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Enhancing Health-Seeking Behavior: A Case of Khwisero Sub-County, Kakamega County, Kenya

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Abstract

According to World Health Organization, the ultimate goal of Primary Health Care is better health for all. Appropriate health seeking behavior and public health intervention can be achieved through functional health care systems. Community utilization of health facilities can be influenced by the cost of services, distance to health facilities, cultural beliefs, level of education and health facility inadequacies. Mwihila Mission Hospital in Khwisero Sub-County, Kakamega County was established in 1955 as a referral hospital and run by missionaries. Due to mismanagement, lack of funding and supplies, there was deterioration of service provision. The hospital collapsed in 2008 thus diminishing the opportunity for better health within the community. The purpose of this article is to illustrate how organizational development theory and participatory action research were used to enhance health seeking behavior and improving public health intervention in Khwisero Sub-County through rehabilitation and revival of Mwihila Mission Hospital thus, improving health outcomes between 2013 and 2018. At the start of the program, data was gathered and preliminary diagnosis of challenges they faced in utilizing health facilities established. Key informant interviews and focus group discussions were used to facilitate the mutual participation in rehabilitation and renovation of the hospital. Illiteracy, poverty, under funding of the health sector, inadequate water and poor sanitation had a big impact on health indicators in the community. These results were used in a program for joint action planning and executing behavioural changes within the hospital management and community organization. Major adjustments and re-evaluations returned the organizational development process to the first or planning stage for basic changes in the program. Organizational development (OD) theory and participatory action research (PAR) process had a positive effect on health seeking behaviour. In conclusion, PAR is essential in the hospital - community relationship. Skills such as self-awareness have the potential to nurture the development of primary health care workers and health seeking behavior. PAR should therefore be applied in enhancing health seeking behavior and improving primary care, and as such, play a role in achieving Universal Health Care.

Keywords: Challenges, Health Facilities, Health Seeking Behavior, Rural Community

INTRODUCTION

According to World Health Organization (WHO), half of the world's population still do not have full coverage of essential health services and bout 100 million people are still being pushed into "extreme poverty" (living on 1.90 USD or less a day) because they have to pay for health care while over 800 million

people (almost 12% of the world's population) spent at least 10% of their household budgets to pay for health care (WHO, 2017; World Bank, 2017). United Nations member states agreed to aim at achieving Universal Health Coverage by 2030 through ensuring healthy lives and promoting the well-being of all at all ages. This involves financial risk protection, access to quality essential health-care services and access to safe, effective, quality and affordable essential medicines and vaccines for all (WHO, 2017).

The goal of SDG 3 is to ensure healthy lives and promote well-being for all at all ages. Kenya through vision 2030 has established an enabling framework for promoting sustainable development by fitting SDG 3 within the national and county development contexts. This can be achieved through the participation of grassroots communities, development partners, private sector, and the scientific and technological community (ICHR Kenya, Ministry of Health & KNBS, 2015).

Kakamega County is dedicated to addressing the diverse health needs of nearly 2 million people (Ministry of Health, 2015). Despite these efforts, progress is uneven within the county due to challenges of having 7 doctors, 22 clinical officers and 48 nurses per 100,000 population (Ministry of Health, 2015). For instance, in 2015 about 38% of county residents had malaria, 53% of babies were not born at health facilities, making it more difficult to track maternal and child health needs and more than one-third of children aged between 12–23 months were not fully immunized thus complicating the health needs of their families and communities (Palladium, 2015). The estimated Human Immunodeficiency Virus (HIV) prevalence rate among adults was 12% in 2015 (Kenya Ministry of Health, 2016).

The most prevalent diseases in the County are malaria, diarrhea, skin diseases and respiratory tract infections. This is attributed to poverty with 57% of people in Kakamega County living in poverty (WHO, 2014). According to WHO (2014), there is a rise in non-communicable diseases (NCDs). NCDs account for 27% of deaths suffered by Kenyans aged between 30 and 70 years, curtailing economic growth and trapping the poorest people in chronic poverty while the probability of dying too young from an NCD in Kenya is 18%. NCDs contribute to over 50% of inpatient admissions and 40% of hospital deaths (Shi, 2015). Nearly three-quarters of all NCD deaths worldwide take place in low- and middle-income countries. Being diagnosed with an NCD often means years of poor health and disability, making NCDs a factor in 30.2% of all disability-adjusted life years in Kenya (WHO, 2014).

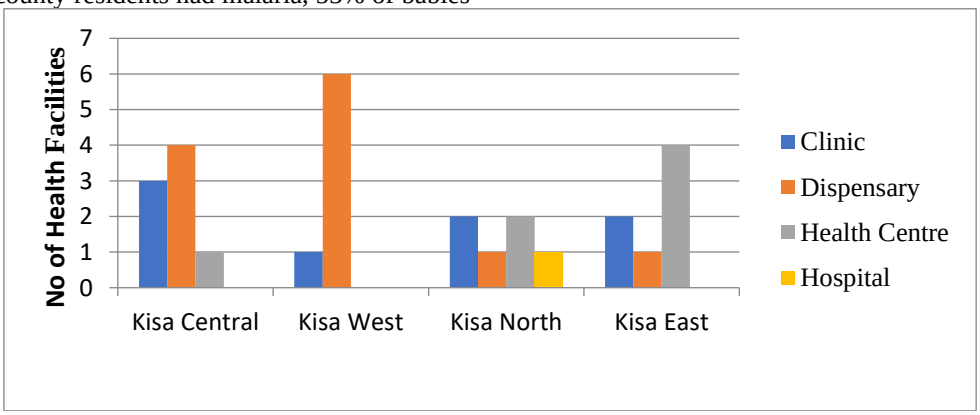

Figure 1: Health facilities in Khwisero Sub-County
Data Source: kmhfl.health.go.ke 2018.

A dispensary has an out-patient clinic while a health center has an out-patient clinic, laboratory for basic tests, pharmacy and a maternity ward. In addition to services in a health centre, a hospital has an X-ray department and an operating theatre.

Khwisero Sub-County had private clinics run by clinical officers or enrolled nurses, dispensaries managed by enrolled nurses, health centers managed by clinical officers and one faith based hospital that was not operational in 2012 (Fig 1). The inadequacy and inequitable distribution of these facilities across the Sub-County led to the community being disadvantaged in terms of provision of health services. Kuuire *et al*. (2015) asserts that renovation and equipping hospitals, public health campaigns and expanding health coverage can increase access to health services and improve the community's health seeking behavior as was observed in Ghana.

A program was therefore designed to enhance health seeking behavior in Khwisero Sub-County. This was done in collaboration with the community and implemented. The program sought to change health seeking behavior, preserve the resource base and develop an effective and sustainable framework for interaction between stakeholders who included researchers, missionaries, community health units, Ministry of Health, Kakamega County Government and the National Hospital Insurance Fund (NHIF).

METHODOLOGY

The study site was Khwisero Sub-County in Kakamega County, Kenya. The Sub-County is approximately 145.6 square kilometers with a population of approximately 102635. It is a rural Sub-County made up of four administrative units, which are Kisa Central, Kisa East, Kisa West and Kisa North (Ministry of Health, 2015).

This was a combination of PAR and implementation of OD theory. Both quantitative and qualitative modes of inquiry were used in the study. A combination of participatory action research and organizational development theory were used to design health interventions and enhance health-seeking behavior. The program begun in 2012 and continues to-date.

"Participatory Action Research (PAR) is jointly producing knowledge with others to produce critical interpretations that are accessible, understandable to all those involved and actionable" (Chatterton *et al*., 2007). It is a spiral of reflective cycles of planning a change, acting and observing the process and consequences, reflecting on these processes and consequences and then re-planning. This was a collaborative and participatory process that involved surveys, focus group discussions, key informant interviews, multi-stakeholder meetings, participatory inquiry, and action research (Kindon *et al.*, 2007). PAR emphasizes social change to solve practical problems (Dickens & Watkins, 1999). PAR allowed the community to benefit from expert knowledge and services and community input thus solving problems that arise from poor health seeking behavior with positive impact on the health of the community.

Organizational Development (OD) theory originally developed by Kurt Lewin was applied to expand the knowledge and effectiveness of the community to accomplish change in health seeking behavior. It involved a process of continuous diagnosis of health problems and challenges faced by the community, developing strategic interventions for addressing the diagnosed problems, implementing the interventions and cultivating commitment to seeking health services when need arises, and assessing the planned change efforts by tracking the community's progress in implementing the change and by documenting its impact on the community. The goal was to transfer knowledge and skills to the community so as to improve their capacity for achieving Universal Health Care (Glanz *et al*., 2015).

Interview schedules were used at baseline. Four focus group discussions of 12 participants each from community health units were held in each administrative unit. Trained research assistants who were fluent in English and the local dialect and well versed with culture and Geography of the region were involved. This was to gather information regarding quality of life, availability and accessibility of health services, knowledge on diseases, perception and practices of health seeking behavior. Key informants who included 1 Sub-County health officer, 4 enrolled nurses, and a faith based management board were also interviewed to establish challenges and opportunities encountered in providing health services. Mixed methods of data collection were for validating the gathered information. Data collection occurred between January 2012 and April 2018. Qualitative data analysis was used in the study.

RESULTS AND DISCUSSION

Information sought during the interviews in 2012 included, household socio-economic status, knowledge and perception towards diseases afflicting the community, available health facilities and services, accessibility of health facilities, and health seeking behavior. From the interviews, household were large and classified as low income with an acreage of land that ranged between 0.5 to 3 acres where food crops were grown and animals reared. Cultural traditions led to repeated subdivision which left individual households with small parcel. Crop yields were low due to inadequate use of farm inputs. This did compromise food security and quality of life. Most household heads had formal education up-to secondary school level. The community members had knowledge of health facilities and community health units within their administrative units. However, they rarely sought services from the health facilities because they could not afford the cost charged at the facilities; government owned facilities often ran out of drugs; the facilities did not work late into the night; and most of the facilities were managed by enrolled nurses and not doctors. Some found the distance to the facilities a hindrance. They opted for self-medication which was cheaper and easy to access over the counter at the local chemist. Some sought alternative care from herbalists. Traditional birth attendants were more accessible and cheaper than the health facilities. According to Musoke *et al.* (2014), poor people are less likely to seek treatment in health facilities, but visit herbalists as an alternative. Kuuire *et al*. (2015) and Glanz *et al*. (2015) found that high poverty levels, presence of Community Health Workers and local chemists were a hindrance to seeking treatment at health facilities. On the other hand, the higher the level of education, the greater the awareness of need for professional health services (Musoke *et al*., 2014). There was also a preference for health centres over dispensaries. Knowledge and symptoms of diseases also enhanced health seeking behavior and improved health outcomes (Abubakar *et al*., 2013).

The health professionals in the health facilities at the time faced several challenges which included, low numbers of clients accessing services, running out of medical supplies, under-staffing, and lack of an ambulance for referral of patients with medical complications. Besides, the referral facilities were far away. Cost of services offered, long distance, inadequate supplies and distribution of health facilities led to low utilization of health services. This concurs with findings by Abubakar *et al*. (2013), Musoke *et al*. (2014), WHO (2017) and World Bank (2017). One enrolled nurse said:

"If only Mwihila hospital was operational the way it used to be, we wouldn't worry about referral cases. But since it went under, the people in this community are suffering. When you refer a patient to St. Mary's Mission hospital in Mumias or to Kakamega level five hospital, they have to find their own means of transport. They would be forced to use public transport, which is slow or even motor cycles to reach the hospital.

Given the poverty levels here, some resort to take patients back home"

Plate 1: State of Mwihila Mission Hospital in 2012.

By 2011, there were 8 community health units in the Sub-County (Fig 2). The community health workers faced challenges in the course of duty too. Given that they were volunteers, they were not appreciated as the community members did not consider them as knowledgeable in terms of providing Primary Health Care. They had to travel long distances to attend to clients in remote areas. They were equipped with malaria test kits and would refer ill patients to health facilities. But those found positive and with fever, preferred to buy pain killers from the local chemist and only sought further help when they experienced health complications due to delayed treatment. Besides providing health education, community members failed to apply the knowledge taught. Similar findings were recorded by Musoke *et al.* (2014). Contrary to the nationwide campaign to enroll with NHIF which requires payment of Ksh 500 per month and subsidized cost for health services, majority of the members of the community failed to enroll. They considered it an unnecessary expense.

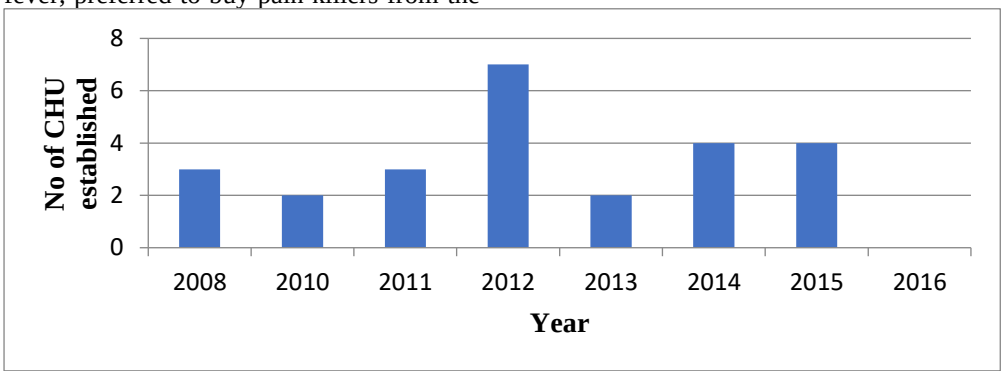

Figure 2: Community Health Units.
Data Source: kmhfl.health.go.ke 2018.

Initiating Mwihila Mission Hospital Renovation

Kuuire *et al.* (2015) ascertain that health seeking behavior is a function of enabling factors and predisposing factors and a need.

Enabling factors include the means available to utilize health services, predisposing factors describe the tendencies to utilize services while the need which is the nature of illness, initiates the actual utilization of health services. These were factors that were identified during the interviews. Given there was a collapsed hospital with potential to meet part of the needs of the community, a program was designed to get the hospital functional again. This begun by having informal and formal multi-stakeholder meetings to plan and implement an intervention (Plate 2). The stakeholders included a faith-based board of directors, County Officers, Sub-County health workers, Community Health Units, missionaries and the community.

Plate 2: Multi-Stakeholder meetings. Photos taken in March 2012.

Participatory inquiry led to establishing the organizational climate and organizational culture within the community. The church board of directors resolved to involve other stakeholders in renovating the hospital and making it functional. The health professionals prepared a detailed list of equipment and personnel required to have the hospital functional. The missionaries resolved to raise funds and provide labour for renovation of the buildings. The county government offered health workers who were seconded to the hospital for service provision. Community health workers mobilized community members for medical camps and health education seminars. The community offered labour for renovation of the hospital. A five year strategic plan was therefore designed to have all stakeholders participate in the program. The whole program was scheduled to be implemented in five phases with each phase monitored and evaluated as it progressed. The first activities in the program were, renovation and free medical camps to sensitize the community on prevention and treatment of various diseases (Plate 3 & 4). Services offered during medical camps included eye care services, minor ailment treatment, screening for cervical cancer, HIV testing and counseling, screening for jigger and treatment, screening for tuberculosis, antenatal care, family planning, immunization, deworming, diabetes screening, hypertension screening and treatment, malaria treatment, typhoid treatment as well as health education and

promotion activities. The medical camps also improved the communities perception towards community health workers. The number of community health units increased from seven in 2012 to fifteen in 2015 (fig 2). Kuuire *et al*. (2015) and Tadesse & Bardill (2013) assert that individual agency and collective action can improve health conditions and disease patterns even in the face of macro-level economic and socio-political structures and environmental structures that can constrain local action.

Plate 3: Renovation of Buildings and Medical Camps. Photos taken in August 2012

Plate 4: Two buildings completely renovated and equipped. Photo taken in December 2012.

The two renovated buildings housed the outpatient clinic, well-equipped laboratory, fully stocked pharmacy and an antenatal clinic. The health workers seconded by the county government to the hospital included a clinical officer, a laboratory technician, two nurses and a pharmacist. The County Government Hospital repaired two refrigerators with one stationed in the pharmacy while another was stationed in the laboratory. With sensitization and health education, the community members begun using the facility. Dispensaries in Khwisero Sub-County also had a facility to refer patients for specialized laboratory tests and drugs. This improved health service provision within the community since 2013 (Table 1). Combining the strengths of researchers, administration and communities creates effective interventions.

Table 1: Activities accomplished by the program

Activity \ Year	2012	2013	2014	2015	2016	2017
Annual medical camps	√	√	√	√	√	√
Reconnection of electricity	√					
Repair of old truck ambulance	√					
Outpatient clinic	√	√				
Laboratory equipment		√				
Radiology equipment		√				
Restored running water		√				
Theatre Equipment			√			
Kitchen remodeling			√			
Wards with beds		√	√	√		
Clinical Officer and nurses	√			√		
Residential Medical Officer					√	
Support staff	√			√		
Radiology Technician			√			
General Surgeon						√
New Ambulance				√		
Renovation of buildings	√	√	√	√		
Functional X-ray Department			√			
Dental equipment			√			
Ophthalmology Equipment			√			
NHIF Accreditation				√		

Further renovation of buildings and purchase of equipment were done to enable provision of more services (Table 1 & Plate 4). There was an increased number of workforces seconded by the county government and employed by the faith based organization. These included 1 hospital administrator, 2 midwives, 2 nursing officers, 2 registered community health nurses, 1 cateress, 1 laundry attendant, 3 patient aides, 2 grounds men, 1 driver and 1 security officer. This enhanced service provision for the community as asserted by Kuuire *et al.* (2015).

Plate 5: Better equipment at the Hospital received by Church and community. Photos taken on 13th March 2014.

Services Offered at the Hospital

The hospital management board entered into a partnership with Port Florence Community Hospitals to manage the daily operations of the hospital. The in-patient services have seen a steady rise in the number of patients to average daily census (ADC) of 25. During the nurses' strike in Kenya which hampered services in public health facilities in 2017, the numbers rose to 50 patients. From the hospital records main diseases treated include malaria, typhoid fever, pneumonia, sickle cell crisis, asthma, diabetes mellitus, hypertension, under-nutrition, diarrhea and orthopedic problems. The minor and major theatres were operational with the first surgery performed in February 2018.

Maternity and maternal child health (MCH) services were high with a daily average of 20 patients. There is an antenatal clinic, labour ward and postnatal ward. Immunization of children also increased. Laboratory tests that were provided included blood widal, blood V.D.R.L, pregnancy, urinalysis, blood sugar, blood tuberculosis, sputum AAFB, blood brucellosis, stool culture, complete blood count, glycohemoglobin, partial thromboplastin time, lipid profile, urea electrolytes and creatinine. Some of these were services are not available in dispensaries and health centres. The hospital therefore provided services that made appropriate diagnosis possible and thus appropriate treatment and management. There was also a rise in referral cases for X-ray services from other health facilities in the Sub-County.

Despite the achievements made at the hospital, certain services were not yet offered even though equipment were available. These included ultra sound, dental surgery and ophthalmology. The hospital engaged consultants who provided services on voluntary services on specific days of the week (Plate 6). These consultants were from the community but work in different urban areas.

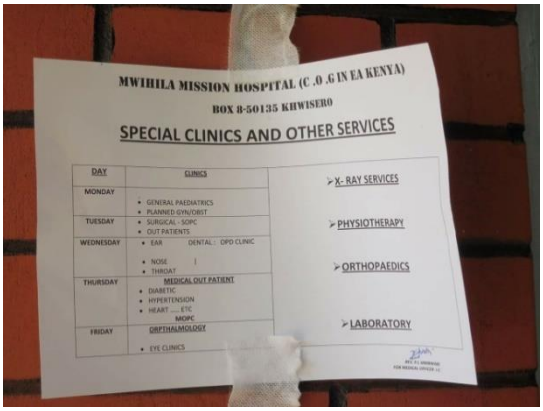

Plate 6: Notice of services offered by medical consultants.

CONCLUSIONS

The renovation of the only hospital in Khwisero Sub-County contributed towards promoting the sustainable development goal 3. The community was able to get help from well-trained health workers, treatment that improved health outcomes, medicine and other products needed and could use their NHIF cards. The community had therefore received in part services that they needed without financial overspending in terms of seeking hospital services that are far away.

While the community had a negative attitude towards the faith based hospital, their perception changed since they gained ownership of the process. This was evidenced through mobilization for medical camps and participation in community health units. Previous mistrust among stakeholders waned making service provision better and enhancing health seeking behavior. The hospital thus has great potential to serve the community in Khwisero Sub-County and its environs.

RECOMMENDATIONS

A lot more work needs to be done to improve the type of health services needed in the community. This can be achieved through increased financing, increased regular staff and adequate and efficient health services. There is need to have regular and more experts at the hospital. Patients visiting the same practitioner will have better monitoring and medical evaluation. This will enhance health seeking behavior.

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