CANADIAN JOURNAL OF
Disability Studies
Published by the Canadian Disability Studies Association · Association Canadienne des Études sur l'Incapacité

Canadian Journal of Disability Studies

Published by the Canadian Disability Studies Association

Association Canadienne des Études sur l'Incapacité

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Access Barriers to Health Care among People with Disabilities in the Kumasi Metropolis of Ghana

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Abstract

Health care is a human right yet access barriers to health care remain one of the major challenges among people with disabilities. One of the several reasons accounting for this is that there is little evidence on access barriers to healthcare among people with disabilities. This partly explains the gaps in policy design and implementation of appropriate interventions for people with disabilities. This study aimed at contributing to filling the evidence gaps on access barriers to healthcare among people with disabilities in the Kumasi Metropolis in Ghana. The study found different access barriers among different disability types and socio-demographic groups. Redesigning and resourcing health facilities to be more people with disabilities' friendly could improve mitigate these barriers.

Keywords

Access; People with disabilities; Health care; Urban

Acknowledgments

The authors wish to thank the Committee on Human Research, Publications and Ethics, Kwame Nkrumah University of Science and Technology (KNUST), for approving the study protocol prior to its implementation. They are grateful to all the study participants for their support during the data collection. The authors again wish to thank Michael Palmer for his assistance in reviewing this article.

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Introduction

The importance of having access to quality healthcare is manifold. First, it can reduce the social and economic burden associated with health problems, such as possible loss of income (Angus et al., 2012). Life expectancy is likely to improve as individuals experience quality and accessible healthcare (Mugilwa et al., 2005, Marmot et al., 2008). Access to healthcare is argued as a human right and is identified in many human rights instruments including the Convention on the Rights of Persons with Disabilities (CRPD) which states in Article 25 that "People with disabilities have the right to the enjoyment of the highest attainable standard of health without discrimination on the basis of disabilities" (United Nations, 2006). This right is further supported by the Sustainable Development Goals (SDGs) where universal access to healthcare has become paramount to ensure inclusive development.

Worldwide, access to healthcare among people with disabilities seems to differ across countries and communities. People with disabilities lag behind other citizens in accessing healthcare (Rimmer et al., 2004). They face access barriers to healthcare particularly in low-middle income countries and widen the access gap between themselves and their counterparts

in the developed world (An Action on Disability and Development (ADD), 2005). For instance, the world report on disability estimates that 5.8% of people with disabilities around the world do not get care when needed compare with 3.9% of non-disabled population. In low and middle income countries, the rate increased to 6.4% compared with 3.9% in the developed countries (World Health Organization, 2011).

Factors that limit people with disabilities' access to healthcare range from physical proximity in terms of transportation to health services and the physical structure of the health facility (World Health Organization, 2013, Peters et al., 2008). Drainoni et al. (2006) stated that people with disabilities experience multiple barriers to obtaining healthcare, and that these barriers seem to be more profound for some types of healthcare than others. The access barriers include lack of adaptive equipment and inaccessible environments for patients with disabilities, professionals' inability to have time for patients with speech and hearing difficulties, limitations in insurance coverage on certain health services and professionals having limited information on where to refer patients with disabilities for specialized healthcare. Also, patients with disabilities mostly have difficulty in moving on and off medical equipment (Story et al., 2009, Kroll et al., 2006, Shah and Robinson, 2007). Additionally, Drainoni et al. (2006) further makes strong assertion that although people with disabilities may receive healthcare to some extent, their satisfaction with the care is low due to delays and frustration. For instance, Thew et al. (2012) and Iezzoni et al. (2004) found that deaf patients experience "fear, mistrust and frustration" in healthcare settings when they experience problems with instructions for physical examination, telephone communication, and difficulty communicating with staff. This is likely to result in incorrect diagnosis and improper treatment.

Notwithstanding this, there exists limited information on access barriers to health care among persons with disabilities in low and middle income countries in particular. This study

seeks to provide empirical evidence on access barriers to healthcare among people with disabilities in the Kumasi Metropolis of Ghana, a lower-middle income country in West Africa. The experience of persons with disabilities in using health care reported in this study aim to inform policy in Ghana and in resource constrained settings more generally.

Disability and health care utilisation in Ghana

Ghana as a country has limited provisions for the healthcare of people with disabilities despite recognition in the Disability Act 2006 to ensure access to effective healthcare and adequate medical rehabilitation service (Mensah et al., 2008). The barriers span from health financing, structural and physical environment. Health facilities do not provide disability friendly services (Mensah et al., 2008) making it difficult for most clients, especially wheelchair users, to access hospital buildings and climb onto medical examination beds. For instance, the accessibility audit data from some district including Ajumako-Enyan-Essiam, Sekondi-Takoradi, New Juabeng, Ho, Wa, Ashaiman and East Gonja found that 76.6% of medical centres do not have policies that specifically cover access to medical facilities for people with disabilities. The report further suggests that 57.4% of health facilities do not have accessible structures and environments for wheelchair users (Institute for Democratic Governance, 2011). Just as physical structures and equipment are inaccessible, there are no provisions for sign language in most facilities to respond to the needs of deaf patients (Mensah et al., 2008). This is likely to result in misinterpretation of sign language by doctors with no knowledge in signing.

Furthermore, it is estimated that less than 5% of people with disabilities in Ghana have access to formal rehabilitation due to limited services, ignorance, and negative traditional beliefs and practices (United Nations, 2011). The Orthopaedic Training centre at Nsawam seems to be the only rehabilitation unit that respond to patients with physical

rehabilitation throughout Ghana. Understandably, people with disabilities may seek care from health facilities other than the rehabilitation and inpatients units, yet, they are underrepresented in the health system (Inclusion Ghana, 2011, Danso et al., 2011, Owusu and Owusu-Ansah, 2011, GSS, 2012, Ghana Federation of the Disabled, 2013).

Methods

Study Setting and Design

A cross-sectional design with quantitative data collection method was conducted with people with disabilities in the Kumasi Metropolis. The Kumasi metropolis is located in the forest zone and covers a total land area of 254 square kilometres (25,415 hectares). The metropolis accommodates resident population of 2 million people as at 2010 with an inter-censual growth rate of 5.4%. Kumasi metropolis is endowed with 189 health facilities ranging from teaching hospital to clinics. Of these, 91 percent are managed by private individuals. Doctor – Patient and Nurse – Patient ratio in the city are 1:41,606 and 1:7,866 respectively. About 81% of the population have registered under National Health Insurance Scheme (NHIS). This arguably makes healthcare affordable in the metropolis. Over 60 percent of OPD attendants are malaria cases, making it a dominant treated disease in all the health facilities in the metropolis. However, it was surprising that there is no available data on the total number of people with disabilities who benefit from healthcare through the NHIS each year. Furthermore, the 2010 population census report showed that the metropolis is divided into 10 sub-metros namely; Asokwa, Asewase, Bantama, Suame, Manhyia, Oforikrom, Tafo, Nhyiaeso, Subin and Kwadaso. The study was conducted in five clusters around these sub-metros.

Sample Size and Sampling

The study assumed the prevalence of disability to be 2.6%. based on the Ghana Statistical Service (GSS) census report in the study area. The sample size was then calculated based on this proportion of the population with significance level of 5%, allowing 0.03 degree of freedom, 10% non-response rate and design effect of 2. The sample size was then estimated at 255 People with disabilities using Cochran's sample size formula[1] (Cochran, 2007, Naing et al., 2006).

The study used a multi-stage sampling to randomly select communities in the Kumasi Metropolis. Five out of ten clusters based on definition of sub-metro were selected: Oforikrom, Subin, Asawase, Tafo and Asokwa. In each of the selected communities, simple random sampling was used to select people with disabilities (physically challenged, hearing and visual impaired). The research team zoned households and streets in selected communities and all people with disabilities were approached and then made to pick from box with papers written on them "Yes" and "No". All people with disabilities who picked "Yes" in all the clusters and consented were enrolled. This was repeated until the required sample size was achieved. In all, Fifty-one (51) People with disabilities were selected from each cluster to get a total sample of two hundred and fifty-five (255) respondents.

Data Collection

The researchers used structured questionnaires to collect information from respondents. The questionnaire was developed in English but was administered in the respondents' preferred dialect; English, Sign language or Asante Twi. A professional interpreter volunteered to assist in the study. The data was collected over a period of two months to allow time to reach all respondents. Each participant spent an approximate time of 40 minutes answering the

[1] $n = \frac{Z^2 * (p)(q)}{d^2}$. n is the sample population, z value is 1.96 for 95% confidence level, p= estimated proportion, q=1 – p (estimation of variance), d= degree of freedom

questions. Questions were asked around background characteristics and issues on access barriers to healthcare. Background information consisted of community of resident, age, gender, occupation, education, religion and whether people with disabilities were staying with their family members. Questions on access barriers related to whether people with disabilities faced physical, communication, and medical equipment barriers to healthcare. The questions were further asked around the type of physical, communication and medical equipment barriers and support for communication difficulties.

Data Analysis

The results of the analysis were generated using descriptive and regression statistics. The data obtained from the respondents was first estimated by considering the percentage distribution. The socio-demographic characteristics such as age, community of residents, marital status, education, employment and family status were estimated. Also, percentage distribution of potential access barriers like physical, communication, medical equipment was also estimated. Logistics regression analysis reporting odds ratio was estimated with different type of access barriers as dependant variables. Independent variables in the regression were disability type, age, education, employment type, geographic location, religion and living arrangement. Significance was set at p-value of less than 0.05. The data obtained from the field were first entered into Statistical Package for Social Sciences Software 20 and transported to STATA version 14 for analysis.

Ethical Consideration

The Committee for Human Research Publication and Ethics, Kwame Nkrumah University of Science and Technology (KNUST) reviewed and cleared the study protocols prior to the implementation of the study. A written informed consent was translated and explained to

potential study respondents in a language well understood by them prior to their enrolment in the study.

Results

Background Information of respondents

The questionnaires were administered among three different disability groups in five different clusters of communities in the Kumasi Metropolis such as Oforikrom, Asewase, Subin, Asokwa and Tafo. An even number of males and females participated in the study (males 50.6%, females 49.4%). The average age of respondents was 38 years; 42% of respondents fell within the ages 31 – 40 whereas only 3.9% were below or exactly 20 years of age. More than a third of the respondents (34.5%) had no formal education while the remaining was split among those who had Junior High School, Senior High School and Tertiary. A little above one-quarter of the respondents were unemployed. The remaining respondents described their employment status as apprentices (21.6%), trading (15.7%), civil servant (11%), and farming (11%). Christianity was the dominant religious sect among the respondents (81.6%). Most of the respondents were staying with their family members at the time of the study (85.1%).

Table 1: Background Information of Respondents

Variable	*Frequency*	*Percentage (%)*
Community of resident		
Oforikrom	49	19.2
Subin	50	19.2
Asawase	51	20.0
Tafo	55	21.6
Asokwa	50	19.6
Gender		
Male	129	50.6
Female	126	49.4
Age*		
≤20	10	3.9
21 – 30	46	18.0
31 – 40	107	42.0

41 – 50	41	16.1
>50	51	20.0
Disability type		
Physically disabled	85	33.3
Blind	85	33.3
Deaf	85	33.3
Employment		
Government/Civil Servant	28	11.0
Trading	40	15.7
Farming	28	11.0
Apprenticeship/Craft	55	21.6
None	73	28.6
Other	31	12.2
Educational Level		
No formal education	88	34.5
Primary	41	16.1
JSS/Middle School	43	16.9
SSS/Vocational School	39	15.3
Tertiary	43	16.9
Others	1	0.4
Religion		
Christianity	208	81.6
Islamic	42	16.5
Others	5	2.0
Stay with family member		
Yes	217	85.1
No	38	14.9

Mean (SD); Min/Max 38; 17/60

The type of barriers among the three disability groups

Table 2 and figure 1 presents the barriers that respondents faced when they accessed health care. In all, 65.6% reported at least one access barrier to health care; 78.14% medical equipment barriers, 66.27% communication barriers and 55.5% physical barriers to health care. Among the group reported to have experienced physical barriers, half (50.75%) constituted persons with physical disabilities whiles 48.51% were visual impaired. Also, the medical equipment barriers were mostly experienced by the hearing impaired persons followed by visual impaired persons and physically impaired. Communication barriers were mostly experienced by hearing impaired persons than other disability groups. The type of barriers experienced among those with physical barriers were inaccessible door entrances,

inaccessible staircases, and the absence of elevators, ramps and medical labels. Also, the type of barriers to medical equipment were inaccessible high beds, inaccessible tables and chairs, and the lack of readable signs. The common support to medical equipment was provided from caregivers and hospital professionals.

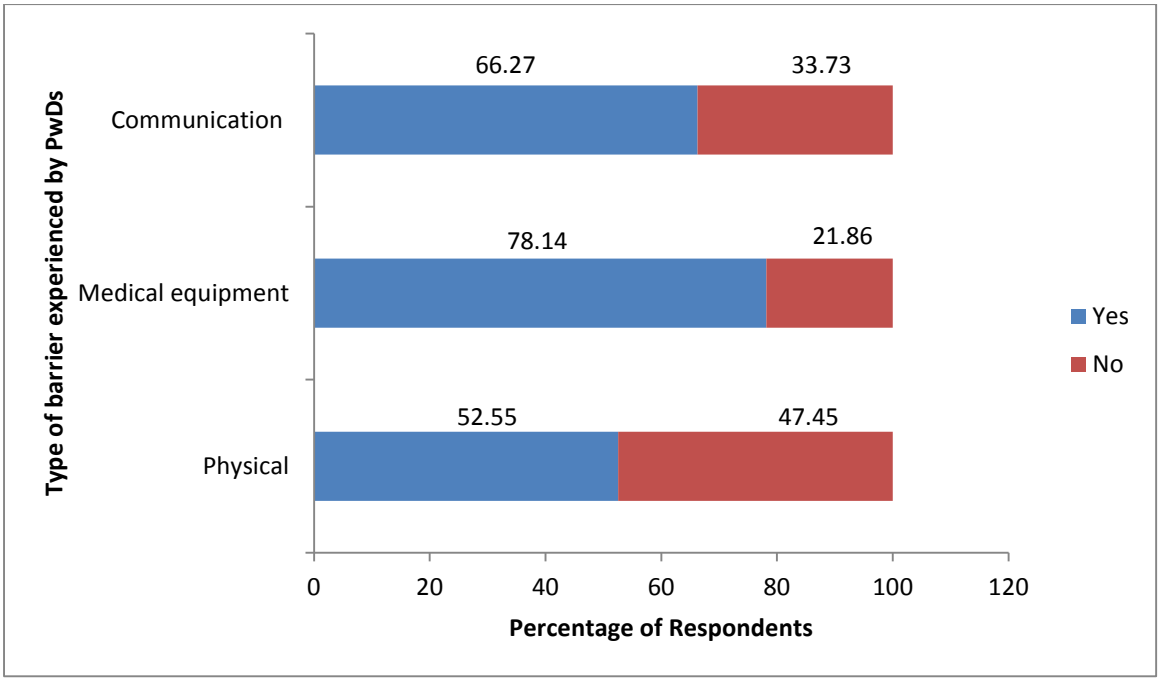

Figure 1: Proportion of barriers experienced by PwDs

Table 2: Percentage distribution of the types of barriers to healthcare

Variables	***Type of Disability***			
Type of barriers	***Physical N (%)***	***Blind N (%)***	***Hearing N (%)***	***p-value***
Physical barrier	68 (50.75)	65 (48.51)	1 (0.75)	<0.001
Medical equipment	53 (27.46)	56 (29.02)	84 (43. 52)	<0.001
Communication	-	13 (15.12)	73 (84.88)	<0.001
Example of barriers				
Physical barrier				<0.001
Inaccessible door entrances	22 (36.07)	39 (63.93)	-	
Inaccessible staircase	32 (56.14)	25 (43.86)	-	
Absence of elevators	5 (100)	-	-	
Absence of ramps	7 (100)	-	-	
Medical Labels	-	1 (50)	1 (50)	
Other	3 (100)	-	-	
Medical equipment				<0.001

Inaccessible high beds	28 (77.78)	8 (25.00)	-	
Inaccessible tables and chairs	24 (75.00)	8 (25.00)	-	
Lack of readable signs	-	35 (29.41)	84 (70.59)	
Other	-	5 (100)	-	
Support to medical equipment				<0.001
Caregivers	13 (13.13)	52 (52.53)	34 (34.34)	
Hospital professionals	20 (32.26)	4 (6.45)	38 (61.29)	
Others	12 (100)	-	-	

The influence of socio-demographic factors on the type of barriers to healthcare

Table 3 presents the logistics regression analysis of the factors determining different types of barriers to health care experienced by people with disabilities. Most of the coefficients on geographical locations were not significant, suggesting that barriers are consistent across communities with the exception of respondents staying in Subin (OR=0.43, 95% CI; 0.19, 1.01) and Tafo (OR=0.42, 95% CI; 0.18, 0.95), who were less likely to have experienced communication barriers compared with those staying in Oforikrom. Females were 1.74 (95% CI; 1.06, 2.86) times more likely to experience physical barriers and 0.61 (95% CI; 0.42, 0.88) times less likely to have experienced communication barriers compared with males. There was an increase of the odds of experiencing physical and medical equipment barriers with age among people with disabilities. Those in the age group 50 years and above were 1.83 times more likely to have experienced physical barriers to health care compared with those 20 years and below, while those between the ages of 41 and 50 years were 26.66 times more likely to have experienced medical equipment barrier to health care compared with the age group below 20 years. Physically disabled persons (OR=4.00, 95% CI; 2.35, 6.80) and Visual impaired persons (OR=3.25, 95% CI; 1.96, 5.36) were more likely to have experienced physical barriers compared to those with hearing impairment. Similarly, the physically disabled persons (OR=1.89, 95% CI; 1.19, 2.99) and visual impaired (OR=2.24, 95% CI; 1.39, 3.58) persons were more likely to have experience medical equipment barriers

compared with hearing impaired persons. Unlike physical and medical equipment, the physically disabled persons were 0.02 times (95% CI; 0.01, 0.06) less likely to have experienced communication barriers compared with those with hearing impaired. The analysis further revealed that respondents who were employed in government sector were 0.35 (95% CI; 0.13, 0.89) times, 0.78 (95% CI; 0.31, 1.93) times and 0.09 (95% CI; 0.02, 0.41) times less likely to have experienced physical, medical equipment, and communication barriers to health care compared with those who were unemployed.

The study further revealed that respondents who had basic education (OR=2.22, 95% CI; 1.20, 4.09), secondary (OR=2.15, 95% CI; 1.00, 4.63) and tertiary (OR=3.97, 95% CI; 1.82, 8.65) were more likely to face physical barriers compared to those with no formal education. Finally, respondents who were not staying with their family members were 1.46 times (95% CI; 0.72, 2.95) and 3.28 times (95% CI; 1.62, 6.66) more likely to have experienced physical and communication barriers to health care respectively compared with those who stayed with their family members.

Table 3 Logistic regression analysis of socio-demographic factors on physical, medical equipment and communication barriers to healthcare

Variable	Physical barrier		Medical Equipment		Communication	
	OR	***95% CI***	***OR***	***95% CI***	***OR***	***95% CI***
Community						
Oforikrom	1.00		1.00		1.00	
Subin	1.38	0.78, 2.42	1.14	0.45, 2.92	**0.43**	**0.19, 1.01**
Asawase	1.04	0.60, 1.80	1.20	0.46, 3.12	0.51	0.22, 1.16
Tafo	0.96	0.56, 1.63	2.22	0.79, 6.20	**0.42**	**0.18, 0.95**
Asokwa	1.08	0.62, 1.82	0.74	0.29, 1.83	0.63	0.28, 1.42
Gender						
Male	1.00		1.00		1.00	
Female	**1.744**	**1.06, 2.86**	1.43	0.78, 2.65	**0.61**	**0.42, 0.88**
Age						
≤20	1.00				1.00	
21 – 30	1.00	0.56, 1.78	.00	0.56, 10.19	**0.07**	**0.009, 0.66**
31 – 40	0.72	0.49, 1.06	2.40	0.67, 10.07	**0.05**	**0.007, 0.48**
41 – 50	1.27	0.68, 2.36	2.60	**2.53, 280.54**	**0.04**	**0.004, 0.35**
>50	**1.83**	**1.03, 3.25**	**26.66**	0.26, 4.33	**0.02**	**0.003, 0.23**
			1.07			
Disability type						
Deaf	1.00		1.00		1.00	

Physical	**4.00**	**2.35, 6.80**	**1.89**	**1.19, 2.99**	**0.02**	**0.01, 0.06**
Blind	**3.25**	**1.96, 5.36**	**2.24**	**1.39, 3.58**	1.00	
Employment						
Unemployed	1.00		1.00		1.00	
Government	**0.35**	**0.13, 0.89**	**0.78**	**0.31, 1.93**	**0.09**	**0.02, 0.41**
Trading	**0.04**	**0.01, 0.12**	2.58	0.91, 7.29	**0.30**	**0.12, 0.72**
Farming	**0.07**	**0.00, 0.05**	1.00		**0.20**	**0.06, 0.62**
Apprenticeship	**0.11**	**0.05, 0.23**	1.19	0.55, 2.56	1.01	0.52, 1.94
Educational Level						
No education	1.00		1.00		1.00	
Basic education	**2.22**	**1.20, 4.09**	1.57	0.72, 3.39	1.12	0.58, 2.17
Secondary	**2.15**	**1.00, 4.63**	1.25	0.51, 3.09	**2.16**	**0.98, 4.71**
Tertiary	**3.97**	**1.82, 8.65**			1.58	0.73, 3.40
Religion						
Christianity	1.00		1.00		1.00	
Islamic	0.92	0.47, 1.79	2.01	0.74, 4.98	0.94	0.46, 1.90
Stay with family						
Yes	1.00		1.00		1.00	
No	**1.46**	**0.72, 2.95**	0.18	0.08, 0.38	**3.28**	**1.62, 6.66**

OR=Odds Ratio; CI=confidence interval, Outcome measures: physical, communication and medical equipment barriers

Discussion

This study aimed at assessing barriers to healthcare among people with disabilities in the Kumasi Metropolis of Ghana. The study considered people with disabilities with moderate or severe limitation as suggested by Mont (2007). It was, however, limited to those with physical, hearing and visual impairments. It supports the definition used by the GSS (Ghana Statistical Services, 2012) that people with disabilities are those who are unable to perform specific tasks resulting from loss of function of some body parts due to impairments. The study found that most people with disabilities had no formal education. Similarly, people with disabilities with no formal employment were most prevalent. This finding is consistent with a review of the disability and poverty literature, which indicates that people with disabilities experience a higher risk of not being gainfully employed than the non-disabled population (Palmer, 2011). The findings in this study are confirmed findings from the 2010 census report where people with disabilities performed poorly in education and employment.

The study found that people with disabilities faced barriers to health care including physical, medical equipment and communication. For instance, the physical barriers were inaccessible door entrances, inaccessible staircases, absence of elevators, absence of ramps, medical labels and inaccessible floors for patients using crouches as floors were tiled. These barriers are consistent with similar access barriers experienced by people with disabilities in some districts (Ajumako-Enyan-Essiam, Sekondi-Takoradi, New Juabeng, Ho, Wa, Ashaiman and East Gonja) in the coastal, middle and northern belts of Ghana. In these areas, health facilities do not have accessible structures and environment for people with disabilities particularly for wheelchair users (Institute for Democratic Governance, 2011). Again, the access barriers to healthcare experienced by people with disabilities corroborate what other researchers have reported (Hwang et al., 2009, Drainoni et al., 2006, Schneider et al., 2013, Iezzoni and O'Day, 2006). These studies suggested that people with disabilities have different needs to healthcare but may experience barriers grouped into structural and process. Again, the barriers experienced by people with disabilities at health facilities are generally similar to barriers at other places like schools and work places (Owusu and Owusu-Ansah, 2011).

Furthermore, lack of readable signs and difficulty in following equipment instructions were the most reported barrier to medical equipment followed by inaccessible high beds, tables and chairs. This is comparable to the equipment related barriers reported by Kroll et al. (2006). The findings confirmed the assertion by Story et al. (2009) that patients with disabilities find it difficult to move on and off medical equipment which is attributed to the lack of voice output for blind patients. Shah and Robinson (2007), however, suggested that involvement of users in the manufacturing of equipment will meet users' needs and quality of the devices. It is important that both manufacturers and professionals ensure that medical equipment is fully accessible to people with disabilities to ensure functionality and usability of the devices.

The study found that females were the group more likely to have experienced physical barriers to healthcare and less likely to experience communication barriers. This finding may suggest that females have higher demands for health care and this is consistently found in most literature in health services research. The finding may also imply that females with disabilities are not treated equally to men at health facilities and may experience negative attitudes from health facility staff.

The study again found that people with disabilities who were in their forties and above were more likely to have experienced physical and medical equipment barriers to healthcare. Though the respondents experienced barriers, this is also probably correlated with old age. Individuals become naturally weak and more likely to face physical barriers to structures and equipment at the health facility. The age of the disabled person coupled with their health conditions is likely to make them weak at the facility and substantially face different kind of barriers. Similarly, physically disabled persons and visually impaired persons were more likely to have experienced physical and medical equipment barriers. This finding is indeed the case as physically disabled persons generally face more physical barriers than hearing impaired persons.

Surprisingly, respondents with some education were more likely to have experienced physical barriers. This finding implies that respondents who were educated knew their basic right to health care and could identify what is regarded as barriers. This finding suggests that educated individuals are motivated to understand what constitute the barriers at the health facility and report them.

The study again found that people with disabilities who were not staying with their family members were more likely to have experienced physical and communication barriers to health care. This finding implies that when a disabled person stays with a family member there is the likelihood of the family member providing support at the health facility to reduce

the barriers. The support that the disabled person may receive from the family member or caregiver is likely to improve access to health care. Specifically, the study found that people with disabilities get support to medical equipment through caregivers and health professionals. This corroborates the conclusion made by Emanuel et al. (1999) that family members, particularly women, provide the majority of assistance aside from health professionals at healthcare centres.

Limitations of the Study

Whilst the findings of this study provide an important foundation for understanding the barriers to access to health care for people with disabilities in metro Ghana, the limitations must also be recognized. The study is limited by the possibility of the interpreter introducing subjective bias in the interpretation of deaf respondents. There may also exist the possibility of response bias with people with disabilities exaggerating the difficulty in access to healthcare in order to gain benefits from authorities.

Conclusions and Implications for Policy Making

The study found that people with disabilities face barriers in accessing healthcare which include physical, medical equipment, and communication barriers. The physical barriers were commonly related to inaccessible door entrances, inaccessible staircases, and the absence of elevators, ramps and medical labels. Also, the types of barriers related to medical equipment were inaccessible high beds, inaccessible tables and chairs, and the lack of readable signs. The study has implications for policy making in Ghana in relation to people with disabilities and barrier-free access to healthcare. Firstly, there is the need for raising community awareness about the needs of people with disabilities and the need for families to support their members. There is also the need for investment in the education of people with

disabilities in Ghana in order to encourage people with disabilities to advocate for their rights.

Again, major stakeholders including ministries should re-visit existing building regulations and policies for re-designing existing hospital infrastructures to ensure a more disability friendly structures to improve access to the services. The buildings and walkways should be universally designed so as to make it easily accessible to people with disabilities. In addition to addressing physical structures, manufacturers and the ministry of health should ensure that medical equipment at the various facilities are assessed on regular basis to ensure that it is accessible to people with disabilities. To this end, hospitals in Ghana should factor in the needs of people with disabilities when procuring materials. For instance, effort should be made to purchase materials such as chairs, tables and beds that can be easily accessed by people with disabilities. This should be built on the premises on ensuring full implementation of the Disability Act 715 which was passed in 2006. The legislative instrument that supports the full functioning of the Act should be passed by the parliament of Ghana to ensure fully accessible environment and structures for people with disabilities in the Ghanaian society.

Additionally, there should be a conscious effort to make hospital materials accessible to people with disabilities. For example, materials should be available in Braille to enable visually impaired persons to read, and sign language interpreters who will be able to communicate with the hearing impaired should be present. Health service providers should also make it a priority to ensure a gender-sensitive approach to the services delivery system.

List of Abbreviations

Confidence Interval (CI); Ghana Blind Union (GBU); Ghana Federation of the Disabled (GFD); Ghana Statistical Services (GSS), Millennium Development Goals (MDGs); National Health Insurance Scheme (NHIS); People with disabilities (PwDs); Physically Challenge Wheelchair Track and Field Association (PCWTFA).

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