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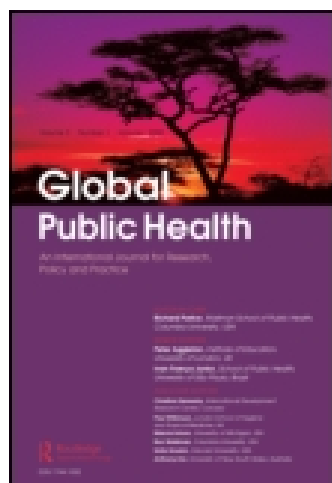
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The integration of water, sanitation and hygiene services into the US President's Emergency Plan for AIDS Relief: A qualitative study

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Water, sanitation and hygiene (WASH) interventions have been associated with improving the health of people living with HIV/AIDS (PLHIV). WASH is increasingly integrated into the HIV sector and is now considered a key component of the transition from an emergency response to a better incorporated and coordinated AIDS response. However, limited research exists on integration efforts. This qualitative research study aims to address the limited body of research on WASH integration into HIV programmes through examining the US President's Emergency Plan for AIDS Relief (PEPFAR). PEPFAR is the US government's initiative to combat AIDS in the most afflicted countries. This study analyses the perceptions of people who have worked or are working on WASH integration into PEPFAR, highlighting their views on accomplishments, challenges and areas for improvement. It concludes with recommendations for moving forward.

Keywords: PEPFAR; water, sanitation and hygiene; HIV/AIDS; WASH; integration

Introduction

Inadequate water, sanitation and hygiene (WASH) remain a problem in low- and middle-income countries (UNICEF & WHO, 2012). While adequate WASH is critical in any context, people living with HIV/AIDS (PLHIV) are especially susceptible to opportunistic infections and suffer disproportionately from WASH-related diseases (WHO, 2010). WASH interventions – including handwashing with soap, using hygienic sanitation facilities and drinking water treatment and safe storage – have been shown to reduce infectious diseases within the general population and among PLHIV (Barzilay et al., 2011; Luby et al., 2005; Lule et al., 2005; Peletz et al., 2012; Prendergast & Kelly, 2012).

Today, a number of global health organisations, non-profits and governmental agencies acknowledge the importance of adequate WASH for PLHIV and call for its integration (Kamminga & Wegelin-Schuringa, 2005; USAID, 2012; WHO, 2010). The US President's Emergency Plan for AIDS Relief (PEPFAR) integrates WASH within its guidelines. This qualitative study aims to address the limited body of research on WASH integration into HIV programmes by examining the PEPFAR experience. It analyses the perceptions of people who have worked or are currently working on WASH integration.

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The study documents accomplishments, barriers and provides recommendations for moving forward.

Background

PEPFAR

Congress authorised PEPFAR in 2003 (H.R., 1298, 2003). It is the US government's initiative to combat AIDS in the most afflicted countries and is the biggest commitment ever made by a nation to combat a single disease globally (PEPFAR, 2012b; IOM, 2013). PEPFAR also sets aside investments for malaria and tuberculosis and aims to address other health outcomes (H.R., 1298, 2003). PEPFAR's original authorisation consolidated US bilateral and multilateral activities for HIV/AIDS, and established the Office of the Global AIDS Coordinator (OGAC) to supervise implementation (H.R., 1298, 2003). The initiative relies on the responsibility of multiple players, including governmental agencies like the US Centers for Disease Control and Prevention and the US Agency for International Development (USAID), non-governmental organisations and partner nations (IOM, 2013).

Since its inception, PEPFAR has made enormous accomplishments by providing HIV prevention, care and treatment services; addressing the needs of affected children; and building in-country capacity (IOM, 2013). Despite success, PEPFAR has been criticised for its vertical approach of addressing a specific disease rather than supporting a broad spectrum of health activities. While PEPFAR began as an emergency response, it now aims to provide a more coordinated response within the broader global health context (PEPFAR, 2012b).

WASH and PLHIV

Worldwide, approximately 35.3 million people live with HIV/AIDS and nearly two-thirds of them live in Sub-Saharan Africa (UNAIDS, 2013). Sub-Saharan Africa is not only the region with the highest HIV prevalence, but also the region where access to adequate WASH is most limited. Only 61% of the population has access to safe water and less than 40% has access to improved sanitation (UNICEF & WHO, 2012).

PLHIV are particularly vulnerable to inadequate WASH and have a greater need for water and sanitation services than the general population (WHO, 2010). For instance, while an average person requires a minimum of 20 litres of water per day, PLHIV need more water for medication, personal hygiene and other activities (WHO, 2010). Yet, PLHIV often face stigma and discrimination that impact their housing, employment and access to WASH (Magrath & Tesfu, 2006).

Moreover, PLHIV are particularly susceptible to opportunistic infections due to their compromised immune system (WHO, 2010). Diarrhoeal disease affects an estimated 90% of PLHIV (Katabira, 1999; Mönkemüller & Wilcox, 2000; USAID, 2012; WHO, 2010). Furthermore, PLHIV often have frequent and severe episodes (Stark et al., 2009), which lead to increased viral load and decreased CD4 counts (Brink et al., 2002; Lule et al., 2005). These are key indicators for disease progression and result in worse clinical outcomes (Mayanja-Kizza et al., 2001; Mellors et al., 1997; Toossi et al., 2001). Diarrhoea is a leading cause of morbidity and mortality among PLHIV (Katabira, 1999; Mönkemüller & Wilcox, 2000; USAID, 2012; WHO, 2010). Mortality rates due to diarrhoea can be up to 11 times higher in HIV-positive children than HIV-negative children (Thea et al., 1993; van Eijk et al., 2010).

People living in unhygienic conditions may also suffer from environmental enteropathy, a condition that hinders gut absorption capacity (Bushen et al., 2004; Prendergast & Kelly, 2012). The disorder can lead to malnutrition and may contribute to anaemia, stunting and poor vaccine efficacy (Prendergast & Kelly, 2012). Among PLHIV, it has been associated with malnutrition and disease progression (Prendergast & Kelly, 2012). Subsequently, malnutrition among PLHIV has been associated with increased mother-to-child transmission, amplified genital shedding of HIV and higher mortality (de Pee & Semba, 2010). Malabsorption of antiretroviral drugs (ARVs) can also occur and lead to drug-resistant HIV strains (Bushen et al., 2004; Sen et al., 2007; USAID, 2012).

Although many links exist between WASH and HIV, the evidence base for effective WASH interventions among PLHIV is limited. For example, while water supply interventions (e.g., easily accessible, protected wells) have proven vital in reducing infectious diseases in the general population (Esrey, Potash, Roberts, & Shiff, 1991), no studies were found that examine their impact among PLHIV. Moreover, while research shows that handwashing with soap can decrease the incidence of pneumonia by 50% in children with healthy immune systems, no similar research exists on PLHIV (Luby et al., 2005; WHO, 2010). However, research in this field has increased over the past several years.

A randomised controlled trial in Uganda examined the impact of home-based water chlorination and safe storage on PLHIV. It revealed that the intervention group had 25% fewer episodes of diarrhoea and 33% fewer days with diarrhoea compared to the control group (Lule et al., 2005). The same study found that among PLHIV, the presence of a latrine in a compound was associated with 31% fewer episodes of diarrhoea and the presence of soap with a 42% reduction in the number of days with diarrhoea (Lule et al., 2005).

Another study found that point of use water chlorination and safe storage were associated with decreased diarrhoea among PLHIV in Nigeria (Barzilay et al., 2011). More recently, a study in Zambia found that water filtration and safe storage in households with HIV-positive mothers resulted in a 53% reduction of diarrhoea among children under two years and a 54% reduction among all household members (Peletz et al., 2012).

Lastly, a cross-sectional study in rural Zimbabwe suggests that access to WASH could decrease the risk of transmitting HIV. The study was on genital schistosomiasis, a parasitic infection transmitted through dirty water that results in vaginal lesions; it found that infected women had an almost three-fold increased risk of having HIV compared to women without schistosomiasis (Kjetland et al., 2006). As schistosomiasis is waterborne, it suggests that controlling schistosomiasis through improved WASH conditions might benefit HIV-prevention programmes.

Integration of WASH into PEPFAR

Funds used in PEPFAR programmes can support home-based safe drinking water interventions for PLHIV and promotion of basic hygiene and sanitation (PEPFAR, 2009). PEPFAR care and treatment strategies often utilise basic care packages, which contain country-specific commodities for PLHIV (PEPFAR, 2009). These usually include co-trimoxazole, a combination of two antibiotics, and safe water treatment products to protect against opportunistic infections (PEPFAR, 2009).

Other integration efforts include incorporating WASH into nutrition activities through nutrition assessment, counselling and support (NACS) and addressing WASH in home-based care for PLHIV (FANTA, 2012; USAID, 2012). The home-based care

approach often promotes small doable actions (SDAs), which are simple, low-cost practices that reduce the risk of infections within PLHIV (AIDSTAR-One, 2012; USAID, 2012). An example of an SDA is using a Tippy Tap, a low-cost handwashing device for those with limited available water (USAID, 2012). PEPFAR-funded AIDSTAR-One has developed a training curriculum for clinic personnel on integrating SDAs into facility-based care (JSI, 2012a, 2012b). The approach was tested in Kenya and Ethiopia and showed 59–68% implementation rates (JSI, 2012a, 2012b).

To institutionalise integration efforts, WASH recommendations have been incorporated within an increasing number of PEPFAR guidance materials, such as the Country Operational Plan Guidance. It assists countries as they create annual plans to get PEPFAR funding (PEPFAR, 2012a). WASH have also been incorporated into training manuals and job aids, which educate health providers on best practices (USAID, 2012). PEPFAR generally promotes activities that are low-cost and do not involve constructing WASH infrastructure, partially because the original PEPFAR legislation did not explicitly authorise the construction of WASH-related infrastructure (H.R., 1298, 2003). The recent PEPFAR Country Operational Plan Guides, however, do allow funding for such infrastructure in health facilities (PEPFAR, 2012a, 2012c).

Methods

Between January and March 2013, 12 semi-structured, in-depth interviews were conducted with technical advisors, monitoring and evaluation (M&E) specialists, programme designers, managers and implementers who work or have worked on integrating WASH into PEPFAR. Interviews explored perceived accomplishments and barriers of WASH integration into PEPFAR, as well as potential solutions to increase integration. Background information was gathered on the interviewees to understand their relevant work experience.

The study used purposive sampling to identify key informants. Prospective respondents were selected based on experience with WASH integration into PEPFAR-funded HIV/AIDS programmes. All key informants were recruited with an email that described the purpose and procedure of the research and were asked to identify other potential candidates. Of the original 24 requested interviewees, 18 responded and 12 participated in the study. Of the six that responded but did not participate, three were unable to participate within the timeframe and three recommended another person whom they perceived to be more qualified.

While potential candidates from seven organisations were contacted, the 12 key informants who agreed to participate represented five different organisations. The majority were technical advisors, though some fit more than one professional category. Key informants were based in the USA at the time of the interview; however, one was in-country staff in South Sudan at the time of the relevant work and another worked on WASH integration in Kenya. The other interviewees had advised, evaluated or managed projects in one or more countries – mostly in Africa, but also Vietnam and Haiti. Table 1 outlines the number of key informants from each organisation and their respective professional category or categories.

Each interview lasted between 20–60 minutes; the average interview lasted 35 minutes. Half of the interviews were conducted in person and half were conducted over the phone. Eleven interviews were audio-recorded and transcribed; rigorous notes were taken for the other. Transcripts were systematically reviewed and analysed for common themes. They were coded for accomplishments, barriers, approaches, opportunities and

Table 1. Sample distribution by organisation and profession, $n = 12$.

Organisation/ Agency	Total no. of participants	No. of participants within each category ^a
A	4	Technical Advisor (4) Programme Designer (1) Manager (1)
B	4	Technical Advisor (3) Implementer (1) Manager (2)
C	2	Technical Advisor (1) Programme Designer (1) M&E Specialist (2)
D	1	Technical Advisor (1) Programme Designer (1) M&E Specialist (1)
E	1	Implementer (1)

^aSome interviewees were grouped in more than one category.

opinions on WASH integration (see also semi-structured interview guide of [Supplementary material](#)).

Results

The results are divided into three sections. The first section aims to characterise what has been achieved in WASH integration. The second section highlights the barriers faced during integration efforts and the third offers perspectives on WASH integration within PEPFAR going forward.

Accomplishments of WASH integration into PEPFAR

Three common themes evolved when key informants discussed perceived accomplishments surrounding WASH integration into PEPFAR. [Table 2](#) summarises these results. Although quotations often fit more than one topic, they are only presented in the most applicable section. Within each table, numbers identify interviewees and text within brackets clarifies quotes.

Eight interviewees (67%) perceived increased global recognition of WASH's importance in relation to PLHIV as a key accomplishment. Key informants explained that WASH was not present in the early years of PEPFAR and is now gaining traction. Many credited the Hygiene Improvement Project (HIP) and WASHplus for much of the increased awareness and presence in the HIV/AIDS sector, highlighting their involvement in vital publications such as 'How to integrate water, sanitation, and hygiene into HIV programmes', published by the World Health Organization (WHO) in 2010.

Other achievements mentioned were the incorporation of WASH activities into country guidelines, training manuals and job aids, as well as basic care packages, home-based care activities and NACS (see also resources for WASH and HIV/AIDS integration efforts in [Supplementary material](#)). Many felt that integration efforts were making a difference and noted examples, such as seeing worn copies of job aids; PLHIV washing their hands with Tippy Taps; and the millions of PLHIV who receive water-disinfection products. Additionally, five respondents (42%) noted community buy-in (e.g., Tippy Taps) and country ownership as successes.

Respondents attributed these successes mainly to close collaboration with respective country governments; working through existing healthcare systems; identifying dedicated champions and leveraging established relationships within agencies. To help sustainability, key informants suggested engaging the Minister of Health as an active participant,

Table 2. Perspectives on WASH integration accomplishments.

Themes
<i>Increased global recognition and awareness of WASH</i>
No.2 ‘I think there is a general understanding globally that WASH and HIV is an important link. It wasn’t there six years ago, but it is there now’.
No. 7 ‘Perhaps one of the main milestones was [when] I believe it was HIP ... worked with WHO to develop a document [“How to integrate water, sanitation and hygiene into HIV programmes”]. This was very important to bring to the surface, or highlight, the importance of integrating water, sanitation and hygiene into HIV programmes’.
<i>Integration of WASH into PEPFAR programmes and guidelines</i>
No. 3 ‘We tried to get WASH into PEPFAR’s technical guidelines and were successful in almost all of their technical criteria, especially for the most relevant areas, like orphans and vulnerable children, paediatrics, and preventing mother-to-child transmission’.
No. 4 ‘I think the Uganda programme is a model ... They have reached millions of people with HIV ... There are a whole lot of people who now are able to treat their water’.
No. 8 ‘I think WASHplus has really made a big splash in integrating [WASH] into Ethiopia and Tanzania, into PEPFAR-funded work there. In our case, it certainly got integrated into all the reference material, training material and job aids’.
<i>Community and country buy-in</i>
No. 3 ‘The Tippy Tap took off because it is convenient; people just love the idea because it is not easy to wash your hands in a setting [without running water]’.
No. 8 ‘I know in a couple of communities that I visited, people were very proud of washing their hands correctly and they wanted us to see that’
No. 11 ‘The Deputy Minister [of Health] just latched on to [WASH integration] and said “yes, let’s do it”’

ensuring monthly committee meetings with diverse stakeholders, and representing WASH in different technical working group discussions. Another respondent remarked that having ‘in-country USAID staff’ rather than ‘USAID and PEPFAR Washington’ decide on WASH activities and their funding would result in greater success.

One respondent highlighted another achievement that was not PEPFAR-funded. An approach used in Malawi, which aimed to improve a Preventing Mother-to-Child Transmission (PMTCT) programme by providing improved water storage, soap, water-treatment solution and hygiene education. WASH commodities were provided to get women into antenatal care and tested for HIV. According to the respondent, participants who used water treatment increased from less than 5% to over 50% and the approach increased HIV testing, partner HIV-status disclosure and the number of antenatal visits. When asked why the approach was successful, the respondent replied:

I have no doubt it’s because it was during antenatal care. That is a key teachable moment. Every pregnant woman is thinking about the new life she is bringing into to this world and how to make things better. I think they are very susceptible to promotional messages and they are just looking to make improvements to protect the new life.

Barriers of WASH integration into PEPFAR

Ten main barriers to WASH integration were highlighted in the research. These are listed in Table 3 and ranked based on how frequently each interviewee mentioned them. The

Table 3. Perspectives on WASH integration barriers.

Ranking	Barrier
1.	Priorities
No. 10	'I think one obstacle is that there is such an emphasis on targets: We need this many people on antiretroviral treatment by this [date], we need this many people tested and counselled, we need to provide ARTs to more people'.
No. 11	'I think the focus was really on saving lives so PMTCT got a bigger bounce ... WASH is a softer, less directly relatable activity towards saving lives'.
2.	Infrastructure
No. 1	'We are trying to encourage most households to invest in their own sanitation situation, but for people living with HIV/AIDS it would be great if PEPFAR money could be used to provide some kind of very targeted subsidy to build sanitation ... It is frustrating that you are always messaging about sanitation but then [PLHIV] do not have a latrine to use'.
No. 4	'There is no authorisation for funding of latrines, but people can educate about [improved sanitation] ... probably the most common opportunistic infection for people with HIV in Sub-Saharan Africa is diarrhoea and very little pay attention to that'.
3.	Evidence base/M&E
No. 5	'I think it is critical to document. How much time does this take? What happens? ... What is the assessment for WASH within NACS? That needs to be done'.
No. 12	'I personally think that M&E is probably one of the biggest challenges, just because it is complicated and it is an area that is quite fuzzy for a lot of people ... It is fuzzy for people on the higher level, so you can only imagine for the people [in] the field that it can get tricky'.
4.	Allocation of funding
No. 4	'They not only have to maintain the current population on ARTs ... but they have to begin treat[ing] people who are newly diagnosed, so funding is a huge barrier'.
No. 7	'[There is a] lack of funding for the activities that are needed or lack of appropriate coordination to really harness the funding ... that is available and advocate for its use to be able to improve [things] like infrastructure'.
5.	Programmatic & logistic
No. 3	'We actually thought and heard [about] documentation to the fact [that the basic care package] was stigmatising, that it did stigmatise [a person] as someone with HIV, because otherwise [he or she] would have never [received] it'.
No. 4	'Lots of people, particularly in Sub-Saharan Africa and also in South Asia, are not easy to get to. They live in distant places; some places are cut off during the rainy season, so it is difficult to get supplies and other needed items to them'.
6.	Institutional & legislative
No. 1	'It would be great if there would be more language and stronger language [in PEPFAR legislation] on the importance of drinking water, sanitation, and hygiene towards keeping people that are now living longer with ARVs healthier'.
No. 2	'It is really hard to get clarity within the PEPFAR programming to figure out what they mean'.
7.	Knowledge
No. 4	'I think a lot of people who run PEPFAR programmes are either ignorant of the need for WASH and the types of interventions that are out there or they just don't think it is as important as some of the other clinical interventions'.
No. 10	'We hear from the ministries [that their] health providers know about handwashing...then we get to the health facilities and we see providers have ... little concept of [when they should] be washing [their hands]'.

Table 3 (*Continued*)

Ranking	Barrier
8.	Silos
No. 1	'In the extent that PEPFAR is its own entity, I kind of feel like [it] is a distraction to improving health services overall'.
No. 12	'PEPFAR is really trying to move away from [silos] ...[to] become much more comprehensive, but I do know it is hard at an operational level, when people are so used to working in silos, to move away from that'.
9.	Behaviour change
No. 1	'I think this idea of correct, consistent, sustained behaviour change is hard not just in WASH, but in all socially marketed behaviour'.
No. 3	'We know from experience that promoting treatment and safe storage of water correctly and consistently over time is extremely difficult, so to basically just give someone the product ... how likely is it, unless there is a lot [of] follow-up in the home, that people would actually use, use correctly, and maintain the use of those products?'
10.	Cultural
No. 8	'We assume that people accept the idea that infection is transmitted through germs; I think that is a big assumption. I think in Tanzania, for example, and Namibia, if somebody gets sick the reason is not that: it is because someone has done something to you, has wished you ill'.
No. 9	'When you come [to a new country], you [need to] be humble enough to learn ... the basis, justification, and the motivations for these practices and see whether there are ways of making improvements without asserting'.

top three were listed by at least seven key informants (58%) and all but the last three were mentioned by at least six key informants (50%). The barriers mentioned most frequently were conflicting priorities, lack of infrastructure and insufficient evidence base or M&E. The barriers were interrelated; for example, PEPFAR funds have been historically unable to support the construction of WASH-related infrastructure, which makes sustainable behaviour change unlikely.

Regarding priorities, interviewees listed the pressure to use ARVs with 'stagnant funding' as a barrier. This pressure ties in closely with limited funding allocated to WASH activities and lack of awareness. One interviewee stated, 'all the activities that I have done on integrating WASH and HIV/AIDS have never been covered by PEPFAR' and recommended 'to diversify the funding source and look for partnerships'. Another one stated, 'they really need to think more broadly than just treatment, because even people on ARVs get sick'. Five key informants (42%) felt that, despite increased awareness, the HIV/AIDS community still lacked adequate knowledge about the importance of WASH in keeping PLHIV healthy.

The majority of key informants argued that an enabling environment is essential when trying to improve WASH practices and that without easy access to latrines, safe and reliable water supply and soap, behaviour change is impractical. One explained, 'if you don't have a source of water in the community, it is not easy or fair to ask [people] to do simple things'. Most key informants expressed frustration with limited WASH infrastructure, stating that it undermined WASH integration efforts. Multiple interviewees noted that building WASH-related infrastructure is generally prohibited under PEPFAR legislation and that PEPFAR policies regarding WASH activities are confusing; as a result, implementers often 'steer clear of doing something that wasn't explicitly stated' as

a permissible use of PEPFAR funds. One interviewee, however, stated that advocacy efforts resulted in a major breakthrough and that PEPFAR now supports the construction of some WASH infrastructure associated with health facilities.

In terms of M&E, five respondents (42%) mentioned that the evidence base for WASH in relation to PLHIV needs to be strengthened, despite the fact that 80% of those respondents found the relationship to be intuitive. Seven key informants (58%) mentioned the lack of adequate M&E as a barrier for increased WASH integration into PEPFAR, noting that the metrics for measuring WASH within PEPFAR are insufficient, inconsistent and 'stop a lot from happening'. Many felt that WASH is 'difficult to quantify'. Interviewees stated that PEPFAR's focus on measuring outputs and mortality rates makes it difficult to report WASH results. While most key informants found the importance of WASH for PLHIV to be clear, the inability to quantify WASH's impact within PEPFAR's context posed a concern. Many desired clear and consistent WASH indicators and follow-up evaluations to assess correct, consistent use of WASH products over time.

Various programmatic and logistic issues emerged as well. A few interviewees felt that the distribution of WASH commodities increases the risk of stigmatisation, as it could reveal someone's HIV status. Interviewees also mentioned that PLHIV did not have easy access to health facilities, especially those in rural areas. Additionally, some key informants were worried that health professionals are not properly trained and do not provide appropriate counselling to PLHIV. They stated that many health professionals are over-worked and that the often-used cascade training system is prone to dilute knowledge down the chain.

Four respondents (33%) mentioned silos as a barrier for increased WASH integration. They perceived PEPFAR's vertical nature as an inherent obstacle to a more comprehensive approach and a reason why WASH is not better integrated. As one interviewee explained, PEPFAR and USAID 'fund programmes through these very distinct silos'. Key informants expressed that the distinct ways of budgeting do not allow for flexibility at the programmatic level and contribute to the limited funding allocated for WASH. They hinted that PEPFAR funds could be better leveraged with greater funding flexibility.

Lastly, some cited correct, consistent and sustained behaviour change as a significant barrier. These interviewees felt that providing water treatment products and soap in a basic care package was insufficient and emphasised that it required follow-up communication and instruction. Moreover, three key informants (25%) cited changing cultural norms as particularly challenging; they emphasised the importance of understanding the origin of specific practices in order to tailor programmes according to formative research findings. Interviewees mentioned that identifying teachable moments, repeating key WASH messages and demonstrating WASH behaviours are essential. They also identified antenatal visits, home-based care and orphans and vulnerable children as good entry points due to repeated contact and susceptibility.

Opinions on WASH within the PEPFAR context

All respondents but one hoped to see increased efforts to integrate WASH into PEPFAR programmes and guidelines. The dissenting interviewee did not explicitly oppose WASH, but also did not feel strongly about its integration. This respondent emphasised that evidence-based interventions with more immediate results should be prioritised. The others, however, asserted that WASH was underappreciated and worth the investment. Seven key informants (58%) were frustrated by the lack of adequate WASH integration into PEPFAR and stated that it is a lost opportunity with serious health consequences.

One stated, ‘I think inadequate WASH access is a big source of opportunistic infections and is very poorly addressed’. In particular, key informants felt that sanitation and hygiene were lacking within PEPFAR programming. Another interviewee explained:

Water, sanitation, and hygiene – that’s the cornerstone of all health, regardless if we are dealing with family planning, HIV, malaria. You need to have water in a community, you need to have water in your health facility; you need to wash your hands, you need to show your clients that you are washing your hands, and you need to prevent infections at the facility level.

Discussion

Key informants suggest that progress has been made integrating WASH into PEPFAR, particularly in terms of increasing awareness and inserting WASH language into PEPFAR guidance and training materials. Further, results suggest that many WASH integration efforts have been successful, with interviewees citing examples of country ownership, community buy-in and behaviour change.

Nevertheless, key informants noted serious barriers to WASH integration into PEPFAR. Many WASH activities are not explicitly supported by PEPFAR policies, which creates uncertainty among implementers and may discourage some from integrating WASH services for PLHIV. Furthermore, lack of adequate WASH infrastructure makes it challenging for PLHIV to practice improved WASH behaviours on an ongoing basis. This can jeopardise the effectiveness of ARV treatment and the long-term health of PLHIV.

PLHIV need easy access to basic care packages and supportive counselling; however, many (particularly in rural areas) still do not receive basic WASH services. As some key informants explained, providing WASH commodities directly to PLHIV may stigmatise them. Anecdotal evidence suggests that providing WASH services in an inclusive fashion, as in the aforementioned PMTCT programme where all women (regardless of HIV status) received WASH services might be beneficial to PLHIV and communities as a whole.

Although interviewees noted seeing worn copies of job aids and increased handwashing – which suggest increased uptake of WASH behaviours – they also mentioned that there is little documentation to support these anecdotal findings. It is thus unclear whether recommended WASH guidelines and tools are fully translated into action. Moreover, the scale and impact of WASH integration within PEPFAR remains in question, partly due to the lack of M&E to assess uptake and health impacts.

Lack of flexibility in funding, deficient metrics and difficulty quantifying WASH impacts on morbidity and mortality pose fundamental barriers and make it challenging to relate WASH to PEPFAR targets. Longitudinal research may be required to truly capture WASH impacts. Despite the numerous challenges, the overwhelming majority of respondents acknowledged WASH’s critical role in ensuring better health and quality of life for PLHIV. Most key informants recommended improved M&E and an increased evidence base to better advocate for WASH within PEPFAR and to identify effective WASH behaviour change interventions.

While there are conflicting priorities, the majority of key informants hoped that PEPFAR would increase WASH integration efforts, including investment in WASH infrastructure and changes in PEPFAR policies. They felt it was short-sighted to put PLHIV on treatment but not ensure quality and effective care and treatment. They emphasised that WASH has been a negligible portion of the budget and that it would be a

shame to regress. Likewise, some interviewees expressed a desire for PEPFAR to further transition away from its historically vertical approach to one that is more inclusive of broader health goals.

Addressing the aforementioned barriers aligns with PEPFAR's efforts to transition from an emergency response to a more integrated and coordinated HIV/AIDS response. The following recommendations are from the experts interviewed and should be considered, while recognising cost implications.

Infrastructure

Well functioning and maintained WASH infrastructure is critical to ensure adherence to treatment. This will help strengthen the overall health system, which is in line with PEPFAR goals. Although it has been difficult to obtain infrastructure funding through PEPFAR, the 2013 FY Country Operational Plan Guidance allows some construction support. Efforts should be made to understand how removing the strict review and approval requirements for construction projects could alter health outcomes in PLHIV. In addition, although the issue of excreta management – that is, collection, transport, treatment and reuse or disposal of human excreta – generally falls outside of PEPFAR, there is the potential for programmes to better advocate and collaborate with other sectors for it. This will be critical for maintaining a hygienic environment for PLHIV.

Monitoring & Evaluation

Clear and consistent metrics to capture output and outcomes are needed to ensure quality of care, effectiveness and efficiency. Moreover, it is recommended that OGAC allows formative and longitudinal research within PEPFAR to assess WASH, especially in the area of sanitation and hygiene. This will strengthen the evidence base and help identify the most effective and sustainable WASH interventions for PLHIV.

Funding

Given the stagnation in funding, PEPFAR should consider efforts to diversify its funding sources and determine how resources can be leveraged from other sectors, including the WASH sector. Results of this study suggest that collaboration between PEPFAR and different sectors in host countries, where they decide on WASH activities and funding, would allow for greater WASH integration.

Programming

Efforts to integrate WASH services within PMTCT programmes, which can improve outcomes for HIV-affected women and their families, are recommended. Approaches that allow for repeated contact and follow-ups with target populations are also recommended. Furthermore, engaging and partnering with local governments and stakeholders can allow for more sustainable integration.

Policy

PEPFAR legislation should consider including stronger language on the importance of WASH in keeping PLHIV healthy. Additions may include the amount spent on WASH activities, supported services, improved M&E and more rigorous research to determine

how WASH affects the health of PLHIV. Additionally, policies that allow for more WASH-related construction, when critical, should be considered.

Study limitations

Several study limitations should be noted. First, the study's small sample size and exploratory nature limit its generalizability. However, the themes that emerged were consistent and did not vary greatly based on each respondent's organisation or nature of work. Furthermore, saturation of themes was observed after the eighth interview, revealing common trends in what key informants reported. Second, as with most qualitative research, selection bias is a concern. Factors such as convenience and interest may have encouraged some more than others to participate. A third limitation is the lack of diversity within the interviewees. While key informants of different professions participated, the majority were technical advisors. Additionally, while the study included staff from five organisations, two-thirds came from one non-profit and one governmental agency. This is partly due to the sampling methods, which involved interviewees identifying potential candidates. A more diverse sample, especially one that included in-country staff, would have enhanced the results by providing a broader perspective. Lastly, it should be noted that besides PEPFAR there are other US government-supported WASH activities, which were not discussed.

Conclusion

The qualitative results discussed suggest that progress has been made integrating WASH into PEPFAR, particularly in terms of incorporating it into country guidelines, training materials, job aids and basic care packages. However, barriers exist and should be addressed to ensure that recent gains are not undermined. The main barriers included conflicting priorities, lack of infrastructure, insufficient evidence base and lack of M&E. According to the interviewees, improvements to M&E, greater flexibility surrounding programme funding and provisions for formative and longitudinal research to identify effective WASH interventions might enhance WASH integration efforts and increase their benefit for PLHIV. The majority of key informants hoped for PEPFAR to increase WASH integration efforts to ensure quality and effective care and treatment of PLHIV.

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Supplemental materials

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