

The Eye Care Needs of Persons with Visual Impairment in a District Hospital in Ghana

Opoku Vincent Karikari^{1*}, Dogbe Joslin Alexei^{1,2}, Hammond Charles², Paintsil Vivian², Taylor Emmanuel¹ and Frimpong Evans¹

¹Centre for Disability and Rehabilitation Studies, Department of Community Health, School of Medical Sciences, Kwame Nkrumah University of Science and Technology, Kumasi, Ghana

²Department of Child Health, Komfo Anokye Teaching Hospital, Kumasi, Ghana

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*Corresponding author
Opoku Vincent Karikari

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Abstract: Almost 80% of the world's visual impairment is treatable or preventable. Regardless of this, millions of people are at risk of visual loss due to the lack of eye-care services. The study examined eye care needs of persons with visual impairments in a District Hospital in Ghana, specifically to assess the availability of eye care services, challenges and measures to improve accessibility. A qualitative approach was adopted to interview persons with visual impairments and eye care providers. Purposive sampling was used to select a sample size of 20; 15 visually impaired and 5 health care providers. A semi-structured interview guide was adopted to capture data onto a voice recorder and transcribed into written notes. Thematic content analysis was used to analyse themes generated from the data according to the objectives. The study found that eye care services were available to some extent but accessibility to the services was limited due to inadequate transport fares and poor health insurance coverage. Aids to accompany clients were limited. Poor infrastructure and equipment limited the ability of healthcare providers to offer effective services. The study recommends that outreach services should be encouraged to provide services at the doorstep to majority and refer complex cases to hospital to reduce cost of transportation. The study further recommends that relevant infrastructure and equipment should be provided by government through the Ghana Blind Union to improve eye care services and also to ensure that health insurance policies adequately cover diagnosis, treatment and the provision of assistive devices.

Keywords: visual impairments, eye care, persons with visual impairments, assistive device, Ghana, Ghana Blind Union

INTRODUCTION

Optimal healthcare is critical for all persons including the disabled and non-disabled for the reason that a sound individual can work adequately to further his or her personal ambitions and add to the advancement of their country. When people satisfy their health needs, they constructively consider their future and how to achieve legitimate welfare [1]. To achieve these, the five components of health services developed by World Health Organization (WHO) within the Community-Based Rehabilitation (CBR) programme should be considered. These services include health promotion, health prevention, medical care, rehabilitation and assistive devices. These components are specifically designed to improve healthcare for persons with disabilities (PWDs) [2].

The impact of visual impairment is highly recognized, in that, it decreases an individual's capacity to peruse, drive and travel freely and enjoy life. Deep rooted interests are regularly abandoned by people who

have developed visual disability [3]. In the 1990s, it was estimated that the worldwide population of visual impairment was likely to increase from 5.8 billion in 1996 to 7.9 billion by 2020, with majority of the affected persons projected to come from the developing world [4]. The latest worldwide estimate of visual impairments by World Health Organization (WHO) revealed that almost 285 million people have visual impairment, out of which 39 million are blind. The burden of eye diseases is unknown in many rural districts in Ghana. However, available data revealed that visual impairments are common in rural areas with an estimated prevalence of blindness of 0.8 to 1.5%, coupled with low vision prevalence of 3.0 to 4.0% [5].

Almost 80% of the world's visual impairment is treatable or preventable. Regardless of this, millions of people are at risk of visual loss due to the lack of eye-care services. With almost 90% of people with visual impairment living in low and middle-income countries, including some of the world's poorest communities,

access to eye care services are often unavailable [6]. Specifically, in Sub-Saharan Africa, only about 20 percent of needs are met [7, 8]. The poor eye care services could be attributed to the inadequate human, infrastructural and related resources [9]. Ghana has an average of 1.5 ophthalmologists per 500,000 population and 4 ophthalmic nurses per 400,000 populations, many of whom are located in the urban areas [10]. The inequitable distribution of eye care professionals leaves the rural communities in Ghana grossly underserved. Consequently, eye care services delivery becomes woefully inadequate in the areas where services are most needed. This study sought to explore the eye care needs of persons with visual impairment attending St. Michael's Hospital in the Bosomtwe District in the Ashanti region of Ghana. Specifically, the study assessed the availability of eye care services for persons with visual impairment, challenges they are confronted with in accessing their eye care services and the measures that can be put in place to improve accessibility to effective eye care services.

METHODS

Study setting

The study was conducted at the St Michael's hospital which is the largest referral hospital in the Bosomtwe District of the Ashanti Region, Ghana. It is a 99-bed capacity district hospital located in Pramso. It has five departments; ophthalmology, medical, surgical, paediatrics and maternity. The study was conducted from January to May 2017.

Study design and approach

A qualitative approach and exploratory design was adopted to investigate the eye care needs of persons with visual impairment attending the hospital. The aforementioned philosophical approach and design allowed for thorough insight into the eye care needs of persons with visual impairment through thoughts and opinions based on personal experiences of respondents.

Population

The population for this study included health care providers working in the eye clinic of St. Michael Hospital and persons with visual impairment attending the eye clinic as at the time of the study. The eye care providers were included to help achieve the third research objective on measures that can be put in place to improve accessibility to effective eye care services for persons with visual impairment.

Sampling technique and sample size

Purposive sampling was used to select participants relevant to the study. This sampling technique provided the flexibility that allowed for the selection of ophthalmic nurses, ophthalmologist and optometrist and persons with eye care needs who frequently visited the health facility. A sample size of

twenty (20) respondents made up of fifteen (15) persons with visual impairment and five (5) eye care providers were recruited to participate in the study. The five (5) eye care providers were made up of one (1) ophthalmologist, one (1) optometrist and three (3) ophthalmic nurses.

Data collection tool

The study was interested in a number of key themes, issues and questions and therefore a semi-structured interview guide was adopted for this study, as it allowed for an in-depth exploration of the eye care needs of persons with visual impairment.

Data collection procedure

Responses from participants were captured and saved onto an audio-recorder using a semi-structured interview guide. The participants were interviewed individually during working hours in the clinic setting. The validity of this study was ensured by subjecting the interview guide to scrutiny and approval by the other researchers. A pre-test was conducted at Kumasi South Hospital using these same research methodologies. Comparing the pre-test results to the actual work helped check consistency in this study to ensure reliability.

Data analysis procedure

Thematic content analysis was used to analyze the data obtained. The analysis involved transcribing, coding, organizing, generating themes and describing the data. The themes captured relevant information about the data in relation to the research questions that represent some level of patterned responses or meaning within the data set [11]. The data gathered through the interview was transcribed into written notes. The same code was assigned to similar responses and different codes were assigned to divergent views. The data was then organized by classifying responses with the same code while taking note of other codes. Themes were then generated to make meaningful interpretation of the data and to emphasise on relevant findings. Where necessary, responses were quoted verbatim.

Ethical consideration

Participants signed an informed consent form. The procedures, risks and benefits involved in the study were explained to respondents. Confidentiality and anonymity were ensured by protecting participant's identity and responses from any third party who was not directly involved in the study.

FINDINGS

Demographic characteristics of respondents

The data was obtained from 20 respondents, of which 15 were persons with visual impairment (A – O) and 5 were eye care providers (P – T). The respondents with visual impairments constituted 8 (53%) males and 7 (47%) females. They were between the ages of 29 and

92 years with a mean of 55.2, SD \pm 17.8. Ten (66.7%) of the respondents with visual impairment had no formal education. Four (26.7%) were Junior High School leavers with only one (6.7%) having tertiary education. All the respondents with visual impairments lived with their families and relatives.

Themes of interview

The study explored the following themes during the interview; availability of eye care services for persons with visual impairment, challenges they are confronted with in accessing their eye care services and the measures that can be put in place to improve accessibility to effective eye care services.

Availability of eye care service for persons with visual impairment

Majority of the respondents with visual impairments were of the view that eye care services were available to them.

[Respondent A]. "Eye care services are necessary and are available to me".

[Respondent B], "Eye care services include visiting the hospital for treatment of eye conditions and also for regular check-ups and being able to pay for the services and medications needed to sustain your eye. The current services are good but they can do better than this"

[Respondent K] "Eye care service is available for me here"

Challenges confronted by the persons with visual impairment in accessing their eye care services

The study sought to find challenges faced by the persons with visual impairment in accessing eye care services at the eye clinic.

Majority of the respondents with visual impairment stressed on financial barriers as the major limitation to accessing eye care services.

[Respondents G and I] "I know I have an eye condition that is critical and needs monthly reviews but I only go to the hospital when I have money".

Few persons with visual impairment stressed on money to pay for transport to the hospital to receive the eye care service. They said;

[Respondent J and N] "If I do not have money, I cannot pay for eye care services. Sometimes it is difficult to get money for transportation to the hospital".

[Respondent C] "I have health insurance but transport fare from my house to the hospital is too high

for me and sometimes I have to buy some of the drugs not covered by the health insurance".

[Respondent A] "I only go to the hospital when my children send me money, even though I have to seek eye care service monthly. However, I always have someone to lead me to hospital; either my daughter or my grandchild".

Few also expressed unavailability of aids to accompany them to the eye clinic as a major challenge.

[Respondent H] "I have no barrier to accessing eye care service, other than someone who will lead me to the hospital".

Measures that can be put in place to improve accessibility to effective eye care services

The study again sought to identify various measures that can improve access to eye care services for persons with visual impairments at the eye clinic. The eye care providers recommended several ways by which persons with visual impairment can access effective eye care services. Among them are; home care services, availability of the needed infrastructure, equipment and better health insurance policies.

Provision of home care services

Majority of the eye care providers emphasized on home care services for persons with visual impairment.

[Respondent S] "I think home care services will improve the eye care services for persons with visual impairment, since most of the people with visual impairment are confronted with difficulties in accessing eye care services, ranging from transport fares to payment for the services rendered to them at hospital. So, home care services would help to reach most of those who need eye care services, but for some reasons, cannot access the hospital. All minor ocular conditions could be treated during the outreach, while more complex cases such as those requiring surgery could be referred to the hospital".

Making available the needed infrastructure

Majority of the eye care providers stressed on the necessity of providing eye care infrastructure and equipment to enable professionals render better services.

[Respondent Q] "Eye care services can be effective by making sure the relevant infrastructure and equipment are in order. This will help to provide better services for persons with visual impairments. For instance, the low vision building here has not served its purpose ever since it was commissioned, because it lacks the needed equipment."

[Respondents R and S] “I would not say the current eye care services are good or bad. But our services can be better if all the required resources in terms of the right numbers of eye care personnel and equipment are provided”.

Better health insurance policies

Few eye care respondents remarked that, better health insurance policies would make eye care services accessible to most individuals.

[Respondent T] “To make eye care service effective, I think health insurance policies should make persons with visual impairment pay less or nothing for the insurance premiums. The insurance must cover more than just the basic eye care medications”.

DISCUSSION

The proportion of males (8) and females (7) in this study of the visually impaired were almost the same. It was not surprising that two-thirds of the respondents with visual impairment had no formal education since there is no easy access to education for the persons with visual impairment. All the persons with visual impairment were living with relatives that could be important for their level of care and aid in assessing eye care services.

Majority of the respondents with visual impairment were of the view that eye care services were available to them but it is also possible, that they could also be lacking in awareness of other imperative parameters of eye care services besides provision of medications and of low vision aids only. These could include such services as rehabilitation management, financing of eye care services, universal access and equity in eye care services and empowerment of people with visual impairment [12].

Challenges confronted by persons with visual impairment are a significant outcome of the limitations imposed by the condition. Without exception, all the respondents with visual impairment agreed to having faced challenges in accessing eye care services. This validates a study by Drainoni *et al.* [13] who found that persons with disabilities experience multiple barriers in accessing healthcare. Accessibility barriers to healthcare are grouped under broader categories like structural, environmental and process barriers [14, 15]. Structural barriers according to these studies comprise of the physical access to health service buildings whereas the process barriers involve the difficulty that a patient goes through in arranging appointments with a service provider and obtaining health insurance coverage.

This study demonstrated process barriers to be the main challenges facing persons with visual

impairment who try to access eye care services. Financial constraints made it difficult to pay transport fares to get to the hospital to receive services and also pay for medications and assistive devices such as spectacles, some of which are not covered by health insurance. The study by Naidoo *et al.* [16] also revealed a similar pattern where the cost of transportation alone could be a barrier to accessing any form of eye care services.

All the respondents with visual impairments were living with relatives. While some may be lucky to have relatives as aids to assist them to access eye care services, others may not, even if they had funds for transportation or healthcare insurance to support the eye care services. Studies by Lewallen & Courtright [17] remarked that caregivers fear of losing their jobs accounted for some reasons why caregivers failed to accompany persons with visual impairment to access eye care services.

Responses from some health care providers revealed that certain provisions could enhance service delivery as well as alleviate the difficulties faced by persons with visual impairment in their quest to access eye care remedies. Taking services to their doorsteps, improvement in infrastructural, equipment and professional capacity in addition to reliable and adequate insurance premiums dominated the themes.

CONCLUSION AND RECOMMENDATION

The study concluded that, eye care services were available to persons with visual impairment to some extent in the Bosomtwe district, but accessibility to the services were limited due to numerous process barriers such as, inadequate transport fares and poor health insurance coverage for treatment and procurement of assistive devices, in addition to lack of aids to accompany them to the eye care centres for treatment. Lack of proper infrastructure and needed equipment limited the ability of healthcare providers to offer effective services to their clients. The study therefore recommends that home care, through outreach services should be encouraged to provide eye care services to the majority and refer cases that would need major attention to hospital in order to reduce the financial burden of transport fares on persons with visual impairment. The study further recommends that relevant infrastructure and equipment should be put in place by government through the advocacy of the Ghana Blind Union to improve the quality of eye care services and also to ensure that health insurance policies adequately cover diagnosis, treatment and the provision of assistive devices for the visually impaired.

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