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‘They are one of us’: How disability training affects health workers’ attitudes and actions towards disabled people in Ghana

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ABSTRACT

Introduction: Health workers negative attitudes and stigma are often reported as one of the greatest barriers for disabled people to access healthcare. Interventions have been developed in response, and preliminary results often show promising effect on changing health workers’ negative attitudes. However, this does not include longer-term, qualitative follow up to explore how health workers change their behaviour post-intervention.

Methods: This qualitative study examined trainees perspectives on a disability training implemented in Ghana in 2017 and 2021. Interview participants had taken part in at least one training session in the Northern, Savannah, or Greater Accra Region. Semi-structured interviews (n = 32) were conducted, transcribed verbatim, and analysed thematically.

Results: Five key themes were identified relating to i) individual and ii) community and system level change. These included: 1) Awareness raising to address stigma and human rights; 2) Prioritisation and positive discrimination; and 3) healthcare workers can be empowered to challenge social norms; 4) Disability training should reach the broader community and 5) Accessibility interventions should compliment training.

Discussion: There are several positive features of providing disability training to health workers and expanding the scope of the intervention to focus on other community leaders and features of an accessible health system. While this helps demonstrate the need to expand disability training for health workers, further research is needed to demonstrate disabled peoples’ perspectives on the changes they experience in their care after health workers’ training.

1. Introduction

Globally, there are an estimated 1.3 billion disabled people (World Bank & World Health Organization, 2011). While disabled people generally have greater health needs (general health needs, specialist health needs, and those related to their impairments), they report three times higher unmet health needs than non-disabled people (McColl et al., 2010; The Missing Billion Initiative & Clinton Health Access Initiative, 2022). There are an array of reasons for these inequities, including physical, financial, and attitudinal barriers to accessing health care (Bright & Kuper, 2018; Hashemi et al., 2020). While there is no definitive evidence on the impact of health workers’ attitudes towards disabled people and its impact on care-seeking, there is a growing body of evidence that suggests health workers have prejudice or negative

attitudes towards disabled people. For example, a 2020 study in the United States found most health workers (82.4%) believe disabled people have a worse quality of life than non-disabled people and feel tentative when providing care to disabled people (59.3%) (Iezzoni et al., 2021). This is echoed in other studies, which suggest physicians perceived caring for disabled people negatively, making them more reluctant to care for disabled people in their practices (Lagu et al., 2022). Indeed, in a survey of student members of the American Academy of Family Physicians, nearly 98% of participants wanted more disability training, with only 36% stating that they were well-trained on how to provide care for disabled patients (Marzolf et al., 2022). Finally, a qualitative study in Ghana found that health workers saw disabled people as anxious, violent, selfish, inconsiderate, lacking self-confidence, and difficult to communicate with—perceptions that

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likely lead to poor quality and unequal care (Acheampong et al., 2022).

Building capacity of health human resources to improve service delivery is included in the United Nations Convention on the Rights of Persons with Disabilities (UN CRPD)—the seminal international legal framework on the rights of disabled people. Article 25(d) specifies health worker training as a means of improving health equity and quality of care for disabled people (United Nations, 2006). Similarly, the WHO Global Report on Health Equity for Disabled People included health worker training as one of the 40 key actions to reduce these preventable health inequities experienced by disabled people (World Health Organization, 2022). These high-level international commitments, as well as additional empirical evidence on increased barriers to health and higher health needs highlighted above demonstrate a need for health workers to understand disability. Health workers have substantial power in a patient-provider relationship. When health workers are dismissive, disrespectful, or abusive, they not only immediately harm the patient, but may also impact their future decision to seek care (Levesque et al., 2013). Putting patient-centred interactions at the forefront of care is a key component of improving health systems, and understanding how to train health workers about disability better may help facilitate this goal.

A recent systematic review highlighted that there are dozens of interventions to train health workers about disability, but few are in Africa and rarely evaluated with in-depth qualitative interviews on participant experience, learning, and gaps (Rotenberg et al., 2022). Recognising this need amongst health workers in sub-Saharan Africa, a training on sexual and reproductive health rights was developed at the University of Ghana. Frontline health workers in the Ghana Health Service were selected from various health centres to attend a two-day course in 2017 or 2021. Training covered disability and rights, myths about disability, and how to provide sexual and reproductive health care to disabled people (i.e., appropriate accommodations, possible contra-indications based on impairments, and appropriate maternal care) (Ganle et al., 2021). There are limited qualitative data on health workers' reported behaviour changes after disability training, as identified in the systematic review. Therefore, this is an independent qualitative study to examine how an existing training on disability in Ghana helped to change health workers' attitudes and behaviour towards disabled people.

2. Methods

2.1. Selection and recruitment of participants

Trainers and trainees who were involved in training on disability were invited to participate in the study, though this analysis predominantly focuses on trainees perspectives and reported behaviour change. All participants were over the age of 18. Trainers were predominantly from government agencies such as the Ghana Health Service; DPO representatives; NGOs; and academia. Many trainers were individuals with disabilities who led the training as lived experience experts, while others were health workers or government representatives who led the training as the health worker counterpart. Any cadre of health worker (qualified or in-training), whose role maps onto the WHO classification of health workers and had been involved in the University of Ghana training about disability in 2017 or 2021 were eligible for the study. These two groups represent key stakeholders for health worker training on disability, which allowed us to understand participants' reported impact and behaviour change.

Purposeful, snowballing, and convenience sampling methods were used to recruit interview participants. Participants were recruited through main ways. First, the lead and senior authors contacted several trainers, DPOs, and health officials involved in training to explain the study and assess eligibility and interest. Second, trainers identified participants in their districts who would be eligible to participate. The lead author conducted phone calls with each participant prior to ensure

they were eligible and set up a time for an interview.

Given the qualitative nature of this research, the sample size was dictated by saturation of data within the high-level themes identified iteratively through interview notes, rather than a target sample size (Mason, 2010). Once no new themes were derived, recruitment for new interviews ended. In total, 32 interviews were completed with 33 participants (including one joint interview) from the Greater Accra, Ashanti, and Northern Regions of Ghana. Nine participants with disabilities (27.3%) were included in the sample (See Table 1).

2.2. Data collection

In February 2023, a series of semi-structured qualitative interviews were conducted by the lead author. These primarily occurred face-to-face, with one interview conducted via WhatsApp audio call. The interview questions covered their perspectives on training, as well as their reported attitudes, behaviour changes, and recommendations for future training. A semi-structured interview guide was designed and used to conduct the interviews, which lasted approximately 20–30 minutes per session. The guide was developed by the lead author, with inputs from the other authors, and focused on two key aspects: first, the participants perspectives on the training they had and second, the changes they would make and advice they would give to others looking to implement health worker training. Interviews were conducted in English language by the lead author, and appropriate accessibility measures, such as providing a sign language interpreter for one participant, were implemented. With participants' consent, interviews were audio recorded transcribed verbatim and cross-checked for accuracy.

2.3. Ethical considerations

The study was approved by the Oxford Tropical Research Ethics Committee (OxTREC Reference: 534–22) at the University of Oxford and the Ghana Health Service Ethics Review Committee (Reference: GHS-ERC 005/12/22). Each participant was given a participant information sheet before the interview began, which was read and discussed before participants consented to take part. All data were stored in encrypted formats on secure devices, in-line with ERC requirements.

Table 1
Participant characteristics.

N	33
Gender, n (%)	
Female	17 (51.)
Male	16 (48.5)
Place of employment, n (%)	
Ghana Health Service	18 (54.5)
DPO	7 (21.2)
Academia	4 (12.1)
Hospital	2 (6.1)
Government	1 (3.0)
NGO	1 (3.0)
Health worker cadre (n = 19), n (%)	
Community Health Nurse	6 (31.5)
Health Volunteer	4 (21.1)
Community Health Officer	2 (10.5)
Midwife	2 (10.5)
Paediatric Nursing Resident	2 (10.5)
Municipal Public Health Nurse	2 (10.5)
District Director	1 (5.3)
Role in training, n (%)	
Trainer	17 (51.5)
Trainee	16 (48.5)
Disability status, n (%)	
Non-disabled	24 (72.7)
Disabled	9 (27.3)

2.4. Data analysis

The overarching question guiding this analysis was, “How have health workers changed their attitudes and behaviour towards disabled people following training?”. The data underwent thematic analysis, following Ziebland and McPherson, as it was developed to analyse data that followed a similar structure to our interviews (i.e., narrative experience and reflection on experiences). (2006) The data were coded in NVivo, a qualitative data analysis software, using an inductive approach. Codes were developed through a combination of ‘in vivo’ (using words directly from the transcript text) coding, from relevant literature, and the researchers’ knowledge of the subject matter. To identify patterns across the codes and generate themes, the data were thoroughly repeatedly reviewed, using a mindmap approach (Ziebland & McPherson, 2006). Throughout the analysis, the lead author was reflective about their personal views, values, and positions, as a white Canadian woman with non-visible disabilities. The final themes were reviewed and refined by two authors (SRy and SZ) to enhance clarity and coherence.

3. Results

The main themes were grouped into individual changes and community and system-level changes.

3.1. Awareness raising to address stigma and human rights

Participants spoke extensively about how the training helped raise their awareness about disabled people. They also remarked (without prompting) that the training increased their understanding of the barriers disabled people faced in accessing healthcare; that disabled people were ‘just like’ them; that disabled people have equal human rights; and that anyone could become disabled at any time. Participants described changes in their attitudes and behaviour towards disabled people thus:

“For me it changed a lot because any time I saw [disabled people] sitting outside, I passed by before ... Before the training, you go on your way. Me too, I will pass. Now, even if they come sitting outside around the facility, the clinic, I ask them: ‘Hi, are you ok? Are you coming to me? What do you need from us?’ just to make them feel free that we are all one.” – Trainee 7, Female, Midwife Officer

Several participants suggested health workers were unaware of what they could do to provide more appropriate care to disabled people:

“When we were doing home visits, even though the disabled persons were part of our home visits, we were not paying serious attention to them. But once we went through the training, we realised that the disabled person even needs more help than the normal [non-disabled] people. So, we need to pay more attention to the disabled persons for them to really know why they need to do some of the things they should do to keep themselves ok.” – Trainee 16, Female, Community Health Nurse

These behaviour changes suggest that increased awareness is an important effect of health worker training. Participants also suggested health workers need to understand how their attitudes and actions might reinforce stereotypes or stigma or be harmful in other ways, such as avoiding harmful language in their practice:

“Up here they will address them by their condition, like a fool or something, but I have been correcting my colleagues; don’t use the condition to address the person. The person has a name ... I was also behaving the same before, but after the training I got to realise that it is not humane to address somebody by a condition or a disability.” – Trainee 9, Female, Midwife

This further suggests that training improved understanding and awareness about poor actions and attitudes and that the impact of these learnings may have reached other health workers as well—not just those

who participated in the training.

3.2. Prioritisation and positive discrimination

This theme dealt with health workers framing of their behaviour changes. In training, health workers learned about the importance of supporting disabled people and how some actions, such as being seen immediately, might support them in accessing health care. However, individual health workers’ description of their interactions demonstrates how the training helped reframe their understanding and treatment of disabled people. For example, several health workers used language suggesting disabled people were “special” in the sense they got specific care:

“I always call my disabled persons the special clients because you can go into a community and see any other person for a routine visit, but for a disabled person, when you are going because we have what we call the special home visit.” – Trainer 11, Female, Community Health Nurse

“The way you treat the disability should be special when they are in the facility. Maybe this person has a disability, so you need to give him that special treatment so that the next time he can come to the hospital. But, when he comes to the hospital, and you treat him [like any other], next time he is sick, he will not come to the hospital. He will just remain in the house which is bad. The health workers are supposed to know this, and how to give special treatment to disabled people.” – Trainee 5, Male, Community Health Volunteer

Some participants said that they had shifted their behaviour to give their disabled patients “positive discrimination”:

“I triage some clients who have certain conditions and give them some positive discrimination sometimes. Sometimes I give them some preferential treatment when they come into the facility, so they don’t waste much time at the facility.” – Trainee 12, Male, Community Health Nurse

These participants showcase how the training reframed their attitudes, allowing them to prioritise disabled people in practice. While some of this behaviour may be seen as ‘othering’ in a different way, some participants highlighted how they held this view in addition to understanding disabled peoples’ autonomy.

“Some disabled people do not need you to help them, and assume [you are offering] because you look down upon them. So, you have to approach the person, if the person is willing for you to help, then you help the person. If the person feels ‘Oh, I do not need your help, I can carry on, and I can be in the queue for that long time’ it’s fine. But we were taught that if we see them, we should attend to them immediately.” – Trainee 7, Female, Midwife Officer

3.3. Healthcare workers can Be empowered to challenge social norms

Furthermore, the analysis suggests that training might empower health workers to challenge social norms and act as advocates for disabled people. Raising awareness of the barriers disabled people face when accessing healthcare has resulted in increased awareness of the need for accessible facilities among health workers. However, participants suggested that this was not the only domain where the training could help healthcare workers to act as leaders on the rights of disabled people in their communities. One of the trainers recounted the following story about a trainee’s impact on the community:

“Right after training, [a health worker] was posted to a community, where she noticed that there were some disabled children in the house. They were supposed to be sent to school, but they had been kept in the house, hidden more or less by their parents because they don’t want the community to see them. When she got to hear this, she visited the parents and then spoke to them about the potentials some of these hidden children

could have, if they were to send them to school. So, some of the health workers are able to convince these parents to bring the kids out and send them to special schools so that they can also receive education.” – Trainer 10, Male, Academic

Another participant spoke about how he had changed his own practice after the training:

“I kept it on myself as a task to kind of enlighten their immediate communities. Sometimes I go for home visits and when I encounter such a client, the first point of contact is persons who are in charge of such a client. I brief them as to what I know is the right way to take care of disabled people.” – Trainee 12, Male, Community Health Nurse

These examples highlight how the training might give health workers the confidence to act and advocate for the rights of disabled people in their communities.

3.4. Disability training should reach the broader community

Participants also highlighted the need to expand disability training to wider society. Discriminatory and negative attitudes were largely due to societal norms towards disabled people. Government officials and other community leaders were singled out as stakeholders who could influence other community members. Some interview participants suggested broader training could facilitate opportunities to have the training ‘rub off’ on health workers, while others noted the challenges involved:

“It is not easy organizing the people from the community ... you have to be patient ... you have to go into the community to talk about it because the communities’ perception about disability is a different thing. If you are able to go there, and talk, and capture and clean off that perception, then your health message will sell.” – Trainer 11, Female, Public Health Nurse

Many interview participants also noted that including disability awareness in the primary and secondary school curricula would further help this goal.

3.5. Accessibility interventions should compliment training

Similarly, participants recognized the limitations of their training and reported frustration they were not always able to implement the learning because of barriers for disabled people they could not address. For example, one participant said she learned about the barriers disabled people experience with healthcare, including physical access to the facility for wheelchair users. While some examples of training were part of an integrated intervention and provided funding to implement accessibility features, this was largely limited to ramps. One nurse said:

“I can’t use our family planning bed for a disabled person unless I assist the person to climb ... it would help if the [accessible] equipment are bought” – Trainee 10, Female, Community Health Nurse

Therefore, participants recognized that implementing the learnings from the training was not only inhibited by the lack of accessible facilities, but also that the training could not address all barriers to health for disabled people. Other participants said that accessibility was one of the next major aspects to address after training, since inaccessibility is a pervasive challenge. Many shared that training was not enough, and more work around accessibility and awareness remains necessary. However, some trainers also reported that they were told health workers had been successful in making these structural changes after their training:

“When they visit the communities, they realize that there are issues of accessibility within the community. They try to talk to opinion leaders in the community so that they can develop interventions, environmental accessibility, and all that.” – Trainer 10, Male, Academic

This suggests training may help empower health workers to be vehicles for the needed structural change at a community level to improve access to health facilities for disabled people.

4. Discussion

This study has shown that health worker training about disability may make a difference in raising awareness, challenging attitudes, and reducing stigma, as well as empowering training participants to be ‘disability champions’ within their communities. These findings align with a recent systematic review which highlighted the effects of disability training in improving health workers’ attitudes and awareness around the barriers disabled people face, as well as the limited qualitative evidence on the behaviour changes after training (Rotenberg et al., 2022). Previous studies in sub-Saharan Africa have focused on either quantitatively evaluating training in Ethiopia (Tilahun et al., 2019) or interviewing health workers to develop a new training in Uganda (Smythe et al., 2024). These examples both show the positive impact of training and the desire for more disability-focused training interventions, yet limited data in the region has hampered progress on this issue. Therefore, this qualitative study adds a broader stakeholder perspective and provides trainee’s perspectives and accounts of how they changed attitudes and behaviour after training. As medical training schools look to enhance their curricula for marginalised groups, these findings demonstrate the importance of including disability training within this to improve health care for disabled people.

These results help demonstrate the positive self-reported changes in self-efficacy and behaviour change health workers experience after receiving disability training. Each theme demonstrated the positive impact and desire for more training, but some, such as the theme 3 on health worker empowerment, demonstrate the wide-reaching potential impact of these interventions. Health workers reported changing how they treated patients—from their attitudes to how they invited them into health facilities, though the endurance of this change is unclear. While some may argue this swings the pendulum from negative discrimination to separate, but not equal, treatment, some health workers emphasized the training made them more aware of this need and how to offer it, rather than providing separate care for disabled people. Moreover, the participants highlighted that disability-inclusion cannot be achieved with disability training alone, as demonstrated most prominently in themes 4 (broader training) and 5 (need for system-level interventions on accessibility). Therefore, shifts in the structural constraints that inhibit full inclusion of disabled people within health systems are needed. These results should spur further action inline with the social model of disability, as it emphasises the need to address structural constraints in addition to attitudes and awareness. Efforts to pair training with other disability-inclusive health interventions, such as accessibility audits for health facilities, are urgently needed (The Missing Billion Initiative & Clinton Health Access Initiative, 2022). Indeed, these findings represent a challenge not just for the health sector, but also education systems, as they mirror the reported impact on teacher training on disability in sub-Saharan Africa. For example, studies in South Africa and Ethiopia found that teachers increased awareness facilitated greater empathy and empowered them to improve their teaching for children with disabilities, but that there remained structural barriers (i.e., lack of inclusive teaching materials, limited training, etc.) that needed to be addressed (Ginja & Chen, 2023; Kelly et al., 2022). Governments must therefore think about disability inclusion as a mainstreamed, cross-sectoral effort, rather than siloed interventions for each sector.

Furthermore, participants suggested there could be benefits to implementing the training in all educational settings. This could support a broader shift in societal attitudes towards disabled people, and perhaps be a tool to empower, enlighten, and engage future health workers in relation to disabled people. Attitudes and awareness can have significant impacts on individuals’ ability to seek care, (Levesque et al.,

2013) and broader training could support disabled people's connection to and use of health services. Given that recent findings have showed no differences in where disabled people seek care for common childhood illnesses compared to non-disabled people, (Rotenberg et al., 2023) these findings also reinforce the idea that a broader training is needed to reach all cadres of health workers and wider society. Research shows there are positive impacts on community attitudes when there is community-focused training on disability and SRH, (Rugoho et al., 2023) reinforcing these findings that training needs to also include other community members. Training is however not a 'silver bullet' to enacting societal change. Even where there is broader awareness and recognition of disabled peoples' rights and efforts to improve accessibility, it may not necessarily translate into better health access or care. For example, in the US, there have been various efforts to include disability in the general education curriculum (Emerging America) and health centres must conform to the Americans with Disabilities Act standards, but this does not appear to have challenged a pervasive, systemic ableism in the health system (Iezzoni et al., 2021; Lagu et al., 2022; Valdez & Swenor, 2023). Indeed, the systematic review found that there were several one-off training interventions, but little systemic interventions to effect change at the scale needed to improve health systems for people with disabilities (Rotenberg et al., 2022). Therefore, training may be necessary but not sufficient to improve disability-inclusion in health systems. Participants' comments emphasized how training should be implemented in concert with other system-level reforms to improve disability-inclusion. This is critical, as health workers desire to change after training could fade, if they continue to face the systemic barriers (i.e., inaccessible facilities) that hamper them from fully implementing their disability training.

4.1. Strengths and limitations

This paper provides novel insights into how participants report the impact of their training on disability issues. It provides insight into how and why health worker 'disability training' may challenge attitudes and stigma against disabled people. However, this study also has several limitations. First, as a small qualitative study in one setting, this study may not be fully representative of the impact of other trainings on disability. Second, as trainers arguably have a vested interest in promoting the expansion of funded training. However, the consensus among participants that more training is needed mitigates against this. Finally, the interviews include health workers' accounts of their attitudes and behaviours which may not fully align with their behaviour in practice. Further research should seek to elucidate the impact of training on disabled peoples' experiences of healthcare, including how disabled people rate their care before and after health worker training (Azizatunnisa et al., 2023).

5. Conclusion

Overall, this paper offers new perspectives on how health workers perceive they have changed since undergoing training on disability. It suggests that health workers report changing on an individual level (i.e., in their actions), as well as understanding the system-level changes that would precipitate further inclusion of disabled people. It suggested that health workers may be empowered to be leaders on disability within their community—a particularly important role when there are pervasive negative societal attitudes towards disabled people. While not an intended outcome of training, this evidence that training can precipitate societal change makes it a powerful tool for improving access to healthcare for disabled people.

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CRedit authorship contribution statement

Sara Rotenberg: Writing – original draft, Resources, Project administration, Methodology, Funding acquisition, Formal analysis, Data curation, Conceptualization. **Sara Ryan:** Writing – review & editing, Supervision. **Sue Ziebland:** Writing – review & editing, Supervision. **John Ganle:** Writing – review & editing, Supervision.

Declaration of competing interest

The authors declare that they have no known competing interests that could have appeared to influence the work reported in this paper.

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