Violence, gender and WASH: spurring action on a complex, under-documented and sensitive topic

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ABSTRACT The global community of water, sanitation and hygiene (WASH) researchers, practitioners and policy makers has to date inadequately addressed the challenge of vulnerability to violence in relation to access to water and sanitation in development and humanitarian emergency contexts. Reasons may include the lack of valid and reliable documentation of girls', boys', women's, and men's experiences of violence while accessing water and/or sanitation facilities; the sensitivity of the topic, with secrecy around individuals' experiences of violence and their sanitation needs further hindering the collection of reliable data; the complexity of understanding the gendered dimensions of vulnerability to violence, with girls and women at least anecdotally reported to be more likely to experience violence in relation to WASH; and the likelihood that many WASH practitioners lack training in gender and violence, affecting their ability to deliver adequate programming and evaluation. In an effort to encourage increased action and learning on the intersection of gender, violence and WASH, a review of the existing evidence and practice was conducted. Findings indicate the need for more systematic, reliable, and ethically conducted monitoring and learning on this topic to build a more solid evidence base, while also refining key principles for improved policy and programming.

KEYWORDS gender-based violence (GBV) / violence / vulnerability / water, sanitation and hygiene (WASH)

I. INTRODUCTION

Globally over 2.5 billion people lack access to improved water and sanitation,[1] despite the equal right of all to safe access to improved water and sanitation.[2] In countries around the world, populations in urban slums,[3] rural locations and refugee camps all struggle to meet their sanitation needs with some measure of dignity and privacy. In many contexts, a lack of access to, or poorly designed, water, sanitation and hygiene (WASH) services can increase vulnerability to violence. A significant and under-addressed aspect of the global water and sanitation challenge is the vulnerability to violence experienced by girls and women in particular when seeking to meet their (and often their families') daily needs for water and sanitation. Girls and women in some contexts must travel long distances in search of a water source, while in other contexts they may wait until evening hours to seek out a field or private place

in order to defecate under cover of darkness.[4] Post-pubescent girls and women have the additional challenge of managing menstruation, which increases their daily water and sanitation requirements for a number of days each month.[5] This may increase the vulnerability to violence of those girls and women who live in households that lack safe access to adequate water and sanitation facilities. Boys and men may also encounter violence in accessing water and sanitation, with local norms around masculinity inhibiting their ability to avoid or report on experiences of violence. Lastly, socially marginalized groups, such as people with disabilities who may have problems accessing latrines, or those from lower castes where entrenched discrimination may prohibit the use of common sanitation sources, may experience increased difficulties in safely meeting their daily water and sanitation needs.[6]

Despite growing reports of increased vulnerability to violence linked to WASH, there remains insufficient documentation of individuals' and populations' experiences of WASH-related violence in contexts around the world. This hinders effective policy and programming. Numerous reasons exist for the inadequacy of the existing documentation of evidence. These include the many sensitivities related to conducting research both on violence and on sanitation behaviours, which may complicate data collection efforts. Sensitivities may be related to the shame associated with both topics and a range of potential risks to the person who has experienced violence, if information on such events is disclosed, particularly in relation to sexual violence. The gendered and other sociocultural aspects of population vulnerability to violence in the context of WASH can be complex to analyze, and the lack of training of many WASH practitioners on these fronts may also hinder the incorporation of these issues into their programmes. There is increasing evidence on the vulnerability of many populations to a range of experiences of violence in relation to accessing water and sanitation, albeit primarily from anecdotal case studies and reports in the grey literature, and there is an urgent need to review and summarize this evidence. This will make it easier to identify gaps in the existing knowledge and practice on the issue, as well as areas for improved intervention and evaluation.

A recent review (by the authors of this paper) of the existing (primarily grey) literature on the topic, combined with discussions with sector professionals, resulted in the development of a violence, gender and WASH practitioner's toolkit aimed at making water, sanitation and hygiene safer through improved programming and services. A secondary aim was to identify gaps in the existing evidence. This paper describes and expands on the findings from this review at the community and household levels; it does not cover the discussions with sector actors.

a. Conceptualization of violence

There exists a range of definitions for different types of violence in the literature, including varying conceptualizations of gender-based violence (GBV).[7] After an analysis of the existing literature on violence, along with consultations with gender, GBV, protection and WASH professionals working in development and humanitarian contexts, we formulated a conceptualization of violence and GBV that matched the toolkit's key purpose, which was to improve programming aimed at making WASH

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1. WHO/UNICEF JMP (2014), *Update: Progress on Drinking Water and Sanitation*, World Health Organization/United Nations Children's Fund Joint Monitoring Programme for Water Supply and Sanitation.

2. IFRC (2012), *Gender in water, sanitation and hygiene promotion: Guidance note*, International Federation of Red Cross and Red Crescent Societies, Geneva.

3. The term "slum" usually has derogatory connotations and can suggest that a settlement needs replacement or can legitimate the eviction of its residents. However, it is a difficult term to avoid for at least three reasons. First, some networks of neighbourhood organizations choose to identify themselves with a positive use of the term, partly to neutralize these negative connotations; one of the most successful is the National Slum Dwellers Federation in India. Second,

the only global estimates for housing deficiencies, collected by the United Nations, are for what they term "slums". And third, in some nations, there are advantages for residents of informal settlements if their settlement is recognized officially as a "slum"; indeed, the residents may lobby to get their settlement classified as a "notified slum". Where the term is used in this journal, it refers to settlements characterized by at least some of the following features: a lack of formal recognition on the part of local government of the settlement and its residents; the absence of secure tenure for residents; inadequacies in provision for infrastructure and services; overcrowded and sub-standard dwellings; and location on land less than suitable for occupation. For a discussion of more precise ways to classify the range of housing sub-markets through which those with limited incomes buy, rent or build accommodation, see *Environment and Urbanization* Vol 1, No 2 (1989), available at http://eau.sagepub.com/content/1/2.toc.

4. Thompson, J, F Folifac and S Gaskin (2011), "Fetching water in the unholy hours of the night: The impacts of a water crisis on girls' sexual health in semi-urban Cameroon", *Girlhood Studies* Vol 4, No 2, pages 111–129.

5. See reference 2.

6. Personal communication with Oxfam Intermón (2013); also Travers, K, P Khosla and S Dhar (2011), *Gender and essential services in low-income communities, Report on findings of the action research project: Women's Rights and Access to Water and Sanitation in Asian Cities*, Women in Cities International and Jagori, Montreal and Delhi.

7. Wilson, F (2011), *Gender based violence in South African schools*, United Nations Educational, Scientific and Cultural Organization (UNESCO), Paris; also Chege, F (2007), "Education and empowerment of girls against gender-based violence", *Journal of*

services safer. A decision was made to expand the scope so as not to focus solely on GBV, but to include experiences of and vulnerability to violence more broadly. The main focus of the toolkit, as of this paper, was on the forms of violence that occur as a result of differences in power between people. These can be related to gender, whether between people of different genders or the same gender; but they can also be related to other social identities and to specific marginalized groups, including, for example, people of different castes, people who are lesbian, bisexual, gay, transsexual and intersex (LBGTI), children, and people with disabilities. Informed by the case studies that were gathered, we grouped the most common forms of violence into the following categories:

- sexual violence (rape, assault, molestation, and inappropriate touching);
- psychological violence (harassment, eve-baiting (public harassment of women by men), bullying or other actions that may cause fear, stress or shame);
- physical violence (beating or fighting leading to injury or death); and
- sociocultural violence (social ostracism, discrimination, political marginalization or social norms that have negative impacts).

b. Methods

The methodology for the development of the toolkit included a systematic and thorough search of the existing grey and peer reviewed literature, along with outreach to experts in violence (GBV and violence more generally, protection, gender, law, and medical and psychological health) and WASH, to identify recommended reports, case studies, articles, and perceptions of existing good practice around violence and WASH. The review covered 275 articles, case studies, reports, videos and other relevant tools and instruments, along with related documentation that included references to, or were of relevance to, the issue of violence and WASH. Once collated, the documentation was put into the following categories for analysis purposes: case studies of GBV and WASH; good practice in responding to GBV and WASH; good practice in protection and responding to GBV (more generally); good practice in advocacy/policy; humanitarian contexts; and specific examples related to equity and inclusion where the documents were specific to these issues (although examples were also integrated into documents in other groupings).

This review was augmented by meetings conducted with WASH and GBV experts with experience in a range of development and humanitarian contexts. Over 100 professionals with a range of specialisms contributed to the toolkit in various ways by identifying case studies, sharing experiences and practices, and reviewing the toolkit. All of this formed the basis for the development of the toolkit, which was published in June 2014.[8]

An additional focused review for the purpose of publication in a peer reviewed journal, to reach a broader audience with the findings, including academic researchers and policy makers, was restricted to the existing literature and documentation related to gender, WASH and violence, and did not incorporate the discussions. The key results are described in this paper, with recommendations included for possible ways forward. The analysis for this review article cross-analyzed the categories described

above for the purpose of providing a more coherent description of the findings in the following thematic areas:

1. review of the existing evidence on violence and WASH;
2. existing guidance: principles for reducing violence in the context of WASH;
3. gaps in the violence and WASH evidence base; and
4. challenges in conducting research on violence and WASH.

It is important to note that, given the limited peer reviewed literature on this topic, a Cochrane-style systematized review would not have been appropriate. Rather, the aim was to identify what is known and being done with regard to this challenge for girls', boys', men's and women's vulnerability to violence in relation to WASH in contexts around the world. Further information is needed on the practical steps that WASH and violence experts can take to reduce vulnerability to violence in a range of contexts, to learn how well different approaches work in helping people feel safer when accessing WASH, and to articulate the areas in need of more systematic data collection for evidence-based decision making in programmes and policies.

II. RESULTS

a. Review of the evidence on violence and WASH

The existing evidence in the peer reviewed and grey literature highlights a range of situations in which vulnerability to violence is increased in accessing water and sanitation. Multiple reports emerged subsequent to the Haitian earthquake emergency response, with one study reviewing the risks of sexual violence in the internally displaced person (IDP) camps in urban Port-au-Prince. Findings suggested open-air sanitary facilities, insufficient bathing areas, and lack of lighting at night intensified the risks of sexual violence for those using the facilities. This report recommended that women-only latrine and bathing areas should be considered in IDP camps, with additional security put into place to assure that the usage is limited to women, and funding allocated to support security.[9] Another study explored the risks of violence to girls and women specifically, discussing how latrines were frequently not built where recommended by camp residents due to practical and engineering concerns. Latrines were also poorly maintained and rarely used, with 33 per cent of women reporting never feeling safe when utilizing them. A further 6 per cent reported feeling safe only during daylight hours.[10] A UNICEF study of girls' and women's WASH-related needs in IDP or refugee camps in Haiti, Somalia and the Philippines similarly identified communal latrines, along with bathing in the bush, as dangerous at nighttime for meeting girls' and women's water- and sanitation-related needs.[11]

There has also been documentation by the United Nations High Commissioner for Refugees (UNHCR) of increased vulnerability to violence in the context of accessing WASH services in refugee camps.[12] A series of case studies describes, for example, both boys and girls being frightened of rape in school toilets in South Africa; girls in particular experiencing rape when using the toilets or fetching water in Zambia; and women

International Cooperation of Education Vol 10, No 1, pages 53–70; and International Save the Children Alliance (2003), *Child Protection Policy*, Save the Children, London.

8. House, S, S Ferron, M Sommer and S Cavill (2014), *Violence, gender and WASH: A practitioner's toolkit – Making water, sanitation and hygiene safer through improved programming and services*, WaterAid/SHARE, London, available at http://violence-WASH.lboro.ac.uk. The toolkit is best viewed on certain internet browsers; please see the homepage for details.

9. Emery, M, M Shaw, L Santosa and O Bird (2011), "Recommendations to reduce sexual violence in Haitian internally displaced persons' (IDP) camps", *New Voices in Public Policy*, pages 1–34.

10. Davoren, S (2012), "Helping international non-governmental organizations (NGOs) to include a focus on gender-based violence during the emergency phase: Lessons learned from Haiti 2010-2011", *Gender & Development* Vol 20, No 2, pages 281–294.

11. Hayden, T (2012), *Menstrual hygiene management in emergencies: Taking stock of support from UNICEF and*

partners, UNICEF and RedR Australia, New York.

12. UNHCR (2006), *Risks associated with access to water and sanitation: UNHCR case studies on SGBV from the Southern Africa Region*, UNHCR, Geneva.

13. UNHCR and Save the Children UK (2002), *Sexual violence and exploitation: The experience of refugee children in Guinea, Liberia and Sierra Leone*, UNHCR and Save the Children UK, Geneva.

14. PPSSP (2007), *Hope out of conflict: how sanitation plays a vital role in protecting women and children from sexual violence in DRC*, Programme de Promotion de Soins Santé Primaires, accessed 20 August 2014 at http://www.communityledtotal sanitation.org/resource/hope-out-conflict-how-sanitation-plays-vital-role-protecting-women-and-children-sexual.

15. Aboune, A and J Hernandez (2013), "Assessing refugee camp characteristics and the occurrence of sexual violence: A preliminary analysis of the Dadaab complex", *Refugee Survey Quarterly* Vol 32, No 4, pages 22–40.

16. Stevenson, E, L Greene, K Maes, A Ambelu, Y Tesfaye, R Rheingans and C Hadley (2012), "Water insecurity in 3 dimensions: An anthropological perspective on water and women's psychosocial distress in Ethiopia", *Social Science and Medicine* Vol 75, pages 392–400.

17. Sorenson, S B, C Morssink and P A Campos (2011), "Safe access to safe water in low-income countries: Water fetching in current times", *Social Science and Medicine* Vol 72, pages 1522–1526.

18. See reference 4.

19. Asaba, R, H Fagan, C Konesa and F Mugumya (2014), "Women and access to water in rural Uganda: A review", *wH2O: The Journal of Gender and Water* Vol 3, No 1, pages 19–22; also CPHD (2011), *The*

fighting with girls when queuing for water in Malawian refugee camps. These reports demonstrate the varied nature of the violence that exists in relation to WASH, ranging from sexual violence to violence over access to water or competition for resources. Similar scenarios are described in Botswana and Mozambique, with additional stories describing experiences of rape in toilets in Mozambique. Although this series of case studies has its methodological limitations (e.g. less rigorous research methods), such documentation still forms an important part of the existing evidence base. Another report from UNCHR and Save the Children[13] documented experiences of refugee children in camps in Guinea, Liberia and Sierra Leone, with children reporting experiences of rape mostly when using the toilets or taking a bath, and describing men lying in wait for them to enter toilets. Similar stories are described from rural villages in the Democratic Republic of the Congo, where a non-governmental organization focused on improving sanitation after reports of women and children being at increased risk of sexual violence when walking outside of the village at night in order to defecate.[14] In refugee camps in Dadaab, Kenya (which is equivalent in population size to one of the largest cities in Kenya), researchers found that women were particularly vulnerable to sexual violence around latrine use. The latrines in the camps were not separated by gender, were poorly lit, and had no locking mechanisms.[15] Although these are primarily examples from refugee or IDP camps and not "urban" contexts per se, there are similarities in terms of the often closely packed living conditions in camps and urban settlements that also lack adequate water and sanitation systems.

Violence in relation to WASH is similarly documented in the development literature. In rural Ethiopia, findings from an ethnographic study that explored local experiences of water insecurity documented multiple situations of violence that emerged in relation to water. A range of experiences was revealed, including women experiencing tension with husbands over the amount of water they brought home; women experiencing domestic violence over water; women experiencing the risk of rape while fetching water daily from distant water sources; and experiences of violence while standing in water queues.[16] Sorenson et al. also explored safe access to water in low-income countries,[17] although their analysis focused more on the burden of water access for women. Their conclusions pointed to the need for better documentation of the assault and attack risks to women when they collect water. In the semi-urban town of Buea, Cameroon, girls described fears around having to fetch water at night, reporting how the lack of water forces them to travel farther away and later into the evening hours to meet their families' daily water requirements. This in turn places them at increased risk of sexual harassment, abuse and rape. In addition, the girls described how vulnerability to violence while accessing water creates feelings of fear, anxiety and stress.[18] Similar findings were reported from rural Uganda and urban Afghanistan, where children reported experiencing verbal attacks and physical fights at water collection points.[19] Another study from Kabul, Afghanistan documented the dangers boys and girls, primarily of pre-pubescent age, face in fetching water for their families. Children were asked to map the most dangerous places they faced, and out of 37 places identified, five related to water points and one to toilets.[20] In Afghanistan, it can be more common for boys to be asked to collect water than girls, as the movement of girls tends to be more restricted.

More recent research was conducted with women in the urban slums of Kampala, Uganda and New Delhi, India, with the aim of understanding how lack of adequate sanitation impacted on their lives. In three slum communities of Kampala (Jambula, Kiganda and Kifumbira), qualitative methods were utilized to elicit women's experiences, and identified flawed sanitation facilities, fear of attack when using the facilities at night, and feelings of shame and helplessness over the daily struggle to practise sanitation in an environment that lacked clean, private and safe facilities.[21] In three slums in the northeast district of Delhi (Bhalswa, New Seemapuri and Sunder Nagri), a participatory mapping exercise was conducted with women in order to identify the dangerous spaces where they felt at risk of sexual violence. Women shared feelings of fear, heightened at night, that they would experience sexual violence when using public toilets, and when defecating in the open and in other public spaces. They also expressed feelings of anger and disgust, as did the Ugandan women, at the daily struggle to manage sanitation-related needs with dignity and safety.[22] The routes to the toilets in Uganda, India and other countries have been described as dangerous in various studies, and not just the facilities themselves.[23] Although studies and reports have cited dangers related to walking to toilets in both rural and urban localities, pathways in urban slum areas in particular have been described as increasing girls' and women's vulnerability to experiencing sexual violence.

A range of articles and reports highlights the particularly gendered nature of vulnerability to violence. A 2012 editorial in *Geoforum*[24] focused in particular on the ways in which urban sanitation and water inequality are gendered, with men being able to relieve themselves in relatively public spaces, but women being much more restricted due to sociocultural taboos. Girls and women are also constricted by their need to squat (a challenge especially for girls and women with disabilities), the heightened social attributions of shame related to women being seen to defecate or urinate, and their actual vulnerability to sexual violence in such situations. In addition, women's added need for privacy during menstruation adds to the complexity of their burden. Although the *Geoforum* editorial itself does not highlight explicit experiences of violence, the gendered nature of sanitation creates a vulnerability that is further delineated by an editorial in *The Lancet Infectious Diseases*[25] that emphasizes the continuing challenge of failing to meet the global demand for clean water and sanitation. This editorial highlights the dangers that women and girls face when waiting to defecate under cover of darkness in numerous low- and middle-income contexts around the world. This was exemplified by a study of 10,000 Dalit households across five states in India that revealed how Dalit women (perceived as lower caste in India and hence frequently excluded from facilities being used by other castes) in particular face significant challenges by not having toilets in their household premises. These included sexual harassment when using communal latrines or defecating in open areas, painful situations during illness (particularly for stomach-related diseases), risks of accidents when defecating on roads or railway tracks, risks of snake and insect bites, and difficulties and pain during their menstrual cycle.[26]

Urban sanitation presents particular challenges for girls and women, as was documented in slum settlements of Mumbai and Pune in India.[27] Women describe having no place to defecate but the side of the road,

forgotten front: Water security and the crisis in sanitation; Water in informal settlements: A case study from Kabul*, Centre for Policy and Human Development, Kabul University, Kabul.

20. de Berry, J, F Anahitai, N Said, N Fariba, H Sami and H Mariam (2003), *The Children of Kabul: Discussions with Afghan Families*, Save the Children USA and UNICEF, Kabul.

21. Massey, K (2011), *Insecurity and shame: Exploration of the impact of the lack of sanitation on women in the slums of Kampala, Uganda*, SHARE and WaterAid, UK.

22. Lennon, S (2011), *Fear and anger: Perceptions of risks related to sexual violence against women linked to water and sanitation in Delhi, India*, SHARE and WaterAid, UK.

23. Jagori and UN Women (2011), *Safe Cities Free of Violence against Women and Girls Initiative – Report of the Baseline Study, Delhi 2010*, Jagori and UN Women, New Delhi.

24. McFarlane, C (2012), "From sanitation inequality to malevolent urbanism: The normalization of suffering in Mumbai", *Geoforum* Vol 43, Issue 6, pages 1287–1290.

25. Editorial (2006), "Watching the world wash its hands of sanitation", *The Lancet Infectious Diseases*, Vol 6, Issue 10, page 615.

26. WaterAid and National Confederation of Dalit Organizations (2013, draft), *Research on the DFID-supported IPAP programmes in five states*, Unpublished report, WaterAid, India.

27. Bapat, M and I Agarwal (2003), "Our needs, our priorities: Women and men from the slums in Mumbai and Pune talk about their needs for water and sanitation", *Environment and Urbanization* Vol 15, No 1, pages 71–86.

28. Amnesty International (2010), *Insecurity and indignity: Women's experiences in the slums of Nairobi, Kenya*, Amnesty International, UK.

29. Taylor, A (2011), *Women and the City I: Combating violence against women and girls in public spaces – The role of public services*, ActionAid International, South Africa, accessed 10 November 2014 at: http://www.actionaid. org.uk/sites/default/files/ publications/women_and_the_ city.pdf.

30. Mitchell, C (2006), "Geographies of Danger: School toilets in sub-Saharan Africa", in O Gershenson and B Penner (editors), *Ladies and Gents* (pages 62–74), Temple University Press, Philadelphia.

31. See reference 30, page 71.

32. Brookes, H and C Higson-Smith (2004), "Responses to gender-based violence against girls in schools" (Chapter 6), in L Richter, A Dawes and C Higson-Smith (editors), *Sexual abuse of young children in southern Africa* (pages 110–129), Human Sciences Research Council, Pretoria.

33. Abrahams, N, S Mathews and P Ramela (2006), "Intersections of 'sanitation, sexual coercion and girls' safety in schools' ", *Tropical Medicine and International Health* Vol 11, No 5, pages 751–756.

with men hiding in nearby bushes so they can watch as women squat. When women are alone, they are more likely to be molested by men in such scenarios. There are no toilets available for women, so they would not venture out to defecate after 6 am and before darkness falls due to the shame of being seen defecating. As with the Dalit study, some participants describe a nearby train track as the commonly used site for defecation, with great risk to girls and women using the tracks under cover of darkness. In Kenya, Amnesty International identified the inadequate availability of sanitation in Nairobi slums as having an adverse effect on women's security, with violence against women occurring when they use latrines.[28] Research from the outskirts of Phnom Penh, Cambodia documented the specific WASH-related challenges faced by women who work in garment factories in urban contexts. Women said the distance between their rental rooms and the available toilets was too far and too poorly lit to use the facilities at night, given the risk of sexual violence. Pregnant women were reported as struggling the most with the distance to the WASH facilities.[29]

Another gendered aspect of the connection between violence and latrines emerges from the literature on schoolgirls and educational environments. Researchers have applied different methodologies, such as safety audits and safety mapping, in an effort to better identify and map this vulnerability to violence. Mitchell describes the findings from the utilization of photo-voice (a technique that includes providing participants with cameras to document and then describe their own lived experiences) and other participatory visual methodology approaches with schoolgirls in townships in South Africa, just outside of Butare, Rwanda and in Mbabane, Swaziland, where girls were asked to identify safe and unsafe spaces in their school environments.[30] Girls in all three contexts identified toilets as sites of anxiety and fear, and locations where boys and men might bully them, or harass and attack them sexually. One suggestion was that schools undertake "toilet audits"[31] to better understand whether their sanitation facilities were potential sites of violence for girls. Brookes and Higson-Smith examined potential solutions in South Africa, finding that in schools where teachers monitored toilet blocks even from a distance, the instances of reported gendered violence decreased.[32] Another study explored the intersections of sanitation, sexual coercion and girls' safety in schools in South Africa. Researchers calculated that, based on the school population, around 80–100 girls would be menstruating on any school day – thus representing a large need for adequate toilet facilities. However, girls also reported that toilets were unsafe during class time because of boys and gangs that hid out in them and hence attention was needed to reduce these opportunities for harassment.[33]

b. Existing guidance: principles for reducing violence in the context of WASH

Although recommended best practices do not yet exist for reducing violence in the context of WASH, the review and learning process undertaken for the development of the violence, gender and WASH practitioner's toolkit generated a range of recommendations for promising good practices. Given that the toolkit provides extensive detail on these

practices, they will not be discussed in great detail here (please reference the toolkit publication: http://violence-WASH.lboro.ac.uk). However, there emerged from the review some guiding principles for reducing violence in the context of WASH that are important to delineate here.[34] These overarching principles apply to efforts to reduce the four types of violence categorized earlier in relation to WASH: sexual violence, physical violence, emotional violence and sociocultural violence. Some of the key recommended principles include the following:

1. The institutionalization of the requirement to analyze and respond to vulnerabilities to violence in WASH-related policies, strategies, plans, budgets and systems. This refers to ensuring, for example, that WASH sector institutions and organizations have clear codes of conduct.
2. Building the capacity of programme staff to understand the problem of violence in relation to WASH and their respective responsibilities. This includes, for example, training WASH professionals to know about violence in relation to WASH programming.
3. Making links with protection, gender and GBV specialists to improve programming. This refers to, for example, strengthening linkages between WASH and child protection practitioners within a given context.
4. Considering possible vulnerabilities to violence linked to WASH. This includes undertaking analysis and safety audits to better understand the risks. It should result from improved sector awareness and training within a given programme effort.
5. Incorporating boys, girls, men and women into the process of identifying risks and solutions.
6. Ensuring that facilities are designed, constructed and managed considering safety. This includes, for example, constructing facilities that are located in safe areas for access by girls and women in particular.
7. Paying particular attention to the consideration of marginalized groups. This involves considering additional vulnerabilities that may be faced by, for example, people who are LBGTI, children, the elderly or people with disabilities when using public toilets.

Two overarching aspects of vulnerability to violence must be emphasized in respect to a way forward. One, the conditions surrounding WASH in many contexts offer opportunities for violence, such as unsafe facilities in peri-urban slums creating vulnerabilities to sexual violence for girls and women in particular. Two, the overall inadequate provision of WASH facilities and/or scarcity of water and sanitation for vast segments of the population (with particular relevance for urban residents who live in close quarters to each other) in and of itself may stimulate violent responses. The latter was well exemplified by Kabul children who rated water points as particularly unsafe. If there was more equity in access to water and sanitation for all, this in itself would likely reduce some vulnerabilities to violence in relation to WASH.

c. Gaps in the violence and WASH evidence base

Although the existing peer reviewed and grey literature on the topic of violence and WASH provides very useful insights into the challenges

facing girls, boys, women and men in various contexts, a number of important gaps remain in the current evidence. The priority areas for research include, first, an improved understanding of the scope of the violence and WASH vulnerabilities and challenges facing girls, boys, women and men in a range of contexts (i.e. urban slums, refugee camps, rural communities). This includes an exploration of the range of violence and WASH-related scenarios, such as the risk of fetching water from great distances, of accessing sanitation for girls and women living in peri-urban slums, and the disputes that arise at water collection points. There is also a particular need to examine the added vulnerability to violence anecdotally reported by marginalized groups, such as those from lower castes and/or people who have a disability.

Secondly, the identification of effective interventions aimed at reducing vulnerability to violence for various populations when they are accessing WASH (i.e. water collection, sanitation facilities) is a priority. While not documented here, there were numerous recommended improved practices for reducing vulnerabilities to violence in relation to WASH. These are greatly expanded upon in the toolkit, but include, for example, engaging girls and women in sanitation facility design in schools and other locations (e.g. refugee camps) in order to assure they feel safe using the end product; assuring that gender specific latrines and bathing facilities are located at a distance from each other as agreed with the users, to increase the safety of their usage; adding strong doors and locks; improving the lighting in latrines; and where possible building family latrines or latrines shared among a few families to reduce the vulnerability to violence in using communal latrines, while also assuring that even family latrines are safe. More complex situations in need of improved interventions include the physical or verbal fighting that occurs at water collection points, particularly for children fetching water for their families, or domestic violence women face if they do not adequately meet the household water needs expected by their husbands. Although only the latter is a gendered experience, the vulnerability of various subgroups within a given population, due to the cultural expectations around chores, is important to highlight and address. The evidence on solutions remains insufficient, both for the documentation of different approaches and for the monitoring and evaluation of their effectiveness. Much learning and innovation remain to be done to meet these needs. Increased documentation must, however, be undertaken carefully given the unique challenges of conducting research on a topic that has dual sensitivities (that of violence and that of sanitation practices) as discussed below.

d. Challenges in conducting research on violence and WASH

A number of methodological challenges arise when research is undertaken on the sensitive topics of vulnerability to and experiences of violence, and also sanitation practices and behaviours. Parkes et al. highlighted the ethical and methodological challenges of researching GBV through insights that were gained from studies conducted in schools and communities in Kenya, Ghana and Mozambique.[35] Although there is a body of literature on the ethics of conducting research on violence and on GBV in particular, some useful insights on conducting violence and WASH-related research with girls and boys emerged from Mitchell's use

35. Parkes, J, J Heslop, S Oando, S Sabaa, F Januario and A Figue (2013), "Conceptualizing gender and violence in research: Insights from studies in schools and communities in Kenya, Ghana and Mozambique", *International Journal of Educational Development* Vol 33, No 6, pages 546–556.

of participatory visual methodologies[36] and from other participatory methodologies described by Leach on utilizing mapping and other techniques for identifying toilets as sites of violence.[37]

Joshi suggests that, as a result of the sensitivities around these topics, there is likely significant under-reporting of sexual violence as linked to sanitation and that women, needing privacy both for regular sanitation and for monthly menstrual management, are both uniquely vulnerable and less likely to report their experiences of sexual violence.[38] The nature of such sensitivities should be carefully considered when designing future research on this topic.

The vast majority of the documentation identified in this review and learning process did not use extensive quantitative surveys or randomized controlled trials. The reasons for this may be the methodological and ethical challenges of conducting research on this sensitive topic, one that can bring shame and stigma to the individual who experiences violence (particularly sexual violence) or that could lead to further violence towards that individual if not undertaken appropriately. Not only would reporting of violence and/or sanitation behaviours pose potential challenges, but ethical issues around assuring that all individuals have safe and adequate sanitation facilities also hinder the use of randomized trials for testing of interventions. Because of these challenges, qualitative research is likely to remain a more appropriate methodology in many circumstances. That being said, the global health community (including but not limited to WASH) is in great need of a larger body of empirical evidence (both qualitative and quantitative where possible) documenting the ways in which accessing water and sanitation may increase individuals' vulnerabilities to violence, in order to determine more effective programming and policy.

III. CONCLUSIONS

The results from the review and learning process revealed important findings for the global community of WASH and violence researchers, practitioners and policy makers. Although there exists quite a wide range of anecdotal case studies, including those identified in this process from over 30 countries, and a few studies that have attempted to quantify the scale of the problem of enhanced vulnerability to violence that populations experience when accessing water and sanitation, additional learning and research are clearly needed. The findings indicated the numerous gendered aspects of the vulnerability to violence in relation to WASH, and the sensitivities around conducting research on both violence and sanitation.

Despite the challenges of doing research on this sensitive topic, there is an urgent need for resources to be put into understanding the vulnerabilities different populations experience, and how the findings can best be integrated into ongoing and future programming. There is also an urgent need to put resources and effort into measuring the effectiveness of interventions and approaches. Last, there is a need to gather qualitative evidence on the feelings of safety when accessing water and sanitation services of people from different populations, along with their views on how well programming approaches have reduced vulnerabilities to violence and how services should be improved.

36. See reference 30.

37. Leach, F (2006), "Researching gender violence in schools: Methodological and ethical considerations", *World Development* Vol 34, No 6, pages 1129–1147.

38. Joshi, D (2011), *Sanitation, indignity and gender*, International Center for Research on Women, Washington, DC.

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