Original Research Article

Barriers to Social Participation of Persons with Mobility Disabilities in the City of Accra, Ghana

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ABSTRACT

Background: In most parts of Africa including Ghana, disability is shrouded in discrimination and marginalization. This may be due to the etiological belief that disability is based on witchcraft or curses. It has been observed that in these countries, there is the lack of focus on ensuring that systems and structures are designed to accommodate individuals with disabilities, particularly those with mobility disabilities.

Aim: This paper explores the impact of physical and transportation access barriers on the social participation of individuals with mobility disabilities in Accra.

Method: Using the photo voice methodology, the researchers engaged 10 participants with mobility disabilities. The participants were trained in photography, provided with cameras, and encouraged to capture scenes about the built environment and transportation access challenges they faced regularly.

Results: The data (pictures) were analyzed with the participants' involvement and shed light on accessibility challenges faced by individuals with mobility disabilities and the impact on movement, security, safety, and social interactions at the mezzo and macro levels.

Conclusion and Implication: The policy of inclusivity is emphasized in ensuring that the needs of PWDs are taken into consideration to foster their rights as outlined in the Convention on the Rights of Persons with Disabilities and the achievement of the Sustainable Development Goals.

Keywords: Ghana, Disability, Photo-voice, Sustainable Development Goals, Discrimination, Marginalization, Inclusivity, Global South

BACKGROUND OF THE PROBLEM

Over the past decade, disability-based research has experienced a steady rise in the Global South, and Ghana is no exception. From 2009 to 2020, disability-based research in Ghana has more than tripled. Persons with disabilities (PWDs) in Ghana are finally able to share their experiences and influence stakeholders to initiate change through participatory action research. Much of this research highlights issues of accessibility, stigma and

discrimination, and poverty for PWDs. A primary issue of accessibility has been raised and legitimized through participatory action research. Through learning about the front-line issues of accessibility from PWDs, it has become apparent that Ghana's Disability Act (2006) has failed to protect the mobility rights of PWDs. According to the literature, general issues of accessibility include: 1) public toilets, 2) public transportation, and 3) public buildings (den Besten et al., 2016; Naami, 2019; Tijm et al., 2011). Ghana's Disability Act (2006) included a ten-year time frame for all public buildings to be reconfigured so that unrestricted access for PWDs would be available (Ocran, 2018).

Though there is ample research examining physical disability in the global south, more needs to be done (den Besten et al., 2016; Mfoafo-M'Carthy et al., 2020; Naami, 2019; Tijm et al., 2011). Persons with disabilities find themselves disenfranchised from society due to the inability to partake in activities of daily living and contribute to society. This is because of the lack of physical structures capable of accommodating individuals with physical disabilities. The absence of accessible physical structures makes it almost impossible for persons with mobility disabilities (PWMDs) to have a sense of belonging. Physical structures like wheelchair accessible buildings in public spaces like schools, banks, and government offices would ease the challenges of PWMDs in accessing such buildings without depending on others for assistance (Naami, 2022).

Also, public transportation services tend not to be equipped to make it necessary for PWMDs to have easy access. As a result, the majority of PWMDs rely on private services to move from one place to another (Naami, 2020, 2022). To eliminate participation barriers of individuals with disabilities in physical spaces, it is incumbent upon the creation of an environment, including public spaces that embrace PWMDs.

In Ghana, PWMDs reported experiencing a lack of accessibility to health care (Abrokwah et al., 2020; den Besten et al., 2016), as well as family members of PWMDs reported experiencing a lack of support in learning how to care for their family members (Opoku et al., 2020). Opoku et al. (2018) state that the lack of a formal social system in Ghana is likely the reason that families are alone in navigating a system built upon pre-existing barriers.

Disability-based research that examines relationships in a multi-layered approach would be beneficial. Examples of relationships include affiliations in one's immediate family; relationships with public systems (i.e., healthcare, education, work, and government); and relationships with society (popular culture and local rhetoric). Conducting disability-based research on a deeper level requires attention to the multi-layered identities and relationships that PWMDs encompass. In this paper, the authors used photo-voice methodology to examine the built environment and transportation challenges faced by persons with mobility disabilities and how these barriers affect their social participation.

METHODS

Study Design

We employed qualitative research design, specifically photo-voice methodology. The photo-voice approach was chosen because it is participatory, empowering, and gives a voice to the chosen population, who traditionally have little voice in policy and practice decisions (Wang & Burris, 1997). The methodology (Wang & Burris, 1994) was used to enable participants to tell their stories about access barriers they encountered daily. This enabled us to have a greater understanding of the issue under investigation (Nowell et al., 2006; Palibroda et al., 2009; Wang, 2006).

Participants

We collaborated with three organizations and, using purposive sampling, selected 10 participants. These organisations are (1) Ghana Society of the Physically Disabled, an association of persons with physical disabilities-Accra central chapter; (2) the Ghana Disability Forum, an umbrella organization of all persons with different forms of disabilities, individuals as well as organizations which have interest in advocating for disability rights; and (3) the Centre for the Employment of Persons with Disabilities, an organization that seeks to advance the employment of persons with all forms of disabilities. These organisations were selected because they work with persons with mobility disabilities. We were given a list of names of eligible participants whom we contacted for participation. Only those who volunteered to participate in the study were selected. The sample size allowed for in-depth discussion and analysis of data (Palibroda et al., 2009).

The ages of participants ranged from 26 to 47 years, SD 7.6 years. The mean age was 36.5 years. Four of the participants used wheelchairs, four used pairs of crutches, and one had a below-knee artificial leg. All the participants lived in the Accra Metropolis. Out of the 10 persons recruited, four were females and six were males. Two of the female participants had no formal education. Four participants (two males and two females) had basic education; one male participant had Senior Secondary School education; one female participant had a diploma, and two male participants were studying towards a Higher National diploma and a Bachelor of Arts degree. At the time of the study, two of the participants were students; four were self-employed; two worked for the government, and one was a Paralympic coach and advocate.

The study was given ethical approval by the Ethics Committee of the College of Humanities at the University of Ghana (ECH 027/17-18). Consent was sought from all the participants before the start of the first workshop. We read out the consent form to six participants who had less than or no education and took their thumbprints after they agreed to participate in the study. Four other participants read the consent forms and consented to the study by signing the consent forms. The data collected was kept on a password-protected computer, to which only we had access. The research was minimal risk, and no participant showed signs of distress during the study period. However, a list of resources was compiled before the study for any eventuality.

Table 1: Demographic information of participants

Demographic features		Male	Female
Gender		6	4
Educational status	No Formal education	0	2
	Basic Education	2	2
	Secondary Education	1	0
	Diploma	0	1
	Tertiary	2	0
Mobility aid used	Wheelchair	3	1
	Crutches	2	2
	Prosthesis for a below-knee amputee	0	1
Others	Participants who had a hunchback	1	0

Data Collection and Analysis

Two half-day workshops were conducted. During the first workshop, we trained participants in basic photography, ethics, photo captioning, narration, and analysis of the

content of the photos. We then gave them Sony digital cameras after they agreed to participate in the study. We then asked the participants to take pictures of anything/place that posed a challenge to their participation in society, indicate meanings and messages attached to those photos, as well as captions. The data collection lasted two months.

The second workshop was for data analysis. We grouped the participants in threes to discuss their pictures and narratives. The content and context of their photographs were discussed in smaller groups as well as the meanings and messages attached to the pictures, which were then related to their collective experiences; messages they wanted to communicate to the public through their pictures (Palibroda, et al., 2009; Nowell, Berkowitz, Deacon, & Foster-Fishman, 2006; Palibroda et al., 2009; Wang, 2006). We used the SHOWED framework in the analysis (Wang, 1999). 'SHOWeD:'What do you see here? What is really happening here? How does this relate to our lives? Why does this strength or problem/ concern exist? What can we do about it? There was a plenary group discussion where issues and recommendations arising from the group discussions were codified into themes. We later rearranged the themes developed from this section based on the contextual analysis and the participants' narrations.

RESULTS

The study revealed that environmental barriers, defined in this study as physical and transportation barriers, affect the social participation of persons with mobility disabilities in the Accra metropolis. The themes that emerged are discussed under movement, security and safety, parenting, participation in church activities and life events, "present but absent", and reliance on others. It is noteworthy that some of the pictures in this paper have been published in other works of the first author and would be referenced accordingly.

Movement

The main challenge to participation for PWMDs in this study was restriction in their movement due to transport and physical barriers. Starting from their homes through pathways to bus stops, entrances, and inside of buses, as well as entrances and inside of individual rooms in buildings, were all not accessible. Rocky, sandy, and muddy pathways (see Figure 1) from their homes cumulated in inaccessible bus stops, and entrances of buses (see Figure 2; Naami, 2022) and buildings (see Figure 3).

Figure 1: Inaccessible Pathway

Figure 2: Inaccessible Transit Bus

A great deal of time and effort was expended to access their environment, which was not accessible, sometimes tiring, and necessitated several stops to their destinations, and most times affected their physical health.

A male participant, who uses crutches, shared his experiences using crutches to climb steps and stairways.

> *You can imagine me on my crutches going to the fourth floor. In fact, I spent a lot of time climbing the stairs. I even fell at a point during the journey, between the third and fourth floors. Everyone around me felt so bad, and so did I. Due to the many stairs that we had to climb to get to the fourth floor, by the time we got to the place for the meeting, I was so exhausted. I had to ask the others for some time to recover from my tiredness before the meeting. I sat down and rested for about 30 minutes before we could start the meeting. When we were having the meeting, in fact, my mind wasn't on the meeting. You can guess what I was thinking about. I was thinking about how I would make my way back through the four floors to the ground floor.* (Participant 1, male, uses crutches).

Figure 3: Lecture Halls

Security and Safety

As participants struggled with access barriers regularly, there was concern for their security and safety. Several forms of insecurity were identified in this study, arising from diverse perspectives, including the lack of and crowded sidewalks, using major roads, short-programmed traffic lights, open drainage, and falls and injuries. All of these affected the effective participation of PWMDs in society.

Lack of Crowded Sidewalks

The study showed that sidewalks were rare in the places that the participants frequented. The few that existed were either not thorough, had no curb cuts, and/or were

crowded with obstacles such as trees, poles, or were broken or had holes that rendered them unusable and unsafe, and restricted participation. See an example in Figure 4.

Figure 4: Sidewalk inhibited with potholes and poles

A female participant who uses crutches narrated her ordeal using inaccessible sidewalks.

> *I always heave a sigh of relief anytime I see a sidewalk because it means that I can get off the major road to reduce the risk associated with walking on it. However, from my experience, there are very few sidewalks, and the few that exist are not accessible due to the obstacles found on them, as seen in this picture. This makes it difficult for me to use sidewalks because it becomes difficult to get off when there are obstacles. I am compelled to risk my life on the major roads, and that is unfair. I am also a human being, and my life matters.* (Participant 2, female, uses crutches).

Use of Major Roads

The lack of, and crowded sidewalks (see Figure 4), forced participants to use major roads/streets regardless of their safety concerns. Three sources of fear were identified in using major roads: (1) The fear of falling into open gutters, which are very common in Ghana (see Figure 5; Naami, 2019), (2) running into reckless drivers and motor bicycle riders, and (3) unmotorable roads resulting from sand and garbage from open gutters that were not distilled.

Figure 5: Open Gutter

Short programmed time for Traffic Lights

The timing for pedestrian crossing at traffic lights seemed too short to cross the dual-carriage roads, amidst impatient pedestrians and their loads. The other aspect of insecurity arising from traffic lights, which affected both wheelchair and crutches users, regards impatient drivers who did not yield to pedestrians when the lights turned green.

> *The road is double, and I believe the time programmed for pedestrians to cross the road is not enough to allow a person with a disability to cross the road in the midst of other busy pedestrians, including those carrying loads. Sometimes, when I get to the middle of the road, I have to stop and give way to vehicular traffic because the light turns green for vehicles to move, and the impatient drivers would not wait even for a second for me to finish crossing.* (Participant 3, male, uses crutches).

Falls and Injuries

Falls were a safety concern and resulted from inaccessible environments such as steps, stairways, steep/narrow ramps, smooth tiles mixed with splashes of water or raindrops, as well as inaccessible buses and *trotros (public transport)*. The risk of falls experienced by individuals who used wheelchairs resulted from the help they received from people who, most time, were not knowledgeable about helping individuals who use wheelchairs. Participants claimed that some of the falls resulted in injuries.

> *I use this pathway regularly from my house to the main streets to continue my journey to wherever I choose to go. It is rough and rocky and difficult for me to use. The nature of the pathway obstructs my movement and sometimes makes me fall. I have fallen not once or twice, but countless times. When it happens like that, I look at my surroundings to see if anyone is looking at me. It is shameful when that happens. One day, the fall resulted in an injury. I went straight home, cleaned the wound, and took care of myself. I couldn't complain to anyone. At that moment, I felt bad that even the road that I could use was rough. To me, it means everything around me is not working* (Participant 4, female, uses an artificial leg).

Parenting

Barriers affected parenting roles that participants could otherwise have played without much difficulty if the environment were accessible. The study participants endeavoured to play their parental roles as prescribed by society, sometimes overcompensating for their disabilities because they did not want to be seen as "asexual" or "weak." However, most times, barriers hindered or interrupted their successful completion of these roles. Parenting roles regarding buying for and participating in their children's school activities were identified in this study.

In his attempt to purchase a school uniform for his daughter, Participant 5 narrated his ordeal of getting stuck in the middle of the road as given below:

> *This is a huge gutter in the middle of the road in the heart of Makola, the biggest shopping area in Accra, the capital city of Ghana. When I got to the gutter, people around me saw the shock on my face because I didn't expect that there would be such a big gutter in the middle of the road. There was an old lady there, so I begged her to go and buy the uniform for me. I didn't want to go back home without it. Why should I send that old lady who is my mother's age? Should it be like this in our society?* (Participant 5, male, uses a wheelchair).

An inaccessible built environment resulted in limited interactions (such as checking their children's academic progress) of parents with disabilities and irregular attendance at Parent Teacher Association meetings. Two parents with disabilities commented on their experiences below:

> *I am also a parent, but I cannot track my daughter's academic progress like everyone else due to the inaccessible nature of the school environment. One day, I went to see the headmaster of*

> *the school about an issue concerning my daughter's education. When I arrived at the office entrance, I realised I couldn't go inside, and I asked myself, "Eeeiii, how can I climb?" I stood in front of his office and called him. And when he came out, I told him that I couldn't enter his office, and he said, "Sorry, sorry, sorry". We stood outside and spoke.* (Participant 6, female, uses crutches).

> *This is the primary school where my daughter goes. This school is designed for able-bodied people. I always need help to get into the school anytime I go there in connection with my daughter's education. I think going there is a punishment for parents with disabilities.* (Participant 9, male, uses a wheelchair).

In other instances, the parents with mobility disabilities could not leave their homes, regardless of their strong desire to play their roles. Instances were when it rained, mirroring the adage "The spirit is willing, but the flesh is weak." However, their children seem to understand their challenges and cooperate with them, as stated by Participant 6 below:

> *Anytime it rains, I am afraid to come out of my room because I am scared that I might fall. I have to beg people to take my daughter to school, but sometimes she insists that I go with her. I have to plead with my daughter to understand that Mummy cannot take her to school on that day because Mummy may fall. One thing about my daughter is that she hates to see me fall. I explained to her that I might fall due to the rain, and when that happens, people will stare at me, and that is why someone else must take her to school.* (Participant 6, female, uses crutches).

Participation in Church Activities and Life Events

Participation in Church Activities

The Church presented limited opportunities for participation by PWMDs. Inaccessible entrances and restricted movement within church premises affected the participation and interactions of PWMDs. Participants reported that they could not even use their God-given talents to benefit the church and to develop useful social networks, such as joining church groups, e.g., the choir, for their spiritual growth and well-being.

An example is Figure 6, Participant 6 narrated her experience of untapped talents below:

> *The staircase that leads to where the choristers sit at my church…is not accessible. I have always wanted to join the choir in my church, but the staircase prevents me from doing that…I am unable to use my talent to worship and praise God. I sometimes feel I can and even do more than what the choristers do, but then the stairway is preventing me from doing so. It makes me feel more concerned about my disability, in that, even in the house of God, I am unable to exhibit my talent*. (Participant 6, female, uses crutches).

Figure 6: Inside a Church Building: Choristers' Seating Area

In another scenario, a mother narrated how she was prevented from interacting with other mothers in the church due to access barriers. The Church had a seating area where all mothers sit and interact with one another, interactions that could be helpful for parents. Participant 6 narrated the effects of this isolation on her life below:

> *The steps and floor leading to the mothers' seating area in the church are very smooth, but that is the shortest entrance to the area. I tried using the accessible entrance, which is in the main church, and I encountered other accessibility issues; not only is it a longer route, but the inside of the auditorium is made of smooth tiles. So, when I put my crutches down, I have to hold firmly to the wall before I can enter the church auditorium. The mothers' seating area, from the main auditorium, ends up with steps too. Every mother sits there, and if I do not, it seems I am not part of them. I am a mother too, and this situation makes me feel that I am not part of them. I am very unhappy; I feel very bad. This is a church I attend, and I have reported this issue, but they have not done anything about it*. (Participant 6, female, uses crutches).

Participation in Life Events: "Dwene Woho" [Mind your business]

In Ghana, events such as marriages, baby naming ceremonies, and funerals are occasions for socialisation because families and friends gather to honour their loved ones. The study found that barriers not only challenged PWMDs to organise their own events but also prevented them from effectively participating in other events.

For instance, one of the participants narrated his ordeal in an attempt to buy the list of items prescribed by the would-be bride's family, a usual practice in Ghana. The would-be groom would get a list of items from the would-be bride's family, which he would present to formalise the traditional marriage. In his narration captioned "You think I cannot marry?", Participant 5 gives a vivid example of how barriers could limit PWMDs from preparing and organising their marriage events.

> *They pretended to have fixed ramps, but the ramps were filled with air conditioners. I went there because I wanted to check on rings as my marriage was approaching. When I got there, I couldn't enter because the air conditioning had taken over the ramps. So, I called one of the workers from where I was standing, but he didn't want to come. I kept bugging him, so he finally came, and I told him, "See what you have done here!". I showed him the air conditioners and how they were hindering my movement. "I cannot enter this place. Why do you think I can't marry?" I told him to call his boss for me, and he said, "My boss won't come", and I still asked him to go and call his boss. He went, but the boss didn't come because he said he was busy. With this kind of behaviour and environment, how do we get married? The preparation*

would be delayed, and the other family would say it is because you are disabled. Otherwise, you would have to send someone to get the items for you, and you may not get exactly what you want. (Participant 5, male, uses a wheelchair).

Figure 7: Inside of a Church Building

Another instance of restricted participation and interactions at life events happened during the funeral services. Arrangement of chairs, musical instruments, and accompanying wires, which were usually exposed everywhere, limited movement for PWMDs as in Figure 7 (Naami, 2019).

Participant 6 described the difficulty of moving to the podium to read a tribute for the departed member.

We went to a Church in Adabraka for the funeral of one of our members (Ghana Society of the Physically Disabled). There were open wires everywhere on the podium. On top of the open wires was a huge step. You could see how our members who read our tribute struggled through the wires and the steps to get to the pulpit to read our tribute. I felt heartbroken about the degree of insensitivity to disability issues in this country. (Participant 6, female, uses crutches).

In other instances, PWMDs were physically present at certain events and took part in some aspects of programmes, but were restricted from taking part in others. Examples are wedding receptions held in different locations from the actual ceremonies. Some participants reported that they were compelled to either eat their food downstairs or return home with or without refreshments.

This is a place where wedding receptions are held. I went there for a friend's wedding reception, and the stairway leading to the reception was inaccessible. When the event planners saw that I couldn't go upstairs and wanted to go home, they asked me to wait so that they could bring me food. But, I didn't wait for them; I felt rejected at the place, so I left without the food. (Participant 9, male, uses a wheelchair).

The final restricted interaction at events was constructed as "Dwene woho" in the Akan Ghanaian Language, which means mind your business. Going to events that were even accessible was against societal norms, as society perceives persons with disabilities as "weak" and "sick" people whose place should be the home. Thus, efforts to attend inaccessible social and recreational events were questionable, as noted by Participant 3.

There is also some sort of perception that a person with a disability should stay home. "Why would they bother themselves to attend such events?" (Participant 3, male, uses crutches).

"Present but Absent"

Participants were physically present in several business environments, including food vending, phone selling, computer repairs, internet cafés, and malls; places that could have served as platforms to connect buyers and sellers to foster informed decisions about products and probably boost sales. However, the inaccessible environment prevented this benefit. See examples from the narratives below:

> *This is a place where food is sold. I sometimes buy food from there after church. I usually stay in the vehicle and ask someone to buy the food for me. At times, I want to go there myself and interact with the food vendor and other buyers, and also see what exactly she sells so that I can make an informed choice. I am very friendly and would like to talk to everybody I meet, but it has become impossible for me.* (Participant 9, male, uses a wheelchair).

> *This is where I go when I have issues with my laptop. Whenever I visit the shop, people have to hold my hands and help me climb the stairs to the shop. At times, they have to take the laptop from me and ask me to wait downstairs. This means I cannot communicate with the repairer personally*. (Participant 10, male, walking with difficulty).

Also, the participants stated that they could not directly interact with public officials due to access barriers. They complained that duty bearers did not make any efforts to reach out to them, but used intermediaries, which increased bureaucracy and delayed processes. A situation that Participant 4 claimed was frustrating, as narrated in the example below.

> *This is the Ministry of Gender, Children, and Social Protection. It annoys me that the ministry that is supposed to be in charge of disability issues is not accessible. How can a person with physical disability and in a wheelchair like me see this minister with this kind of structure? How can I be a part of you if I have to struggle to climb stairs to see you? There was a time when I got sports equipment shipped to me from abroad. I needed to go to this ministry to get permission to clear the goods free of charge. It took me forever to get the clearance because I couldn't go up there to see those in charge. Even the Department of Social Welfare…The department responsible for the welfare of persons with disabilities is not accessible…I am unemployed because I am tired of going there to find people in order to talk to them. When I stay downstairs and ask for them, I am always told they are not around, but how can I challenge that when I am prevented from seeing and knowing what is actually happening up there? (*Participant 4, male, uses a wheelchair).

Relying on Others

Persons with mobility disabilities depended on others to complete tasks such as boarding and getting off of vehicles, entering buildings, buying things, getting potable water, and other little things they believed they could do on their own, such as buying food from vendors on the roadside. Their lives practically revolved around others. Nonetheless, help did not always come on time. Participant 8 stated how sometimes he waited for several minutes before getting help and how he felt more dependent and excluded (see the photo in Figure 8 by Participant 8).

> *But when I got to the entrance of the hall, I realized that it wasn't accessible, and I was going to deal with it for 4 years; the joy that I had all vanished. I was filled with sorrow. ...Coming in and out of the hall with a wheelchair has been a huge challenge for me all these years. I can't*

do it on my own. I always have to wait for people to get me in and out of the hall to go to lectures and to the library. So any time I want to go out, if my friends are not around, I just have to hope and pray that someone will meet me at the entrance and help me. I feel excluded, dependent, and like a burden on others. I feel trapped since someone has to help me before I can go in and out of the hall. So I don't consider extracurricular and other educational activities. They are not a luxury for me. (Participant 8, male, uses a wheelchair).

Figure 8: Entrance of a Hall of Residence

DISCUSSION

The study suggests that, although impairment of PWMDs could sometimes restrict their movement, the major impediment to their participation in mainstream society is "man-made", which is referred to as physical and transportation barriers. They navigate inaccessible environments from their homes to bus stops and inaccessible buses that necessitate that PWMDs crawl and/or be helped to board. Additionally, a great deal of time and effort was spent in transit and navigating the inaccessible environment.

The restricted environment was also a source of concern for the security and safety of PWMDs because it caused falls and injuries. They also affected time spent in transit because of the usage of longer routes, spending more time accessing barriers, and/or spending more time waiting for help to board buses. The findings also revealed that PWMDs got tired and/or experienced excruciating bodily pain at the end of their trips due to the insurmountable barriers they navigated. Although private transport services such as Uber and Taxis are expensive, it was a necessity for PWMDs to avoid being late for programmes and/or to minimise the inconveniences that accompanied excessive time spent accessing inaccessible environments, which further affect their meagre and irregular income and increase their economic vulnerability (Naami, 2015; WHO, 2011; United Nations, 2013).

Persons with disabilities are regarded as asexual and individuals who cannot perform societal roles (MacInnes, 2011; Mehotra, 2004) and which affects their marital endeavours. This study revealed that access barriers affected formalising intimate relationships as well as performing gender roles. It is noteworthy that, contrary to other studies (Mahotra, 2004), which cite the impairment of persons with disabilities as barriers to performing gender roles, this study cites access barriers.

Parents with disabilities encountered challenges performing their roles, such as taking their children to school, buying necessities for them, and attending PTA meetings. The study, therefore, suggests that access barriers reinforce negative perceptions about the capabilities of persons with disabilities to develop and maintain intimate relationships as well as perform their parental roles.

International and local legislations emphasise a barrier-free environment for the inclusion of persons with disabilities in their communities and cities. For example, Article

19 (c) of the Convention on the Rights of Persons with Disabilities requires states to ensure, "*Community services and facilities for the general population are available on an equal basis to persons with disabilities and are responsive to their needs.*" Goal 11 of the Sustainable Development Goals (SDGs) mandates states to: "Make cities and human settlements inclusive, safe, resilient and sustainable." Further, the Persons with Disability Act 715, Sections 6 and 7 also reiterate access to public services and buildings for persons with disabilities. However, the study found that several environments, including schools, government offices, shops, and events, were not accessible for PWMDs. In addition, Churches and other religious activities were also not accessible.

Ghana, being a religious country, one would have thought that efforts would be put in place to ensure that everyone participates in such activities. However, the study demonstrates that restrictions placed on the entrances and inside of Church premises hinder freedom of worship and most likely affect the spiritual growth of PWWDs, which validates other studies indicating the lack of opportunities for the spiritual growth of persons with disabilities (Hurst, 2007). Furthermore, meaningful social interactions that could boost social networks and strengthen social capital were affected by environmental barriers.

Nonetheless, the study indicates that PWMDs were resilient. Some defied the odds of restricted environment and inaccessible transport systems, which sometimes resulted in falls and injuries, longer times spent in transit, fatigue, and excruciating bodily pain, in addition to negative societal attitudes to participate and/or organise events. One attitudinal issue that stood out in this study is the "Dwene woho" concept, which means mind your business, drawn from the perception that PWDs are "weak", "sick", and "pitiable" and should be catered for (Naami, 2014; Slikker, 2009). Thus, going to events that were even accessible was questionable, let alone events that were inaccessible.

Study Limitations

Low literacy among the target population was a challenge for the data collection. During the data collection, the researchers had a one-on-one meeting with the participants to back up data to prevent data loss. During these visits, we realized that most of the participants could not journal their experiences, which hampered photo taking. Out of the ten participants, only two could write out their narratives. An additional two wrote a few narratives. However, we suggested audio-recording to the participants who could not write their narratives, and they agreed. They chose the times and places convenient for downloading their pictures and audio recording their narratives. The audio-recorded data were transcribed, and the participants validated their stories. Member checking is important to ensure the trustworthiness of a study (Lincoln & Guba, 1985).

CONCLUSION AND RECOMMENDATIONS

Persons with mobility disabilities in Ghana have limited access to social participation due to restricted mobility. Although their impairment could sometimes restrict their movement, the study concludes that the major impediment to the social participation of PWMDs in mainstream society is "man-made," which is referred to as physical and transportation barriers created by society. The barriers not only affect travel time and efforts, but also security, safety, and health, economic, and interactions of PWMDs at all levels in society. It is also noted that stigma associated with disability plays a significant role, at all levels, in the neglect of PWMDs, but they have proved to be resilient amid neglect, as some defied odds of restricted environment and inaccessible transport systems, as well as negative attitudes, to make ends meet. The environment must be free from barriers to effectively include persons with disabilities and to enable them to freely participate in their communities sustainably, as suggested in Goal 11 of the SDGs: "Make cities and human settlements inclusive, safe, resilient and sustainable." The authors therefore recommend that the government be held accountable to cater to the needs of PWMDs. This will

include advocacy and working with organisations of persons with disabilities, civic society, and other community organisations to ensure that transportation, roads, and physical spaces, specifically, government structures, are equipped to accommodate PWMDs.

We also conclude that photo voice is necessary for Global South research with persons with disabilities, who are more marginalized, oppressed, and over-represented among the poor. This is because photo voice promotes the active involvement of participants, thereby empowering them. For example, although many of our study participants did not have higher education, through photos, they were able to express their experiences about the barriers they faced. Through taking and self-expression of photos, the study fostered the self-esteem of the participants, as well as developed their team-playing abilities through group discussions at the analysis stage. The project also enhanced the creative skills of participants, which were exhibited in the kinds of pictures they took, the captions, and narrations.

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