencies in Bwagiriza refugee camp, Burundi, Nairobi: International Federation of Red Cross and Red Crescent Societies. (p.2)

155 Kuncio, T., 2018. Pilot Study Findings on the Provisino of Hygiene Kits with Reusable Sanitary Pads, Mbarara: UNHCR. (p.7)

	Projects			
Project Activities	***Mungula Refugee Settlement, Uganda***	***Bwagiriza Refugee Camp, Burundi***	***Rhino Camp Refugee Settlement, Uganda***	***Kyaka II, Rwamwanja and Nakivale Refugee Settlements, Uganda***
Baseline Surveys / Response Planning	Community meetings, FGDs*	Baseline KAP** study, Age-disaggregated FGDs	Questionnaires, In-depth interviews, FDGs, KIIs***, MHM facility assessments, Stakeholder engagement, Community sensitisation	KIIs FGDs, WASH facility assessments
MHM Training for Camp Staff	Training of National Society Staff, female enumerators and refugee volunteer interpreters on MHM and sensitization sessions	Capacity building of male and female staff at IFRC and National Societies on MHM	Training on menstruation, MHM, self-care and use of menstrual materials	Training of Trainers by AFRIpads staff to UNHCR staff and schoolteachers, Training of volunteers on collecting information and leading FGDs
MHM Training and Hygiene Kit Instruction Dissemination	Block-to-block education and demonstration sessions	Practical information (in local language) including descriptive images	Training using menstrual materials to demonstrate and illustrative flip charts, Distribution of menstrual calendar and diary	Training on MHM and AFRIpads care, Illustrative flip charts, Take-home booklets, Poster hung at school
Disposable Hygiene Kit Distribution	N/A	Distribution of 1,000 disposable hygiene kits	N/A	N/A
Reusable Hygiene Kit Distribution	Distribution of 950 reusable hygiene kits	Distribution of 1,000 reusable hygiene kits	Distribution of 71 menstrual cups, 63 reusable AFRIpads	Distribution of 270 reusable hygiene kits
Project M&E	Age and sex disaggregated FGDs, KIIs, KAP Surveys 1- and 3-months post-implementation	Age and sex disaggregated FGDs, KIIs, KAP Surveys 1- and 3-months post-implementation	Mid- and endline questionnaires, semi-structured interviews, FGDs, MHM facility assessments	KIIs, FGDs

*focus group discussions (FGDs), **key information interviews (KIIs), ***knowledge, attitude and practice (KAP)

Table 1: Summary of Project Activities

To situate these projects within the Toolkit guidance, the following analysis explores the different project activities, structured according to the two different key components of the Toolkit.

5.2.1 Component 3: MHM Information

The Toolkit's chapter 9, 'MHM and Hygiene Promotion and Health Education Activities' covers different aspects of Component 3 in the following sections: 9.1 types of menstrual hygiene promotion and health education, 9.2 developing and designing IEC materials, 9.3 menstrual hygiene promotion and 9.4 health

education on menstruation. These correspond to the activities observed in the pilot projects, namely training of camp staff and MHM training of the project beneficiaries themselves.

Activity 1: MHM Training of Trainers for Camp Staff

The Toolkit is explicit in its reference to how all staff that are involved in the distribution of menstrual materials and supplies, regardless of their gender, must be knowledgeable and comfortable discussing MHM and its interlinking topics. This includes understanding the local beliefs and taboos surrounding menstruation, as well as the appropriate languages and terms in which it should be discussed, and with whom it should be discussed. Notably the toolkit recommends that "*male staff should not be directly discussing MHM with the female beneficiaries*", although they can be involved with planning and some implementation activities, for example waste management or warehouse distributions.[156] Trained staff should also be familiar with the materials themselves, such as how reusable pads are worn, washed or dried. It is explained in the Toolkit that all staff across relevant sectors must be provided with such training.

In terms of training of staff of both genders, in Mungula camp, IFRC trained both its male and female National Society Staff (NSS), but refugee volunteer interpreters and volunteer enumerators that also received training were only female. In Bwagiriza, training was conducted in a very similar manner, targeting both male and female staff at IFRC and its NSS. In both cases, endline key informant interviews (KIIs) revealed that the emphasis of this training should be placed on the practical aspects of MHM. In Mungula, respondents also reported that cultural beliefs and perceptions, as well as consultation with women and girls and the identification of beneficiary groups were highly important topics that should be included in staff training. Further feedback highlighted that trainings and advocacy briefings should be given to WASH, health, and waste management staff. Additionally, advanced capacity building should focus on the appropriate design of WASH facilities and concepts surrounding menstrual waste management. In Rhino camp, male and female members of the village health team (VHT), as well as senior female teachers received MHM training. Whilst most VHTs stated at endline that they would like to receive further training, some male VHTs reported that they felt shy to discuss menstruation. This concurs with the Toolkit guidance that male staff should not directly discuss MHM with female recipients.

Another identified challenge concerned retention of knowledge after staff trainings. In Mungula, endline interviews identified varying experience of the volunteer pool and that some volunteers had not understood what was expected of them during project implementation even following the trainings. Furthermore, trainings often had to be repeated due to a rotation of volunteers. In terms of the corresponding guidance from the Toolkit, there is no explicit reference made to navigating this challenge. Whilst there is extensive reference to evaluating beneficiary knowledge on MHM after project implementation, there is no sign in the toolkit nor in the pilot project reports on evaluating staff knowledge post training. In other words, there is an observable gap in assessing whether training exercises have equipped staff to implement MHM interventions, and whether this role has been sufficiently understood. Evaluating post training knowledge retention should be integrated into project M&E steps to compensate for this. Similarly, it is important to note that trainings may need to be repeated to accommodate for the rotation of volunteers.

Despite these challenges, an overall high level of concurrence with the Toolkit guidance is observable. All piloted projects placed focus on pre-distribution staff training, as well as the different participation levels of different genders. Furthermore, the Toolkit guidance that only female staff should directly discuss MHM with project beneficiaries is supported by project findings.

Activity 2: MHM Training for Beneficiaries

Trainings provided to the women and girls benefitting from interventions were also observed at the core of all four projects. Information, education, and communication (IEC) materials used to address MHM knowledge gaps among the target population is also a fundamental element of the Toolkit. Here, the Toolkit advises that MHM trainings should be preceded by baseline consultations with women and girls to assess their previous knowledge and cultural practices, including any harmful misconceptions about menstruation. The Toolkit details the key topics that are fundamental contents of MHM training, such as information on product use and the basics of the menstrual cycle or puberty. Information on product use should include physical demonstrations, for example how to insert a reusable pad into underwear. Furthermore,

156 [22] (p.15)

targeted IEC materials should use clear diagrams and pictures, and where possible should be left in places visible to women and girls following the sessions, for example in female latrines or school toilets. The trainings should also take place in safe spaces, such as during NFI distributions, in women's community centres or youth centres or as part of existing informal women's meetings. Additionally, health outreaches or clinics and the sexual and reproductive health (SRH) curriculum in schools can be opportunities to access the target group. In all cases, it should be considered whether adolescent girls and women are comfortable receiving training together or whether sessions should be age disaggregated.

Many of the piloted interventions recorded successes when using visual materials to aid in the training of beneficiaries. For example, in Bwagiriza camp practical information in the local language included descriptive images on the menstrual process and how to manage it. The sessions were split into two groups by participant age. Of 891 women and girls surveyed at endline, 65% demonstrated basic MHM knowledge, a significant increase from the baseline of 15%. Further feedback from these beneficiaries revealed that they would like to receive more information on menstrual pain management and a more detailed diagram of the female anatomy. They also confirmed that IEC materials should use less words and bigger pictures. Following a similar method, the project in Kyaka II, Rwamwanja and Nakivale settlements consisted of information sessions of 2-3 hours using flip charts with diagrams, for example showing the menstrual cycle, as well as providing a booklet to take home and a poster to be left hanging at school. Here, it was recorded that correct usage of menstrual materials was close to 100% following demonstration of their use.

Some projects reported more mixed results from the IEC sessions. In Rhino camp, training was provided in English with translations available. Participants reported that the sessions had subsequently led them to discuss menstruation with a female household member. These women and girls were also given menstrual calendars to help them predict when menstruation would begin each month. However, no participants recorded using the calendars for this purpose. In another example, volunteers in Mungula conducted trainings from block to block, finding that, for many beneficiaries, this was their first time receiving MHM information. The take up was recorded as very successful, for instance, the number of women and girls who could report the average length of menstruation rose from 25% to 78% after training. Similarly, less than 10% reported difficulties understanding how to use hygiene items following demonstration. These IEC sessions in Mungula also covered topics of pregnancy and family planning, however, many women were less receptive to talking about these topics than with menstruation, as within their culture family planning was discouraged.

In terms of encountered challenges, for instance in Kyaka II, Rwamwanja and Nakivale settlements, 23% of participants reported that they still did not have enough information about MHM even after training. Whilst this showed an increase from the baseline recording of 44%, there was clear room for improvement. The findings in the project report suggested that this may have been due to sessions being held in English, which for some of the younger girls presented a challenge. The Toolkit itself does not directly reference the need to tailor MHM information to the local languages of the recipients, and in some more diverse communities this may be difficult where many different languages are used. However, piloted projects here have suggested that translated materials or the presence of a translator in the sessions can aid uptake of information. Indeed, the report from Rhino camp promotes the idea of using already trained participants as 'menstrual champions', or focal points, to spread messages among their communities in their native languages. Further challenges were identified in Rhino camp in the form of fluctuations in IEC session attendance. Lower attendance rates were observed where sessions took too long, were during school hours or on days where other NFI or food items were being distributed. Reflecting this, the project recommendations included not exceeding 2-3 hours of training and working around distribution days and school hours. Notably, the toolkit itself does not recognise these aspects and this can be identified as a gap between practical learnings and the operational guidance under analysis.

5.2.2 Component 1: MHM Materials and Supplies

Chapter four of the Toolkit 'Providing MHM Materials and Supplies' summarises the guidance for Component 1. Sections 4.2 - 4.4 detail the selection and procurement of MHM materials and supplies. All four project activities included the distribution of different types of menstrual materials, including disposable or reusable pads, as well as menstrual cups.

Activity 3: Distribution of Reusable Dignity Kits

According to the Toolkit, the use of commercially produced reusable sanitary pads is a cost-effective option for MHM projects. Identified constraints include requiring a space for washing and drying pads, access to water, requirement of a separate bucket and laundry soap for washing, as well as a clothesline and pegs for drying. Furthermore, incorrect disposal of the pads can result in the clogging of latrines, which can have environmental and health ramifications. The key sectors involved in the procurement and distribution of MHM materials are the WASH, health and NFI sectors. The piloted projects themselves reference many of the elements seen in figure 4, albeit to varying degrees. For example, in Mungula, the distributed hygiene kits contained all but three of the Toolkit recommended items. Differences were also observable, for instance, no projects provided a torch, cloth or safety pins within their hygiene kits. In terms of overall product approval, take-up and satisfaction with reusable pads was high. For example, in Kyaka II, Rwamwanja and Nakivale settlements participants reported a decrease from 59% to 9% in experiencing leaks and stains, which corresponded to a significant improvement in quality of life. In Bwagiriza camp, 90% of adolescent girls and 85% of women were 'satisfied' or 'very satisfied' with their reusable pads.

Feedback was more varied regarding the quantity of hygiene kit items. In Kyaka II, Rwamwanja and Nakivale camps, even though 99% of women and girls said that they would use the reusable pads again, access to soap and underwear continued to be an issue. 60% reported that the number of pairs of underwear in the kits was not enough. That said, the majority reported owning five or more pairs and the report stated that it was unclear as to what would be considered enough. The Toolkit itself suggests that 3 pairs of underwear should be distributed every six months. For other kit items, participants in the three camps reported that 250g of laundry soap was only enough to last them for one week, mainly because they needed to use the soap for washing other clothing items as well. However, in Mungula camp, women and girls found that a monthly distribution of soap was sufficient. The Toolkit references the fact that consumables, such as personal and laundry soap must be distributed more often, although it advises that this should be done only once a month with 200g of each.

There are therefore disparages between some project findings and the recommendations in the Toolkit. Defending its guidance, the Toolkit references the fact that distributions occurring more frequently than once a month may encourage the resale of consumables. One further observation was from women in Mungula camp, who requested to receive a towel as part of the hygiene kit. This, again, is not an element referred to in the Toolkit. Similarly, whereas the Toolkit does not make explicit reference to the pre-distribution storage of MHM materials and supplies, reports from Mungula recommend a buffer stock of items, due to fluctuations in target groups and to ensure a timely delivery of items to new camp entrants.

Related to the reports of lack of items, in Mungula, participants requested that the number of reusable pads be increased from four to six or even eight, particularly for those with a heavy flow. Only 43% of Mungula respondents reported being 'very satisfied' with the kits, with the main reason for dissatisfaction being that one pack of pads was not enough. These women and girls also concluded that numbers of reusable pads should account for the fact that drying pads is challenging during the rainy season. For example, 12% of respondents reported that when it rained their pads never fully dried, with many confirming that it took more than a full day. This was concurred by women in Rhino camp who encountered similar difficulties during the rainy season. As observed in chapter 2, damp menstrual materials pose risks to health and wellbeing. The Toolkit itself does not make specific reference to the longer drying times of reusable pads in different climates, although it does offer guidance of how drying times can be reduced, such as by designing pads in colours that can be subtly dried on the top of tents without drawing attention. Another gap between project findings and Toolkit guidance was recorded in Mungula, in that the bucket provided was too small for washing items properly. The Toolkit does not refer to the recommended size of such items.

Finally, in terms of male involvement, the Toolkit refers to the fact that, dependent on circumstance, it may be possible to involve men in distributions. Due to the fluid nature of gender roles and relationships, this point is left notably open with the advice that interventions must be tailored to the cultural sensitivities of each target population. In Mungula, women reported that in general men were happy that the hygiene kits were being distributed. Indeed, some men also requested to receive something and so were given the soap, with the instruction that this was for the women to use. In Bwagiriza, some men even collected the kits for their wives who were unable to attend. However, it was also reported that some men felt unhappy or 'left out' due to a perceived lack of consultancy with them as heads of households about the purpose and running of distributions. Bearing this in mind, baseline community sensitisation meetings in Mungula

were partly aimed at secondary target groups (males), concentrating on explaining the menstrual materials and supplies. It was recorded that, whilst male participants showed a high level of engagement with MHM, menstruation was still perceived as a 'women's issue'. Furthermore, women needed permission from men to attend all events associated with the MHM intervention. These findings demonstrate the need for culturally sensitive implementation and strong understanding of gender roles in target populations, as underlined in the Toolkit.

Activity 4: Distribution of Disposable Dignity Kits

In comparison to its reusable counterpart, the Toolkit finds that disposable sanitary pads are perceived as 'easier' to manage in situations in which privacy is limited, for example in camp settings. There are, however, numerous environmental implications associated with their incorrect disposal, for example blocked latrines or polluted water sources. Coordination with the WASH sector to provide waste management systems is key. Furthermore, single-use pads are not viewed as sustainable solutions, particularly in protracted situations. Both the Toolkit and findings from Bwagiriza and Mungula camps suggest that, where possible, items for hygiene kits, especially pads and laundry and personal soaps, should be procured locally. The Toolkit highlights that in the case of disposable pads, this is generally easier and more rapid than for the reusable variety.

The project in Bwagiriza camp was the only one to include disposable pads in its activities and, to enable an element of comparison, hygiene kit distribution was split between 1,000 disposable and 1,000 reusable options. In terms of acceptance, focus group discussions showed that 68% of adolescents and 65% of women were 'satisfied' or 'very satisfied' with the disposable kits. That said, the project recorded an overall preference for the reusable variation of the hygiene kits. For example, when asked about the usefulness of the items, the pads, as well as plastic bags to aid with discreet disposal, were rated as the least useful items. Other items in the kits included contents akin to the reusable ones, for example buckets, soap, underwear, rope and pegs, as well as instructions on use, care and disposal. Preferences for the two options differed according to age group. For example, women reported that reusable pads were more sustainable and provided them with a long-term option to manage menstruation, whilst adolescent girls found the process of washing and drying the pads difficult to manage, especially incorporating it their daily routine whilst also attending school. This is an important element to bear in mind when seeking to reduce the mental stress placed on young girls in dealing with menstruation. The Toolkit underlines the need to consult with women and girls at baseline on preferences for MHM materials, at this stage it is therefore important to note any age-based differences.

Activity 5: Distribution of Menstrual Cups

A third option for menstrual materials is the reusable menstrual cup. In Rhino camp, these were distributed alongside reusable pads, with some women receiving one or the other, and some testing both. The use of menstrual cups is not included in the Toolkit, which states that only the "*most commonly used materials in emergency contexts, and specifically those currently used in low-income settings*" are covered.[157] Menstrual cups are a relevatively new concept, both in emergency and low-income settings, as well as in the developed world. However, its inclusion in this research contributes to its contention as an option for future guidelines and interventions. Indeed, in Rhino camp, 81% of respondents reported that there was nothing that they didn't like about their menstrual cup. Of those who tested both options, 52% expressed preference for the maenstrual cup over reusable pads. Challenges of the menstrual cup included 11% of respondents finding difficulties using the cup, cleaning it or fearing meeting someone else whilst doing so. Interviews also revealed that women and girls took longer to become comfortable with using the cup, as it was a new concept. These findings are overall positive in their review of the menstrual cup as a consideration in future project activities.

157 ibid. (p.22)

6. Concluding Remarks

Insufficient access to safe and dignified MHM, both in lower-income settings and displacement situations has lasting impacts on the health, wellbeing and socio-economic development of women and girls. Since the turn of the millennium, MHM has emerged in public discourse, been referred to in international development frameworks and appeared in subcomponents or even as the core focus of operational guidelines. Clearly, such guidelines originate in the humanitarian world. In terms of academic research in health or related publications, however, a limited evidence base finds very little reconciliation of different streams of practical MHM experiences. This is even more so the case in emergency or displacement situations. It is apparent that the gradual efforts of the humanitarian world to document implemented MHM projects is poorly transported into academic research. Arguably a stronger base for formative research exists, for example academic reviews of needs of different populations and attributes of MHM in low-income communities. However, this has been insufficiently translated into development of policy, methods, protocols, and replicable project learnings for those seeking to implement MHM interventions on the ground. Such translation is required to systemise and disseminate existing knowledge, both to guide future actions and to serve as a basis for engaging wider actors with the aim of advocating for MHM and the rights of women and girls.

As is often the case in humanitarian situations, this research has identified projects in the piloting stages, which have focused on providing MHM materials and supplies, as well as information, education, and communication for those distributing and receiving them. Indeed, the four projects analysed here have provided observations and recommendations for changes to implementation design, which can be considered in future projects and guidelines. The findings also confirm an overall demand for MHM interventions among their target populations, as well as acceptance of a wide range of products. The concrete learnings from these pilot projects contribute to an evidence base of what is feasible in displacement contexts. In this way, recommendations for fine-tuning of future operational guidelines can be deduced. That said, on the wider dissemination of learnings, the results from the piloted projects very much support the academic literature in its findings that established mechanisms for information sharing are lacking. Suggestions for such mechanisms include research consortia or the mapping of individual MHM studies in systematic reviews. Through the mainstreaming of practical learnings into wider used information-sharing mechanisms, the base for engagement with MHM issues at higher levels can be enriched.

There continues to be a limited focus on more overreaching strategic issues, such as cross-sectoral coordination or how to address the issue of sustainability. This research finds that the pilot projects stop short of engaging with these broader issues. Coordination amongst emergency response sectors is highlighted in academic research as systematically lacking in MHM responses. Findings here support this statement and recognise the continuing need for a more comprehensive focus on MHM across the response spectrum. Building on this need for an overall focus, there is a notable lack of guidance on how to progress beyond a 'kit culture' to establish longer term strategies. In doing so considerations for scalable and sustainable development processes can be addressed. This can raise the profile of MHM to a higher level of decision-making concerning programming, policy, and funding, bringing the needs of displaced women and girls to the table.

7. Recommendations for Progression

MHM Programming Recommendations

- The training of camp staff involved in MHM interventions should be followed up by a post-training evaluation to ensure that disseminated information and roles have been fully understood. Where staff are involved in data collection, pre-implementation training should include guidance on data collection methods, for example how to lead FGDs or use digital data management tools.
- Trainings may have to be repeated at various stages of implementation where staff are on rotating schedules.
- Where possible, training should be provided in local languages, especially when working with younger girls whose command of foreign languages, such as English, may not be sufficient for them to express themselves or understand IEC sessions.
- Trainings should be organised outside of school hours and on days where food or other NFI distributions are not taking place.
- Consumable items, such as laundry and personal soap, as well as underwear, should be distributed more frequently than other items. However, according to assessment of the situation, projects should avoid fuelling resale culture.
- In wetter climates or during rainy seasons, reusable pads should be included in hygiene kits to allow for longer drying times. Similarly, for women experiencing heavy flows or post-partum bleeding, kits should contain more supplies.
- To account for fluctuations in target groups, as well as new arrivals, a back-up stock of hygiene kits should be maintained to enable timely distribution.
- Preferences for reusable or disposable MHM materials may differ among different age groups and should be noted as part of baseline consultations with beneficiaries.

Recommendations for Addressing MHM at a Higher Level

- The lack of cross-sectoral coordination must be addressed. For example, MHM trainings for camp staff should be expanded to include wider audiences, including WASH, health, and waste management sectors.
- Mechanisms for mainstreaming project learnings must be established to expand the base on which policy, programming, and funding decisions are made. Suggestions include research consortia or the mapping of individual MHM studies in systematic reviews.
- This research addresses small-scale pilot interventions. Future research should focus on the challenges associated with the scaling up of kit distributions, as well as the funding issues and environmental concerns associated with larger-scale projects.
- Moving beyond the concept of 'kit culture'. By expanding documentation and sharing of evidence this can fuel the establishment of a more sustainable and scalable strategy.