



'They will listen to women who speak but it ends there': examining empowerment in the context of water and sanitation interventions in Ghana

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ABSTRACT

Gender plays a vital role in shaping access to and governance of water, sanitation, and hygiene (WASH) services in many contexts. Notably, women and men have different WASH-associated roles as well as varying access to resources and power. This study explores the meanings of women's empowerment in the WASH sector from the perspective of local stakeholders in the Asutifi North District, Ghana. A qualitative approach was employed, which involved 15 key informant interviews with community leaders, local government professionals, and WASH practitioners. Participants conceptualized empowerment in terms of four major themes: (1) availability of resources, (2) WASH information, (3) social and cultural structures, and (4) agency. Participants defined empowerment as a multifaceted process shaped by their physical, social, cultural, and political environments. The study provides researchers and practitioners with a greater understanding of the dimensions of empowerment that are relevant to strengthening WASH interventions and practices.

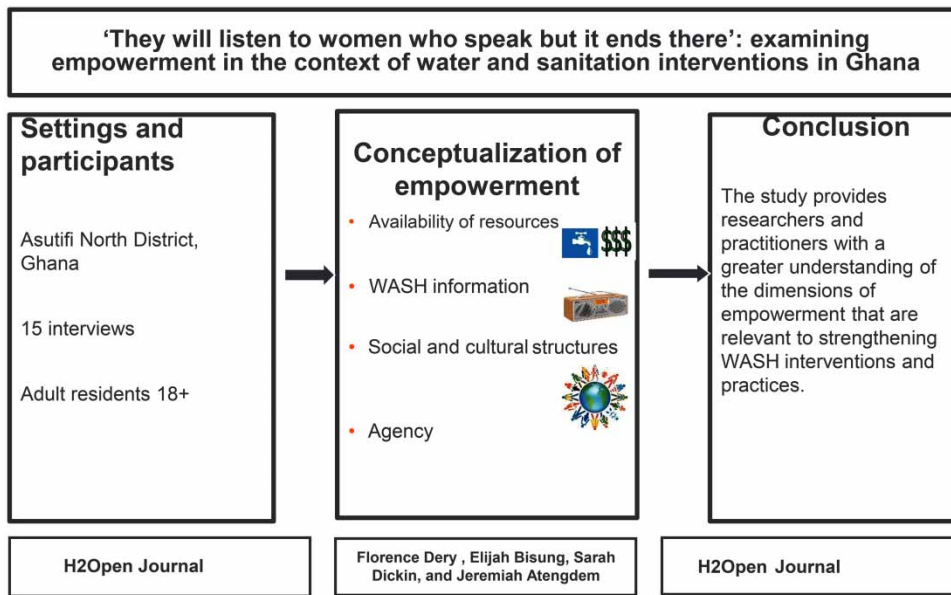
Key words: empowerment, equality, gender, qualitative approach, water security

HIGHLIGHTS

- Empowerment is captured as a multifaceted process.
- We emphasize the need to use more inclusive perspectives to address inequities at the household level.
- Support from male partners in household chores appears to be a common practice in the study area.
- Support from male partners in WASH activities is critical to enhancing women's autonomy.
- The study suggests that multiple facilitators of empowerment exist.

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GRAPHICAL ABSTRACT



INTRODUCTION

There has been a growing understanding of the role of gender in development in recent decades, with women's empowerment being recognized as critical for reducing gender disparities and related adverse outcomes across all sectors, including the water, sanitation, and hygiene (WASH) sector. Recognizing the importance of WASH for human well-being and gender equity, the recently adopted sustainable development goals (SDGs) target universal access to WASH for all by 2030. SDG 5 is geared toward achieving gender equality and target 5.4 seeks to 'recognize and value unpaid care and domestic work through the provision of public services, infrastructure and social protection policies, and the promotion of shared responsibility within the household and the family as nationally appropriate' (United Nation (UN) 2017). Without attention to gender inequalities and empowering women as outlined in SDG 5, the achievement of SDG 6, which focuses on universal access to clean water and sanitation, could be meaningless.

Women's empowerment is particularly crucial in WASH, as prevalent social norms assign the majority of water collection roles to women in many low- and middle-income countries (LMICs; Fisher *et al.* 2017). This results in women often bearing higher health and social costs associated with household water and sanitation insecurity, such as higher exposure to water-related disease, discriminatory taboos, and unrealized economic productivity (Gupta & Obani 2016).

While the provision of WASH facilities is essential for addressing access disparities, it does not address inequities in the control of water resources (i.e., sources of water that are useful to humans) and facilities. Thus, assessing WASH technical services and infrastructure is necessary when tracking WASH progress. Equally important are social and cultural factors, including social capital, social status, and socially constructed gender roles that affect women's engagement in community-level WASH programming. Including women in community WASH activities are vital as we strive toward achieving women's empowerment as a development goal (Akter & Ali 2014; Leahy *et al.* 2017; Dery *et al.* 2020). For instance, research in Uganda and Vanuatu show that the political participation of women in decision-making and water and sanitation committees is an essential determinant of water infrastructure sustainability (Foster 2013; Mommen *et al.* 2017).

The importance of gender empowerment for development has resulted in the creation of a range of tools and approaches to measure empowerment. For instance, several aggregate national indices and tools (e.g., Gender Empowerment Measure (GEM), Gender Inequality Index (GII), and Gender Development Index (GDI)), have been developed to capture changes in gender disparities at the national level. However, these indices are focused on national averages and cannot adequately capture the nuances of the concept of empowerment. This

potentially limits their ability to identify significant variations in people's lives to ensure no one is excluded from accessing WASH services.

Understanding empowerment in WASH

The meaning of empowerment within the WASH sector remains unclear (Dery *et al.* 2020), partly because of the various ways empowerment manifests itself (Kevany & Huisingh 2013; Schweitzer *et al.* 2014; Ewerling *et al.* 2017). Based on these challenges with the definition of empowerment, a contextual understanding of empowerment will better inform appropriate empowerment approaches or strategies that might work better in specific contexts. This is needed for the successful implementation of WASH programs and interventions that are aimed at empowering individuals and communities.

The Empowerment in WASH Index (EWI) (Dickin & Bisung 2019) was recently developed to guide WASH practitioners in measuring and monitoring gender outcomes, empowerment, and inclusivity in WASH-related interventions, particularly in LMICs. The EWI is also a diagnostic tool for identifying WASH constraints as well as an instrument for evaluating the effectiveness of WASH interventions. In developing the EWI, concept mapping with local stakeholders in Ghana, Burkina Faso and a scoping review was conducted to uncover critical indicators of empowerment across multiple levels (individual, household, and community). Twelve interrelated indicators were identified and used to develop the EWI: (1) input decisions about WASH roles and responsibilities; (2) households' input into decisions about WASH expenditures; (3) households' input into decisions about involvement in community WASH activities; (4) intrinsic agency in WASH; (5) control over assets; (6) work balance; (7) time allocation for water collection; (8) group membership; (9) leadership in WASH implementation; (10) leadership in WASH accountability; (11) sharing of WASH practices information; and (12) sharing of information about WASH rights and responsibilities.

Although standardized quantitative measures such as the EWI are crucial for straightforwardly identifying empowerment levels, the index, like all quantitative measures, cannot adequately capture the nuances of the concept of empowerment. To address this gap and complement the EWI, this paper draws on Kabeer's empowerment framework to examine local stakeholders' understandings and experiences of empowerment at the household and community levels within the Asutifi North District of Ghana.

Conceptual framework

Empowerment has been defined in different ways, but commonly draws on concepts of agency, choice, opportunities, resources, and power (Rowlands 1997; Sen 1999; Alsop *et al.* 2006; Ibrahim & Alkire 2007). This paper draws on Kabeer's definition of empowerment: 'processes by which those who have been denied the ability to make choices acquire such ability' (Kabeer 1999, p. 435, 2005, p.13). Kabeer further explored empowerment through three interconnected dimensions: resources, agency, and achievement (see Figure 1).

The framework depicts empowerment as a dynamic process in developing individuals' capacity to articulate preferences and make decisions to fulfill their potentials or acquire resources. In her view, resources include both material resources (e.g., earnings and assets), human resources (e.g., education, training and skill development programs, and self-efficacy), and social support (e.g., participation in community groups, peer networks, and



Figure 1 | Empowerment framework. Adapted from Kabeer (1999, p. 437).

role models), which enhance an individual's ability to choose (Kabeer 1999, 2005). Thus, resources are the channels through which agency is exercised.

Agency indicates the ability to define and act on individual or shared goals, and to put them into effect (Kabeer 1999, 2005). The last dimension, achievement, represents the failure or realization of an individual's potential to live the life or achieve the well-being outcome they want (Kabeer 1999, 2005). The three dimensions interact across space and at multiple levels. In this study, we used the framework to analyze and understand factors that matter for (dis)empowerment at various levels (individual, household, and community). Thus, the framework served as a guide in developing the interview guide, data analysis, and interpretation of findings.

METHOD

A qualitative design was used for this study. Qualitative research is often used to explore and understand the meaning of complex issues (Creswell 2013). Qualitative techniques also help to understand the human realities of a situation within a given context (Green & Thorogood 2013). The strength of qualitative research is that it provides narrative information about different issues (e.g., human perception, beliefs, and social norms) and offers an opportunity for the participants to describe the situation in their own words (Creswell 2013). This design was suitable for the study because it provides a rich account of how people interpret their personal experiences, construct their worlds, and attribute meaning to their experiences (Neergaard *et al.* 2009).

Study context

The study was conducted in the Asutifi North District in the Brong Ahafo Region, Ghana. The Brong Ahafo Region has since been divided into three regions (Bono, Brong Ahafo, and Ahafo) after this work was completed. The district's population, according to the Ghana Statistical Service (Asutifi North District report), is 62,816 people, with most (68%) people residing in rural areas (Asutifi North District Assembly 2018). Large-scale mining in the district has led to a growing service sector, though subsistence agriculture remains dominant (Asutifi North District Assembly 2018).

Overall, about 15% of the district population lack access to basic water services (Asutifi North District Assembly 2018). Access to basic water is defined as an improved source with a collection time of not more than 30 min for a round trip (WHO 2017). However, households without access to basic drinking water use water from a variety of unreliable sources including rivers, streams, unprotected wells and springs, dugouts, or tanker services (Ghana Statistical Service 2014). Furthermore, whereas 42% of rural residents have access to improved communal water facilities, only 61% of them are able to make a return trip of water collection within 30 min (Asutifi North District Assembly 2018). Rural households (50.5%) primarily use shared public toilet facilities in the district. However, about 60% of public facilities in the district do not meet the threshold of basic sanitation (Asutifi North District Assembly 2018). Five percent of the population practices open defecation in bushes and fields (Ghana Statistical Service 2014).

In response to the WASH inadequacies faced by the Asutifi North District, a WASH master plan has been developed that sets out key targets and strategies to ensure every household gets access to safe water and sanitation by 2030 (Asutifi North District Assembly 2018). The local government, non-governmental organizations (NGOs), and local authorities support the master plan. The study context is therefore well suited for this study because it is a pilot district for interventions aimed at achieving universal access to water and sanitation by 2030.

Participants and recruitment

Data were collected through interviews with local stakeholders. For this study, we considered local stakeholders as key informants based on their expertise and experiences in WASH-related activities such as community mobilization and involvement in local governance. The final key informants included leaders of local women's groups (2), persons with disability groups (3), youth group leader (1), member of a community resettlement committee (1), community health service (1), local government agencies (3), and local authorities (4). The approximate number of participants for the key informant interview was initially targeted at 12. However, data saturation was reached after interviewing 15 participants (Creswell 2013). Convenience sampling was used to recruit the participants for the interview. This sampling technique helped to derive a sample of individuals who were willing and able to share their experiences with the phenomenon of interest (Creswell 2013). The open-ended nature of the questions gave room for participants to introduce their own lines of arguments and elaborate or emphasize issues they value.

Before recruitment, invitation letters were sent to the Asutifi North District Assembly. The district assembly circulated the study information to groups and partner authorities who work within the WASH sector. Those willing to participate contacted the assembly. The district assembly then shared the contact details of potential participants with the research team, thus providing access to the participants. Initial face-to-face contact was made with the participants separately in an introductory meeting. Participants were selected purposefully based on inclusion criteria, area of expertise, and geographical location to ensure that diverse perspectives and opinions were considered. Individual interviews were then scheduled and conducted at a place and time that was mutually convenient.

Data collection

One-on-one interviews were conducted with participants in either English or Twi using an interview guide. The interview guide was developed to collect information concerning norms and practices around household chores, including WASH-related tasks (e.g., water collection), leadership and decision-making responsibilities, and challenges in accessing water and sanitation services. One participant who was proficient in English and Twi decided to respond in both languages. Eight participants responded in Twi, and six responded in English. The study drew upon *Kabeer's (1999)* definition of empowerment to ask open-ended questions. Particularly, questions were focused on access to water and sanitation, access to education or training and capacity building opportunities, and engagement with community groups. We further asked about women's level of influence and participation in decisions at the household and community levels, as well as women's ability to speak freely in public. For example, respondents were asked to describe people in their community who can make essential decisions in their lives and put those decisions into action. This allowed the participants to freely and openly elaborate on the most critical aspects of their experiences. Follow-up questions were asked if necessary. Interviews were conducted at various locations, including participants' workplaces (9), public places (4), and homes (2). Interviews were audio-recorded with permission from participants and lasted between 45 and 60 min. Fieldnotes were also taken through observation, especially regarding access to WASH facilities, good sanitation practices, and body language of the respondents. The recordings were supplemented with notes taken about participants' body language, any distractions during the interviews, and reflections on how the settings and external interactions influenced the discussions. Data were collected between April 2019 and May 2019. Verbal consent was taken from all the research participants. To protect the identities and confidentiality of the participants, personal identifiers were not used in the analysis and presentation of data. The ethics committee provided informed consent, and the study protocol was approved (Queen's University's Health Sciences and Affiliated Teaching Hospitals Research Ethics Board, Ontario, Canada, protocol No. 6023634, May 18, 2018).

Data management, analysis, and rigor

The audio recordings were simultaneously translated and transcribed. The field notes were added to the transcripts to provide contextual details noted during the interview. A graduate student with proficiency in both English and Twi was contracted to compare each interview transcript to the corresponding audio file. Another graduate student randomly selected the translated transcripts and compared them with their relevant audio recordings. These steps were taken to ensure that meanings of keywords and constructs were maintained during the translation process. The completed transcripts were then imported into NVivo™ 12 software for coding and analysis.

With guidance from the empowerment framework, data were inductively analyzed using thematic analysis (*Braun & Clarke 2006*). First, the data were systematically coded by summarizing the primary topic of relevant text in a word or short phrase. For example, we used words such as 'participation' and 'decision-making' to serve as topics. These words conveyed the meaning of the relevant text or sentences. Second, emergent subthemes were identified in each passage and subsequently grouped under broader themes. For example, subthemes such as 'the presence of WASH facilities/resources' and 'financial resources' were captured under a broader theme, 'availability of resources'. Subthemes were reviewed by two researchers independently to ensure concepts that related to the same phenomenon were coded under the same category. Finally, themes were subsequently defined based on a general understanding of ideas in the existing literature.

RESULTS

Participants came from Kenyasi, Ntotroso, Gambia, Obengkrom, and Dadiesoaba and included adult males (7) and females (8). Pseudonyms are used in reporting the findings to ensure anonymity.

Understanding/conceptualizing empowerment

Though it was a challenge to translate ‘empowerment’ appropriately into Twi, most of the participants were familiar with the term partly because they had attended training programs or workshops often led by NGOs. Local understandings of empowerment were substantially alike but differed slightly among the few stakeholders. According to one participant, ‘empowered persons speak confidently in public and go about their daily activities independently’ (Dikpe, male). According to another participant, ‘an empowered woman is one whose inputs during community fora are valued without channeling them through her partner’ (Ama, female).

Four significant themes emerged from the inductive analysis: (1) availability of resources; (2) WASH information; (3) social and cultural factors, and (4) agency. Supportive quotations from the participants to illustrate these themes and their related subthemes are described in the subsequent sections (see Table 1).

Availability of resources

The availability of resources generally refers to the volume and types of WASH services accessed when needed. Most participants felt that people with resources were more empowered than those without resources. Resources here are captured as the presence of WASH facilities/services and financial resources.

Presence of WASH facilities/services. Concerning the availability of WASH facilities, individuals with access to WASH facilities at home received greater respect and status than those without such facilities. According to a key informant:

‘You are not respected in this community if you are not able to build a toilet facility for your family. People with WC are even more respected than others.’ (Owusu, male)

Another key informant highlighted that despite the presence of government water supply agencies, the rich and educated people are perceived to be able to connect pipes in their homes compared to the poor. These persons are considered empowered and seen as role models. The participant stated:

‘We have community town water systems in this community, but only the educated and “well to do” people are able to connect water into their home. My family and I are saving money towards getting water connected to the house so that we can also enjoy good water like what they [rich and educated persons] are enjoying.’ (Ada, female)

Furthermore, some participants complained about how the inadequacy of WASH facilities affects the exercise of good hygiene practices: According to one of the key informants:

‘mmm-hmm, once these [WASH facilities] are not in place, it is difficult for one to engage in good hygiene practices. For instance, living in a house without a toilet promotes open defecation. How can one, therefore, stop to defecate openly when he has no alternative? So, people are willing, but there are no logistics or adequate WASH facilities to promote good WASH practices.’ (Klenam, male)

Financial resources. The irregular water supply and the cost of accessing safe water discourage individuals from engaging in good WASH practices. The participants recounted how challenging it is to pay for water in the community. As noted by one of the key informants:

Table 1 | Themes and number of mentions

	Theme	Number of mentions
Dimensions of empowerment	Availability of resources	41
	WASH information	28
	Social and cultural structures	60
	Agency	25

'Where I live, the piped water does not flow regularly, and so sometimes we buy the water for 30 pesewas per yellow gallon [20-liter container] from a privately-owned borehole. Most of us are unable to afford this all the time. It is difficult to get water if you don't have money to buy water from the borehole. For me, sometimes I fetch the water with permission to pay later, but not everyone is given such an opportunity.' (Dikpe, male)

Another participant also highlighted how structural factors such as unemployment disempower many residents:

'The hardship in this community is too much. One is aware of the good WASH practices but cannot afford the basic materials like soap to help him practice good hygiene like the rich people in the community. We do not even have money to buy food, how much more soap. If the unemployment situation is solved, then it will help us engage in better hygiene practices.' (Owusu, male)

WASH information

WASH information relates to the provision of the appropriate education individuals need to improve WASH-related behavior. Subthemes captured include WASH knowledge and capacity building.

WASH knowledge. WASH knowledge mainly refers to the awareness of good WASH practices and water-health linkages. Equipping individuals with WASH knowledge might enable them to articulate their WASH needs and contribute to decision-making at the household as well as community levels. According to a key informant:

'I personally share learnings on WASH with members of the association I belong to. I was selected to take up the role because of my educational status. I represent the association during workshops where I present our challenges and water needs to the authorities. My neighbours also come to me to teach them appropriate water treatment methods.' (Shine, female)

According to another key informant, WASH information should be shared through a medium that could be understood by all. This act could be done using a variety of communication tools that everyone, especially disabled groups in the community (e.g., persons with hearing impairment) would understand and benefit. The key informant said:

'It [following WASH education programs] is difficult to understand what is being discussed. We [persons with hearing impairment] sometimes feel very disappointed, and it hurts us so much. Sometimes we leave the place. During some of these meetings, there is an interpreter who translates whatever goes on. We understand and put the information to use to improve our lives. But in situations where education is going on without an interpreter, we try to read the lips of the speakers and gestures to be able to follow what is going on, but it is difficult.' (Kofi, male)

Capacity building. Emphasis was placed on improving WASH knowledge through training programs. Some participants indicated that receiving training in good WASH practices empowers them:

'I am part of a group called the compassion group, and we educate people on hygiene so that they can improve their lives. This group is made up of men and women, and we are trained during meetings to have knowledge relating to good WASH practices.' (Elorm, female)

According to one of the key informants, persons living with a disability are empowered through training and capacity building given to them. This has made them more confident in articulating their WASH needs, especially at the community level. As noted by the key informant:

'Initially, women were shy, but due to training and empowerment that we received from the leaders of the Federation [association for persons with a disability], we have built the confidence to speak up in public. During

such empowerment training, they teach us the persons with disabilities how to go about our daily activities without depending on anyone, and this has been helpful. We are now being recognized in the communities because of the efforts we are putting in our daily work. We are invited to partake in stakeholders' meetings and other activities in the community.' (Dikpe, male)

Social and cultural structures

Social and cultural structures relate to the attitudes and beliefs that shape or enhance individuals' ability to define goals and work toward achieving them. There were four subthemes, leadership, social norms, and social support.

Leadership. Based on societal gender norms and expectations, some women suspend participating in community activities to focus on household or domestic chores. Irrespective of the good intentions or otherwise of these gender norms, they can undermine individual active involvement in water-related collective action. Individuals, particularly women who go against such societal norms or expectations, are seen as powerful. According to one of the women participants, she was nicknamed 'Yaa Asantewaa' (a brave and fearless woman) because of her active participation in community meetings:

'As for me, I speak when there is a need. Until I finished with what I want to say, I am not intimidated by some of the male colleagues who usually want to shut me up. As a result of my confidence and boldness, they gave me several nicknames, including "Yaa Asantewaa".' (Aviela, female)

Furthermore, all participants thought that women would be more empowered if they have 'power over' WASH issues in the community. It is considered a great achievement when women are given a chance to take supervisory or leadership roles:

'It [creating opportunities for women to gain leadership roles] will be very helpful because women play a major role in sanitation and water issues at home. Women need and use WASH services more for household chores such as cleaning, washing, cooking, sweeping. So, when they play a major role in the WASH committee, it will be helpful because they need WASH services more than men and so they will manage the committee better if they are more on the committee.' (Elikem, male)

Socio-cultural norms. Some participants indicated that having men carry out duties meant for women was embarrassing and against social norms and tradition. Domestic chores, including sweeping, water collection and cleaning, were considered inappropriate for men and not traditionally accepted. Men who engage in these activities were considered disempowered. According to a key informant:

'Mostly, women are responsible for cleaning the house. Our culture too does not support men sweeping or cleaning, so if I see a man holding a broom to sweep, I feel ashamed of myself, and I quickly sweep the place for him.' (Aviela, female)

Another participant added that men who engaged in domestic WASH activities do not only go against traditional norms but also undermine their masculinity. According to the participant:

'Tradition demands that women are solely responsible for WASH activities. Even if a man is living alone, he finds a woman to come and clean his bathroom for him. Any man who is seen doing such chores is not considered a man by his peers.' (Owusu, male)

Creating social environments that promote men's involvement in domestic WASH activities will help promote gender equity. Some key informants, however, indicated that this might threaten socio-cultural norms. As stated by a participant:

'Some men help their wives. For instance, my husband sometimes fetches water from a nearby village when we are faced with a severe water shortage. However, some women would want to make it a permanent role for their husbands if the men try to assist with fetching water at one point. But this is wrong. It should not be so. Men are, therefore, trying not to help to avoid being taken advantage of by their spouses.' (Elorm, female)

Social support. Some participants mentioned that having support from other members of the household and community in WASH activities is considered empowering. For example, in a context dominated by gender inequalities, support from male partners in WASH activities is critical to enhancing women's autonomy and extending their use of WASH facilities. According to a participant:

'Some men support. For instance, I have a partner, but I wash my clothes. I sometimes fetch water. Not all men do that. However, looking at how women are overburdened with household chores, we need to support and empower them.' (Elikem, male)

Another woman mentioned that women's mutual support, especially WASH planning and governance, could be necessary for women's empowerment. She stressed the importance of supporting the collective voice of women at public events, where decisions regarding WASH are deliberated. According to the participant:

'Most women are afraid to speak in public, but they are suffering. The woman who however talks seems not to get other women to speak in support of her. When this happens, it may seem like it is an individual problem or concern.' (Ama, female)

Agency

Agency mostly refers to the ability of a person to define goals and put them into effect (Kabeer 1999, 2005). Sub-themes captured under agency include participation and decision-making.

Participation. Some respondents mentioned that women are mostly present at gatherings; however, they cannot engage in active discussions. Participation requires an enabling environment that recognizes the capacity of both men and women to work together:

'We are burdened, but most women are afraid to speak up. It is a massive problem because water is a big challenge to us women in this community. As for me, I can talk confidently anywhere, but others do not. Sometimes when we meet with the men to discuss issues, the men shut us up.' (Aviela, female)

Another woman added that women's voices should be amplified to enable them to participate in WASH deliberations without barriers. This could help promote inclusivity in WASH planning and governance. According to her:

'The women are not speaking up in public, especially in the situation where they have their husbands or in-laws as part of the gathering; they tend to be quiet except a few of them. I think some of the men are intimidating. If you want to speak, they want to intimidate you.' (Ama, female)

Some participants felt that women lack adequate time to participate in community activities, as they receive little or no support in carrying out household chores. As highlighted by a participant:

'The committees that have been inaugurated; the majority of the members are men. It is because women are not coming out. It is a voluntary job, and I think men are more willing to take it up than the women. The women are involved in so much household chores that they have little time for other activities.' (Anamaala, female)

Decision-making. Some participants highlighted that women are overburdened with household chores, which affect their participation in community decision-making processes:

'Mmm-hmm, if it comes to the usage of water and sanitation, women use it more, but when it comes to decision making, the men take the lead in that. For instance, every water source point in most parts of the district is managed by the water and sanitation committees, but the committees that have been inaugurated; the majority of the members are men.' (Anamaala, female)

A woman participant who sometimes finds herself in the WASH committees recounted that her suggestions are sometimes not considered at the end of the day:

'They will listen to women who speak, but it ends there. Mostly, they do not work with what was voiced out. But we will continue to talk about water issues and how the inadequate supply affects us.' (Shine, female)

Furthermore, other women who are very outspoken have recounted being excluded from community water board meetings. As intimated by a key informant:

'I am one of the board members. Because of the critical issues around accountability that I am fond of raising, the former board members mostly held meetings without involving me.' (Aviela, female)

The exclusion of women from meetings limits their likelihood of taking up leadership roles in the community.

DISCUSSION

We conducted this study to explore how individuals understand and experience empowerment within the WASH sector in Ghana. This study provides insights into the perspectives of community stakeholders on empowerment. These perspectives include factors that facilitate (dis)empowerment, including socio-cultural structures, resources, agency, and WASH information. Similar considerations have been identified as barriers to empowerment in previous studies (Boateng *et al.* 2013; Leder *et al.* 2017; Routray *et al.* 2017). For example, a study conducted in rural India by Routray *et al.* (2017) revealed that cultural norms limit female's active involvement in decision-making processes regarding sanitation. A study by Agarwal (Agarwal 2007) in India also revealed that women's active participation in decision-making were impeded by social and cultural norms, even when they were motivated to act. In instances where women are included in decision-making bodies, their participation in some cases are mostly tokenistic (O'Reilly 2004).

The results of the study suggest that multiple facilitators of empowerment exist. These include support from other members of the household, mutual support from peers, as well as opportunities for women to gain leadership roles in WASH planning and governance. Spouses were identified as relevant sources of support, especially for the collection of water and cooking. Support from male partners appears to be a common practice in the district. This is partly because some people believe that husbands were expected to help with household chores. This finding supports a study by Eger *et al.* (2018), which argues that empowerment acquires its value and meaning from relational acts. With male counterparts helping with chores, women can accomplish what they previously could not. Thus, women's experience of empowerment increases as their responsibilities (e.g., water collection and childcare) decrease, allowing them extra time to engage in other activities, including economic and community social activities.

On the contrary, other studies found men's engagement in WASH activities only when female partners were sick. For example, a study conducted in Mozambique by Van Houweling (2015) found that men collected water when their wives were ill, as well as during periods of severe water scarcity. Also, another study was conducted in India by Luke *et al.* (2014) showed that men assisted with domestic chores such as cooking and childcare only when wives were ill or expected to arrive home late from work.

Creating opportunities for women to gain leadership roles in WASH planning and governance is essential because women leaders could inspire their colleagues to take up similar roles. This study reveals that women in WASH-related leadership positions are considered authoritative and can bring the voices of other women to the policy arena. However, women were underrepresented within top decision-making bodies in the communities (e.g., WASH committee), and their suggestions are mostly ignored during meetings. While gender parity in leadership has not been achieved in many fields (e.g., law, science, education, technology, and political space), the gender gap in the WASH sector is particularly problematic because women are less involved in WASH

decision-making. Including more women in decision-making processes would help ensure inclusive WASH service delivery to promote the global goals of achieving gender equity (Dhatt *et al.* 2017).

Most WASH initiatives, such as community mobilization to enhance water access, do not often consider contextual factors (e.g., cultural norms) that shape women's empowerment (Peal *et al.* 2010; Mosler 2012). We recommend that policymakers and WASH practitioners focus more on creating favorable platforms for women to make decisions in a socially and culturally appropriate manner. Furthermore, community WASH committees need to look beyond merely including women to providing them with genuine opportunities to participate in decision-making fully as well as opportunities for leadership at all levels. Addressing disempowerment at the community level (e.g., providing community leadership) does not necessarily shift the gendered expectation of women's primary role at the household level. In a context where women are mainly overburdened with domestic chores, there is no time for meaningful participation in economic activities or WASH activities at the community level, even when the opportunities are presented. Interestingly, the findings from this study reveal that some men deviated from the cultural norms of gender roles and engaged in household tasks as a way of supporting women to have some time to engage in economic activities and communal activities.

The study emphasizes the need for WASH programs to pay attention to the prevailing societal and community factors that influence women's participation in collective action. For example, social support and social norms that create opportunities for women to gain leadership roles in WASH planning and governance could be identified and promoted during the implementation of the WASH program by local government authorities.

Though the application of empowerment frameworks in WASH-related research has been limited, Kabeer's framework provides researchers with a unique conceptual tool for understanding factors that influence (dis)empowerment. It directs attention to the interplay between resource, agency, and achievement. For example, the realization of empowerment is grounded in the availability of resources as well as socio-cultural practices. The most critical aspect is for researchers and practitioners to disentangle how the three dimensions of the framework interact within households and communities to enhance empowerment. Further research could study the relationships and interactions between the aspects of empowerment and specific WASH outcomes using sex-disaggregated data further to expand the literature on empowerment in the WASH sector. This information could provide a further understanding of the contributions the WASH sector makes toward improving health and well-being in general.

LIMITATIONS

There are some limitations to this study worth acknowledging. First, there is the possibility of selection bias, as our sample was limited to participants from organizations and community groups within the study district. Second, we recognize the potential of lost meaning in the translation process of the interviews. However, the following steps were applied to ensure rigor. First, all interviews and discussions were recorded verbatim and transcribed. Second, all the audiotapes were cross-checked with the transcripts before analysis to correct any errors and fill any gaps. Third, a graduate research assistant with proficiency in both English and Twi randomly selected the translated transcripts and compared them with the relevant audio recordings. Lastly, adequate accounts of behaviors and activities during interviews were noted to aid in the analysis. The study did not also examine the difference in experiences of participants based on the organization. This might have helped provide in-depth knowledge on how individuals within similar groups perceive or experience empowerment.

CONCLUSION

This study provides evidence that can inform policy development and practice. More specifically, the results could inform the development of policies to enhance the participation of women and men in WASH decision-making and subsequent implementation. Doing this would help achieve universal access to WASH and achieve gender equality and empowerment for all. The importance of gender equality and empowerment has received attention from (WASH) sector over the years; however, significant gaps in understanding facilitators and barriers to women's empowerment remain. This is partly due to limited sex-disaggregated data and the limited application of theoretically informed empowerment frameworks and approaches (Grant 2017). This study's findings allow researchers and practitioners to analyze and understand factors that matter for (dis)empowerment in WASH. This would enable the development of appropriate interventions and programs for achieving SDGs 5 and 6.

ACKNOWLEDGEMENTS

This work was supported by an accelerated grant provided by the REACH program. REACH is funded by UK Aid from the UK Department for International Development (DFID) for the benefit of developing countries (Aries Code 201880). However, the views expressed and information contained in it are not necessarily those of or endorsed by DFID, which can accept no responsibility for such views or information, or any reliance placed on them.

DECLARATION OF INTEREST

Florence Dery, Elijah Bisung, Sarah Dickin, and Jeremiah Atengdem received a research grant provided by the REACH program. REACH is funded by UK Aid from the UK Department for International Development (DFID) for the benefit of developing countries.

DATA AVAILABILITY STATEMENT

All relevant data are included in the paper or its Supplementary Information.

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First received 14 May 2021; accepted in revised form 31 August 2021. Available online 20 September 2021