



PHYSICAL BARRIERS INFLUENCING ACCESSIBILITY OF HEALTHCARE SERVICES BY THE PHYSICALLY CHALLENGED PERSONS: A CASE STUDY OF LIKONI SUB-COUNTY, MOMBASA COUNTY

DANIEL KOSGEY KAMAREI, MRS. FRANCISCA K. SYENGO MR. BEN OSUGA, MS. MAUREEN ADOYO

PHYSICAL BARRIERS INFLUENCING ACCESSIBILITY OF HEALTHCARE SERVICES BY THE PHYSICALLY CHALLENGED PERSONS: A CASE STUDY OF LIKONI SUB-COUNTY, MOMBASA COUNTY

¹Daniel Kosgey Kamarei, ²Mrs. Francisca K. Syengo ³Mr. Ben Osuga, ⁴Ms. Maureen Adoyo

¹Student, Kenya Methodist University (KEMU), (Corresponding Author)

²South Eastern Kenya University (SEKU)

³Department of Health System Management and Medical Education, Kenya Methodist University (KEMU)

⁴Department of Health System Management and Medical Education, Kenya Methodist University (KEMU)

Accepted August 11, 2016

ABSTRACT

People with physical disability are entitled to use health facilities at least as much as the general population if not more. The objective of the study was to establish the physical barriers that hinder the physical challenged persons from accessing health care services. Descriptive cross sectional study was used in the study. The target population was 384 and composed of facility staff and persons with disabilities seeking health services at Likoni, Mtongwe, Mbuta, Ng'ombeni and Kenya Navy Health centres. The sampling method used was purposive sampling. Interview and questionnaires were used as data collection methods. Data processing was done by use of regression analysis, editing, coding, classification and tabulation then analysed using SPSS software for proper and accurate information. Data was presented in form of tables, graphs and charts. According to (Kroll and Beaty, 2010), Structural environmental barriers are impedimenta to medical care directly related to the number, type, concentration, location or organizational configured to suit the disabled person (Tororei, 2011). Lack of transportation options present an obstacle to disabled persons living in areas where there are no roads (Tororei 2010). According to WHO and World Bank (2011) 85% of the disabled persons lack means of transport to take them to health facilities. The findings showed that the physical environment was not accommodating the physically impaired persons because they could not move through sandy ground with their wheelchairs and therefore could not access health services easily. The findings will be used to improve the accessibility challenge faced by the disabled persons in accessing health services.

Key Words: *Physical Barriers, Health Care Services, Physically Challenged Persons, Likoni Sub-County*

Background of the study.

People with physical impairments remain at the margins of the society as one of the most impoverished groups. Disability is considered not just a problem for people with physical impairment, individuals and their families but also an economic liability for nations (*Hosain and Chaterjee 2010*). According to Hosain and Chaterjee “nothing is costlier to a nation than to allow a child to be exposed (before, during or after birth) to the risk of physical or other impairment. Let it escalate to an irreversible disability, then to work for rehabilitation that can never be adequate”. Thus it becomes important that disability be addressed at a national level.

To understand what physical impairment is one should understand the term disability. The Oxford Advanced Learners dictionary 8th Edition (2013), defines disability as a moderate to severe limitation of a person’s ability to function or perform daily activities as a result of physical, sensory, communication, intellectual or mental impairment, if the limitation has lasted or has prognosis of lasting more than a year, and is diagnosed by a registered medical practitioner in accordance with standards prescribed.

Becker and Tiukle 2011 identifies five commonly recognized reasons for inadequate health care services for people with physical impairment. Transportation problems, inadequate public transportation and also inaccessible transport with physical impairment to get to health care facilities, inaccessible transport with physical impairment to get to health care facilities, inaccessible offices, when offices are inaccessible, relying on patients personal assistants to lift them onto examination tables can potentially breach important privacy boundaries (*Davis, Lezzoni 2011*).

Disabilities has moved from all issues of the family to a public issue and it is for this reason

that this study addressed access issues to health care services for those that are physically challenged. The rationale is to help policy makers with formulating health policies that are equitable.

The disability act states that: As part of the process of equal opportunities, provision should be made to assist people with physical impairment to assume a more complete responsibility as members of society. Thus they should receive the support they need within the ordinary structures of society in areas such as health, employment, education and social services.

Statement of the Problem

In Likoni Division, it is estimated that there are over 1000 disabled persons (*KNSPWD 2013*). While considerable research has been done on health care access, use and satisfaction among those with physical impairment, there is very little work done on access barriers for people with physical impairment in Kenya (*Tororei, 2008*) and this study hopes to fill this gap in literature. Recent work in the health science field has shown that more than 70% of the regions in Kenya provide health care services either in form of outreach or permanent facility services (*APDK, 2010*). Over the three year period, 2010 to 2013, the number of patients provided services and treatment given steadily to more than 90% (*Tororei 2014*). Despite the increase in the number of services provided and country’s commitment of equal health care access for all by the year 2030 (*GOK, Vision 2030*), those with physical challenges still find it difficult to access health services. In Kenya, the 2009 national census estimated that there were approximately 1.3million disabled persons. It also stated that more than 33% of persons living with disability do not have any of employment. They are also disadvantaged by inadequate infrastructure.

Objective of the Study

To establish accessibility factors of health care services by the physically challenged persons.

To examine the physical factors that influence accessibility of health care services by the physically challenged persons.

LITERATURE REVIEW

The objective of the study was to establish physical barriers that hinder the physically challenged persons from accessing health care services. To understand the current situation on access to health care services by the physically challenged persons, the author identified the process barriers that the physically challenged experience in accessing health care.

Physical Characteristics

Barriers to access are those factors that contribute to preventing a person from utilizing a service when needed (*Kroll and Beaty, 2010*). Sheer et al 2011 identified two broad categories of barriers. Structural environmental barriers are impediments to medical care directly related to the number, type, concentration, location, or organizational configuration of health providers. They include issues of accessibility, geography, technology and location and doctor's offices. Process barriers relate to the delivery of service. For example lack of provider knowledge, bad attitudes and lack of timelines of service from providers are issues frequently reported by patients. Barriers to services by people with disabilities may vary considerably according to the type of impairment they experience.

This study did not explore all the specific barriers and it would have been impossible to do this justice in one qualitative study. The inclusion criterion was therefore, limited to a specific group, those where disability arose from impairment in movement related functions, and or body structures relating to movement. Geographical conditions greatly affect access to health services. In general, people in mountainous

areas (regardless of economic status) access health services less frequently than people in delta regions. Geographical access is measured in distance and time to health facility and these indicators are worst in most parts of Kenya (*Tororei, 2009*). Geographical challenges such as mountains, gullies, rivers, unpaved roads etc. present physical barriers to accessing health care, "Due to these geographical challenges, some rural residents make trade-offs between their safe travel in inclement weather and accessing health care in a timely manner" (*Tororei 2010*). "Generally, the more remote the area in question, the greater the problems of access to medical care due to geographic distances, transportation problems, lack of insurance and an inadequate supply of local providers" (*Lishner, Richardson, Levine & Patrick, 1966*). Brems et al, 2006) argue that travel distance negatively affects access to health services for rural more than urban patients. Moreover, due to distance and access restrictions, rural residents with a chronic illness may not receive information on new treatment strategies (*Tororei 2010*). Rural residents also have very "limited access to specialized providers and consultants (i.e. cardiologists, oncologists, psychiatrists), and additional resources due to the rural geography" (*Tororei 2010*). It is not just mere distance, but it is also the difficulty of travel as well as availability of specialized services which are a problem in rural areas in Kenya.

Among the attributes of rural areas which influence health care utilization are low population density, isolation, and lack of services. These geographic attributes present major challenges related to travel that rural residents encounter (*APDK, 2009*) such challenges are summed up as follows:

"The ability to transverse these distances becomes imperative in obtaining health care. Without transportation, even a short distance to care can become an insurmountable problem. The opportunity for health care consumers to have a

vehicle to transport them to a practitioner or facility is especially important in rural settings where distances are relatively great, roads may be of poor quality, and public transportation is seldom available" (Tororei, 2005).

Minden, Frankel, Hadden and Hoaglin (2007) agree by arguing that transport is critical for rural patients' ability to receive care and maintain their health and functional status. Similarly, Caldwell (2008) found that for families with developmental disabilities, the greatest out-of-pocket costs included transport. Lack of transportation options present an additional obstacle to rural dwellers accessing healthcare (Lishner et al. 1996). Brems et al (2006) found that lack of access to services due to transportation difficulties were reported overwhelmingly more by rural than urban providers.

Because public transport is not always an option for those who use wheeled mobility devices, access to health-care services by people with disabilities, as well as their ability to participate in other community settings, is not equal to that of the general population. Even those who can use public transport often have providers or durable medical equipment vendors with offices that are not close to public transport (Scheer et al, 2003)

Theoretical Framework

Equity Theory

"Universalizing" effective and humane health, care requires delivery of services according to the principle of equity; That is to say health care must be delivered according to each person's need for it, without discrimination on grounds of the means to pay or the age, sex, social class, place of residence, ethnic status or any other socio-demographic characteristic of the true recipient.

The Conceptual Framework

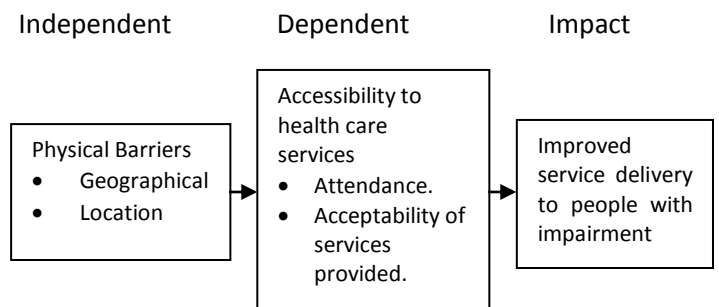


Figure 1: Conceptual framework

Source: Author (2015).

RESEARCH DESIGN & METHODOLOGY

This chapter briefly gives an introduction of the study sites, methods of data collection, selection of cases, sampling and finally concludes with how data was collected and analyzed.

This study used descriptive cross-sectional descriptive design. The targeted persons were people with disabilities and hospital staff within Likoni Division since they had characteristics that the study objectives intended to achieve. Purposive sampling was used to select people with differing impairments, ages, socio-economic status in order to obtain data on a wide range of experiences. The study used semi-structured interviews and focus groups discussion. Primary data was gathered by use of closed and open ended questionnaires which were self-administered. Interviews were conducted with six providers (as key informants) of health services whereby two providers were purposively chosen from each clinic. Providers were selected if they worked in a chosen health care facility and if they gave treatment or nay other service to people with impairments. The providers were either nurses, doctors, community counselors or security guards. A pilot study was conducted in advance specifically to test aspects of the research design such as stimulus, material, ambiguity and consistency of the questions. It also allowed necessary adjustments before final commitment to the design. The pilot study was undertaken at Tiwi

rural demonstration health centre. Reliability of the study was achieved by the purposeful selection of competent respondents. Interviewer's bias was eliminated by use of self-administered questionnaires. Research clearance was sort from Kenya Methodist University research Ethics committee and the Mombasa County health department before commencement of the study. The request was granted.

DATA ANALYSIS AND PRESENTATION

This chapter presents findings on the physical barriers to accessibility of health care services by the physically challenged persons. Descriptive statistics was used to analyze the data in terms of percentages and frequency tables. In inferential statistics, multiple linear regressions and pearsons correlation were used. For validity purpose, a pilot study was conducted in advance specifically to test aspects of the research design such as stimulus, material, ambiguity and consistency of the questions. Reliability of the study was achieved by the purposeful selection of competent respondents. A total of 219 respondents were interviewed with 121 being male and 98 being female. According to age categories, those disabled between ages 20-39 were many compared to the other groups (Mtongwe 10.5%, Mbuta 6.8%, Ujamaa 9.1%, Likoni 21% and Kenya Navy 13.2%). On type of impairment there were many disabled/impaired persons with amputated legs, (34.2%) followed by amputated arm and paraplegic (4.6%). Others are hearing impairment, visually impaired 2.7% and 0.5% respectively. On education aspect, majority of the respondents had nil education that is 139(63.5%). They were followed by those who had primary education at 130(3.7%) while 28(12.8%) had secondary education. On the employment status of the respondents, it was established that 55(25.1%) were employed while the rest of the respondents were not employed.

The Physical factors that influence accessibility of health care services by physically challenged.

The study found that there was lack of access ramps at the health facilities. It was also difficult to access rooms and heights e.g. height of tables, scales that do not accommodate wheelchairs, inaccessible wash rooms and the unavailability of needed transportation services to medical appointments. According to Demographic and health survey (2012) access to health care facilities, in terms of distance, time and cost is a very useful indicator of the quality of life of the population.

Challenges faced by disabled people

The researcher sought to establish the experiences of disabled people in regard to the several specific challenges. Most of the disabled people face many challenges. Convenience of the services hours, security, privacy, neither good nor bad were as follows physical surroundings, accessibility and Crowding, availability of seats, water and other refreshments, restrooms, cleanliness Registration procedures.

Barriers affecting Disabled

Respondents also had the opinion of bad experience on Availability of their medical records, attitude, availability and number of staffs, lack of confidentiality, waiting times and length of consultation Autonomy and informed consent, Treated in an acceptable manner, Drug dispensing; Availability of drugs, asked about-allergies, side effects, use of drags, verbal and written directions given-dosage, frequency and route, follow-up. Physical accessibility depended on the type of disability and the designing of the clinic. For example, those in wheel chairs had problems of access to buildings while the visually impaired and those with upper limbs disability are unable to manage to access health care services easily.

Distance

The KDHS (GRN 2012, p2) found that urban households are more likely to be nearer to a clinic than rural households, and urban households are more likely to be nearer to a government hospital than rural households. For Likoni region the percent distribution of households by the nearest government health facility, according to residence and region is 20.5% for a hospital, 3.2% for a health centre and 65.6% for clinic. For Mtongwe region, the per cent distribution of households by the nearest government health facility according to residence and region is 7.3% for a hospital, 14.9% for health centre and 77.3% for a clinic (KDHS 2012). There are however implications, it means that most people attend clinics than hospitals because they are the nearest type of health facilities. The mean time to reach a government hospital was 60 minutes; with 14 per cent of households being three or more hours travelling time from the nearest hospital. The KDHS was very general when it comes to the mean time to reach a government hospital. Because government health facilities tend to be concentrated in cities towns, urban households are closer to hospitals than rural households and travel times vary substantially.

The mean time to the nearest government hospital was 37 minutes for urban households compared with 150 minutes for rural households (KDHS 2012). Respondents in the two regions, especially those living in Mbuta / Ujamaa area complained of the long distance to the nearest clinic since it is situated far from their villages. For those in Kenya Navy, distance was not a problem for many respondents; the problem only came if the persons was physically unpaired and had to walk to the clinic. This means that without transportation even a short distance to care facilities can become an insurmountable problem.

Transportation

Transportation was one of the most worrisome problem people with disabilities faced. The Kenya Bureau of Statistics (2011) reported that on average, in Likoni region, it takes 11.3 kilometres to reach a hospital or clinic. Two in three households access the nearest government health facility on foot.

In Likoni region, 28.9% of households accessed a Government hospital by car or motor cycle, 21.6% by bus or taxi, 0.8% use animals or animal carts, while 48.7% walk (KBS2013). For some, location provides another physical barrier to accessing health facilities as comments under the distance them have shown. Form of transport to/from facility is important in any consideration of transport. In rural areas there are many strategies people with disabilities employ to get to healthcare facilities.

They include private car or walking (the majority), taxis (where available) and in a minority of cases motorcycles. Access to transportation is the same for all groups of people in society; it does not matter if one is male or female. In Kenya Navy access to public transportation is easy but in Mbuta getting transport to go to clinic is very difficult because Mbuta is in a rural area. Ujamaa, getting transport was also extremely difficult most of the time because of poor road network and so people make their own means of transportation or use motorcycles from the hospital but it takes hours to get to the facility.

DISCUSSION AND CONCLUSIONS

This chapter presented summary, conclusions and recommendations arrived from the study.

Summary and Discussion of the Findings

The physical environment was not accommodating to the physically impaired individuals because most of them could not access health care services easily, this constituted structural-environmental barriers among others Health service delivery process barriers. This was

an issue, especially when it came to the hearing impaired individuals because they found it hard to communicate their health conditions to providers (and vice versa) if they did not have interpreters of their own.

The identified access barriers to health-care services were grouped into two categories: structural barriers and delivery process barriers. Structural barriers encompassed issues of geography, location and transportation. Process barriers included communication with patients and providers and accessibility of the facility. The results of the study conducted among individuals representing different forms of impairments indicate that despite regulations by the Kenya government to allow people with impairments to access health care services for free, people with impairments continue to face significant barriers to health care access. Consistent with the findings of other research on health care access for people living with impairments, a wide range of barriers were reported (KDHS 2012).

Many of the findings e.g. lack of transportation and inadequate specialised health care providers largely confirm research findings. There were still those barriers that are unique for example, the employment of nurses who don't understand local languages.

Communication problems between the hearing impaired and the providers and lack of toilets came across as issues of unequal access to health care. Kroll et al. (2006) argue that it is of utmost importance that facilities at health centres are user-friendly. This term means that health centres should not make it difficult for one to get treatment and other services that they are looking for there.

In Likoni area public transportation was a method of transport used to get to health facilities while in the Ujamaa region people relied on their own form of transport which was very expensive. This

is the situation because Likoni is an urban area while the Ujamaa region is rural. If health care providers were available at the clinic in both regions, there were not of much assistance to physically impaired individuals especially to those who have hearing impairments.

Conclusions

However, despite the severity of the barriers faced in the two regions under study, it was believed that individuals with impairments in other parts of the country may face even greater challenges than those reported here, in view of the highly dispersed population found in Kenya where people are dispersed far from established towns/homelands and towns are also far away from one another.

While a small exploratory study is hardly definitive, our results reinforce and expand on previously reported difficulties faced by people with disabilities when they attempt to access health care services. Hopefully, future research will include people with disabilities as an integral part of the research team in addressing these issues. Future researchers can look at similar studies with control groups so as to compare perceptions of access to and quality of the services provided by primary care doctors.

Although the failure to adequately address the health needs of people with impairments may seem inevitable given limited resources, it is also not clear whether the current approach is the best one in the long run given the barriers discussed in this study. In my opinion, to eliminate access barriers and meet the needs of people with physical impairments in an effective and sustainable manner will require innovative thinking and input from those intimately familiar with and affected by current barriers. It will also require input from health care providers who are familiar with the structural, process and environmental challenges of providing accessible

and high quality care to members of this population.

Recommendations

Based on the present findings and analysis, the following recommendations are aimed at improving health care access for persons with physical impairments. Interventions should be directed at enhancing providers' understanding of how to work effectively with people with physical impairments for example providers should be able to determine real health issues from disability issues.

Linking of rehabilitation specialists as consultants to group practices or community clinics should be done so that the specialists' expertise would be available to primary care providers in community settings. Provisions of timely access to treatment making mobile clinics available in villages so that long distances will not become a major factor preventing people who cannot walk from accessing health care services.

To date, the Ministry of Health has built clinics, provided health care providers and medications, and also has introduced free access to health care services for people with disabilities and a lot more, but there are still those critical factors related to

the needs of those with physical impairments that the Ministry still needs to consider. These are: provisions of trained sign language interpreters, accessible health care physical infrastructure for people in wheel chairs, constructing more clinics in communities for those who cannot walk etc. The overall objective of the National Policy on Disability in Kenya is to "ensure that all disabled people are able to participate in mainstream contemporary society, by providing adequate services" (Ministry of Health 2012). In order for people with physical impairments to participate in the main-stream economy, adequate services such as those mentioned above needs to be met.

Rising to the challenge of providing excellent and accessible health care to persons with impairments is imperative as a matter of equity. This study hopefully will motivate health professionals to go beyond the minimum requirements set by law in order to make facilities and services usable to the physically impaired patient as much as possible. By meeting the needs of people with physical impairments, one will also be providing enhanced facilities and services to other health consumers because people with impairments are frequent users of health care services and will provide a good measure of the overall performance of the health care system.

REFERENCES

- Anthony, W., Cohen, M., Farkas, M., & Gagne, C. (2002). *Psychiatric Rehabilitation* (2nd ed.). Center for Psychiatric rehabilitation, Boston University.
- Arcury Presser, T. J., Gessler, W., & Powers, J. (2005). Access to transportation and health care utilisation in a rural region. *The Journal of Rural Health, 27*(1), S1-38.
- Babbie, E., & Mouton, J. (2001). *The practice of social research*. Oxford University Press.
- Bailey, E. J. (1987). Socio-cultural factors and health care-seeking behaviour among black Americans. *Journal of the National Medical Association, 79*(4)
- Becker, H., Stuifbergen, A., & Tinkle, M. (1997). Reproductive health care experiences of women with physical disabilities: a qualitative study. *Arch Phys Med Rehabilitation, 78*, 33.
- Bell, R., & lithindi, T. (2002). Improving equity in the provision of primary health care: lessons from decentralised planning and management in Namibia, *Pub Med Central 50*(8), 675-681.
- Bender, D. R. (1967). A Refinement of the Concept of Household: Families, Co-residence, and Domestic Functions. *American Anthropologist, 69*(5), 493-504. doi: 10.1525/aa.1967.69.5.02a00050
- Brems, C., Johnson, T., Warner, & Roberts, L. (2006). Barriers to healthcare as reported by rural and urban interprofessional providers. *Journal of Interprofessional Care, 20*(2), 105-118.
- Caldwell, J. (2008). Access to Health Care of Female Family Caregivers of Adults with Developmental Disabilities. *Journal for Disability Policy Studies, 19*(2), 68-79.
- Carrillo, E.J. (2005, August 2). *Barriers to Health Care Access in the Latino Community: Communication, Satisfaction and Adherence*. Power point Presentation, NewYork: Montefiore Medical Center.
- Central Bureau of Statistics. (2008). *A Review of Poverty and Inequality in Namibia* (p.99). Windhoek Namibia: National Planning Commission.
- Chipp, C., Dewane, S., Brems, C., Johnson, M., Warner, T. D., & Roberts, L. W. (2010). "If only Someone Had Told Me..." Lessons from Rural Providers, *27*(1), 122-130. doi:10.1111/j.l748-0361.2010.00314.x
- Choruma, T. (2007). *The forgotten tribe: people with disabilities in Zimbabwe*. London: Progressio. Retrieved from www.progressio.org.uk
- De Vos, A., Strydom, H., Fouche, C., & Delport, R. (2005). *Research at Grass Roots*. Pretoria: Van Schaik Publishers.
- Donabedian, A. (1990). The seven pillars of quality. *PubMed, 114*(11)1115-8.
- Drainoni, M., Lee Hood, E., Tobias, C., Bachman, S. S., Andrew, J., & Maisels, L. (2006). Cross-Disability Experiences of Barriers to Health-Care Access: Consumer Perspectives. *Journal of Disability Policy Studies, 77*(2), 101-115.
- Ensor, T., & Cooper, S. (2004). Overcoming barriers to health service access: influencing the demand side. *Health Policy and Planning, 19*(2), 69-79. doi:10.1093/heapol/czh009
- Etowa, J., Keddy, B., Egbeyemi, J., & Eghan, F. (2007a). Depression: The "invisible grey fog" influencing the midlife health of African Canadian women. *International Journal of Mental Health Nursing, 26*(3), 203-217. doi:10.1111/j.l447-0349.2007.00469.x
- Etowa, J., Wiens, J., Bernard, W., & Clow, B. (2007b). Determinants of black women's health in rural and remote communities. *Canadian Journal of Nursing Research, 39*(3), 56-76.
- Fiedler, J. L. (1981) VA review of the literature on access and utilization of medical care with special emphasis on rural primary care. *Social Science and Medicine, 15*(3), 129-142.