Chapter

Perspective Chapter: Health Facilities and Services in Rural Sierra Leone – Implication for Longevity and Well Being of Her Citizenry

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Abstract

Sierra Leoneans face multiple barriers to accessing health facilities and services in rural communities leading to morbidity and mortality. The objective of this paper is to identify some of these challenges and proffer possible solutions to mitigate morbidity and mortality in rural communities and prolong the lives of their citizenry. The lack of money, the use of cheaper traditional medicines versus expensive medicines at health centers, lack of confidence in health workers, and transportation access to reach health facilities are barriers to accessing health facilities and services by rural community people. The above barriers outline was obtained through thirty years of interaction, discussion, and observations with people and health workers in rural communities. Possible solutions include the provision of free health care, ambulances to ease transportation, the integration of traditional medicine into the national health system, and the encouragement of rural community people to engage in multiple cropping every year. The above solutions and many others will encourage the citizenry in rural communities to attend health facilities and services in the country's rural towns and villages.

Keywords: rural, health, well-being, citizenry, long-life

1. Introduction

Sierra Leone had limited health facilities in rural communities before the rebel war in 1991. This was partly due to low health expenditures by the government due to the reduced tax collection base of the country. In 2001, the African government agreed to allocate 15% of its annual income to health known as the Abuja declaration [1]. However, most countries have not achieved this African objective due to low gross domestic product, low tax collection, and low budget allocation to the health sector as a result of many competing priorities [2]. However, health requires intensive capital

investment, as it increases labor efficiency and productivity, increases income, and improves the standard of living of her citizenry [3]. Current health expenditure by the government of Sierra Leone in 2019 was 8.75%, and out-of-pocket expenditure was US$25.47 [4]. This is far well below the WHO recommended US 30–40 per person needed to cover essential health care in low-income countries [5]. Low-income countries currently spend US$8.00–US$129 per capita compared to US$4000.00 for high-income countries However, many countries in Africa have not been able to meet the Abuja declaration, except Botswana, Rwanda, and Zambia [6], while Equatorial guinea who has not achieved toe the Abuja declaration, but has high health per capita [7].

Rural communities' health infrastructures were destroyed, and only 86% of district headquarters health facilities remained functional during the eleven-year-old civil war. In 2003, the government rehabilitated and made 631 available peripheral health units (PHU) across the country [8]. Most communities' peripheral health facilities were 5 miles apart, so distance will not limit people from seeking medical attention. However, the major bottleneck is the need for more trained and qualified health personnel to operate these health facilities in rural communities. United Nations reported that only 38% of nurses and 25% of medical doctors work in health facilities in rural communities [9]. Five of the fourteen districts lacked access to primary health services after the civil war. The government reintegrated ex-combatants who were treating rebels and civilians as vaccinators. The strategy increased the number of health workforce but limited progress in the health sector due to a need for a clear political vision. Despite this improvement in the country's health facilities, most of the population residing in rural communities could not afford the cost, which also contributed to the high maternal mortality rate of 1800/100,000 in 2002 [8].

In 2010, the government introduced free healthcare to increase access to health facilities and services for pregnant and breastfeeding women and young children [10]; at this time, most births in rural communities were done by traditional birth attendants. The government engaged conventional birth attendants and trained them to work with health workers, thereby increasing attendance at health facilities. By-laws were formulated to discourage home birth but to encourage the use of health facilities. The objective was to reduce maternal morbidity and mortality [11].

Free health care and funding performance-based increased coordination in the health system and brought a paradigm shift in the health sector in the country [12]. The government also introduced performance-based financing as a way of motivating health workers. Compounding the situation further was the high death rate of health personnel, which eroded patients' convenience in attending these facilities and accessing the service [13, 14].

In July 2015, the President of Sierra Leone launched the Ebola Health Recovery Plan to attain a resilient sustainable health system to reduce maternal and child mortality and morbidity [4]. However, the presidential recovery initiative was for 24 months, with a critical focus on IDSR, strengthening IPC, Community engagement, enhancing Human Resources for Health, and Improving Management for Health and a Resilient Health System. The government needed help translating this novel initiative into an effective maternal health system. It was, therefore, the plan of the Ministry of Health and Sanitation to design an appropriate and effective program that is economically, socially, and culturally acceptable to the rural population of Sierra Leone.

The WHO designed the External Joint Evaluation to address the health challenges and build a sustainable, resilient health system to reduce maternal morbidity and mortality. Moreover, the Ministry of Health and Sanitation, with international partners and the One Health secretariat, prioritizes zoonotic diseases to improve the health situation in the country. Aside from these strides, people in rural communities face numerous challenges in accessing these health facilities and services.

2. Challenges and constraints in accessing health facilities and services in rural communities

The primary source of income in rural communities is agriculture and mining contributing to employment and gross domestic product [15, 16]. In time past, people in rural communities were engaged in all-year-round income generation. They harvest and sell coffee, cocoa, and piassava from October to January in the southern and eastern provinces. Ginger was harvested and sold from January to march, orange from February to May, and rice was harvested from June to November. Other assorted crops planted and sold include cassava, benne, yam, groundnut, maize, millet, sweet potato, and other multiple crops cultivated on the rice farm [17]. During the dry season in some communities, there are several water catchments and rivers where the women fish and prepare dishes for the evening meals. The men set traps, hunt animals for home consumption, and sell some for emergencies. All these multiple sources of income make it possible for people in rural communities to easily pay medical bills.

Today, massive destruction of the environment through lumbering, charcoal burning, and mining has destroyed the farming environment in rural communities [18] reported that human activities in the environment in which they live have shown a negative impact on the forest ecology in the last 2800 years. Morie Sam [19] confirmed for Sierra Leone that people depend on forest vegetation as a major source of energy. Soils are no longer fertile, yields are low, and the current population is unwilling to farm. Sam and Zhiqiang [20] said, removing the vegetation cover of the forest decreases the forest and soil stability and biosphere and thus impacts the normal environment. Moreover, the massive destruction of the environment has drastically reduced the income of people in rural communities [21]; as such, the majority can no longer afford to pay for basic essential commodities and services. What are the Challenges and constraints of accessing health facilities and services in rural communities?

i. **Lack of money:** most rural people have narrowed their income sources to single or sole cropping or few activities. IFAD [22] reported that the yields of all major crops cultivated in Sierra Leone are significantly lower than most countries in the subregion of West Africa. The government of Sierra Leone estimated that rice yields are 0.97 t/ha far below other countries in the region. The Government attributes the low yields to the unavailability of improved seeds, lack of access to fertilizers, mechanization, crop protection products, weak extension services, and water control in lowlands [22]. Other contributing factors in rural communities are deforestation and charcoal burning, leading to the reduced organic matter in the soil, low fertility, and crop yield, which cannot meet their daily household or domestic needs. About two-thirds of people in rural communities now grow multiple crops to mitigate against crop failure and reduce the risk of cash income failure [23, 24]. Animal rearing is another source of income, but its compounded with numerous disease

outbreaks such as PPR, New Castle Disease, Rift valley fever, rabies, and theft. Most animal rearers drop out of animal rearing which decreases their sources of income. The average Sierra Leonean earns less than 1.90 dollars daily. This has led to many deaths and others being unable to access these medical facilities and services.

The lack of money to pay for consultancy services and transportation to reach these facilities has led to the situation where most pregnant women give birth at home. At the same time, others die on the way to these facilities on foot or bikes.

Sometimes, family members are taxed to contribute and pay the medical expenses before a person goes to these facilities. Some members find it challenging to raise their contributions leading to delay or death of the patient.

ii. **Traditional medicine is cheaper than health facilities**: the extended family systems throughout Sierra Leone make information easily accessible to people within their communities. Most people know about traditional herbalists living within their communities, and in some cases, they relate to each other. They see the herbalist and have confidence in them based on their records because it is embedded in their traditions and customs [25]. Payment for such services is based on kinship, which is cheaper and can be paid for when money is available. In some cases, payment is in kind or other forms, making it easier for people to seek medication from an herbalist than from health facilities. Most rural people prefer to give birth through traditional attendants than health facilities because it is relatively cheaper than modern medicine [26].

iii. **Lack of confidence in health workers:** the Ebola outbreak showcased people's unwillingness to attend health facilities in the country for fear of death or contracting Ebola. The government announced that there was no medicine to treat the disease, but at the same time asked people to go to these health facilities for treatment. Tiffany et al. [27], and Sabeti and Salahi [28] reported that the Ebola Virus Disease outbreak in Sierra Leone was fueled by persistent misinformation and conspiracy theories that led to the public health disaster. Most of the people who attended did not return home; as such, people were afraid to seek medical attention through these health facilities; many healthcare workers died, thereby making people run away from these facilities. Sochas et al. [29], and Elston et al. [30] reported that many healthcare staff died, leading to patients' lack of confidence in the healthcare services.

iv. **Lack of medication:** most health facilities in rural communities depend on medicine supplied by the government. People in rural communities cannot afford the cost of these drugs and therefore take to traditional medications. The inability of rural communities to pay for these drugs has caused most pharmacy shelves to go without essential medicines, as reported when Partners in Health entered Koidu health center in 2014. Patients look for places where they can get cheap drugs. A typical example is the traditional birth attendants. These local people get more delivery of babies than the nurses in the health centers because of the cheap cost of delivery services offered to their subjects. The government has to encourage them to work with health facility workers, where they can receive more training to meet international standards.

v. **Lack of transportation fees for vehicles and bikes:** most rural towns and villages in the country are not accessible either by cars, vehicles, or in some cases, motorbikes [31]. Some people trek on foot to access health services in those facilities. Families who lost their strong and abled-bodied relatives during the war stayed in the villages with no one to take them to the medical facilities. Some with strong relatives have to travel with them on a hammock, while others die on the way. With the advent of motorbikes, traveling to health centers has become much easier, as these bikes move faster on bad roads, thereby reducing transportation constraints in rural communities. The disadvantage is the high cost which most people cannot afford in rural communities. The same is true of the ambulance government has introduced in the country.

   Due to the challenging economic status of people in rural communities, providing funds to make use of ambulance services even when available is a major issue. The people not only resort to risky alternatives but also seek spiritual help from traditional herbalists or religious sources. A typical example is in Lumponga village located in Kamajei chiefdom, Moyamba district, the southern province, where a lady suffered for three days before giving birth because of financial constraints. The people have to seek the attention of church members for prayers until the lady gave birth to a bouncing baby boy three days later. So, although the government has provided ambulances, many people, especially in rural communities cannot use them. Alternatively, they also seek the help of traditional herbalists. This is one factor that has increased the use of conventional medicine in these communities.

vi. **Decision-making** as to who should allow the patient to travel: in rural communities of Sierra Leone, the male is the head of the family household. The family head takes all decisions relating to the family. In his absence, all family members will have to wait until the head returns. Aside from being the head of the family, certain decisions require all family members to be present, particularly when it relates to a family member's health. These consultations and waiting for the head to decide denied most people in rural areas access to health facilities. The situation is compounded when the total financial involvement is high. Here the head will tax all members a certain amount of money for them to pay. The amount charged depends not on the amount people get but on what the leader has proposed. In some cases, other family members cannot afford it, leading to the patient's death. As a result, the patient remains suffering for a long time.

vii. **Traditions and customs:** the tradition of some societies limits people from accessing healthcare facilities and services. A named church does not allow its member to go to hospitals when they fall sick. When people in rural communities who are holding high-ranking positions in secret societies fall sick, they are usually taken to their secret society bushes or shrines, where they perform traditional ceremonies on the person. In most cases, the person dies. Such traditional customs refuse their people access to health facilities and services. Some secret societies deny their members access to medical facilities when they fall sick.

viii. **Altitude of health workers:** the attendance at health facilities by rural community people is heavily dependent on the altitude of the health workers.

Some health personnel have good interpersonal relationship with patients, and this encourages patients to attend such health facilities. The patient in such a community informs others of the good attitude of the health staff. The health worker, in turn, receives gifts from the community, such as rice, chickens, fish, yam, palm oil, or whatever agricultural commodity they have. In some cases, because of the bond, rural community people who do not have money pay in kind, and the health worker sells the items received into money, thus increasing access to health facilities and services.

On the other hand, where health workers' relationship with community people is poor, the rural community people run away from these facilities and rely on traditional herbalists for treatment.

ix. **Case study**: during the Ebola outbreak, most sick people ran away from hospitals and medical facilities around the country because the government announced that there were no drugs to cure Ebola. People suspected of or infected with Ebola refused to attend health facilities but instead went to nurses. They had good relationships. My daughter was one such person who received many patients due to her relationship with the communities she worked. In the end, she, too, contracts the virus and dies.

Rural community people believe in friendship and encourage health professional who loves, promotes, and empathizes with their situation.

x. **Lack of bye-laws:** these are effective constitutional instruments, if judiciously used, can increase attendance in rural health facilities. During the Ebola outbreak, all the paramount chiefs formulated by-laws and circulated them in their respective chiefdoms. These were later digested by the chiefdom authorities and became chiefdom by-laws. It was fully implemented, which helped reduce the epidemic in those communities where it was enforced.

In some communities during the Ebola outbreak, people were asked to report to the hospital if they fell sick. Fines were levied against those who refused to report to health facilities.

xi. **Technical and social infrastructure:** the type of health infrastructure built in the rural areas will attract both technical staff and patients to access the facilities. Medical doctors and other highly trained personnel will stay in rural communities if they have the equipment to work with. Many people would like to stay in rural areas if provided with the necessary infrastructure. Such facilities include hospital services, preventive care, and emergency services. At Njala University hospital, a medical doctor resigned because there was no theater to conduct operations on patients.

3. How do we make people in rural communities attend health facilities and access services to prolong their lives

In many low-income countries, several factors prevent people from equal access from attending health facilities which leads to morbidity and mortality. Particularly so in rural communities [32]. Sierra Leone is one such country where medical bills are

paid by the individual, lack of skilled medical staff, and services provided are poor and not to the satisfaction of the patient [33]. Compounding the situation further is the concentration of more than half of the medical staff concentration in the capital city leaving the majority of communities at the mercy of mother nature [34]. The government increased access to health facilities by introducing free health care in 2010 to reduce maternal and neonatal mortality by waiving all medical fees for pregnant and breastfeeding women, children under the age of five years, and those who survived the Ebola pandemic. st as a means of reducing [35].

Another method used to increase access to health facilities was the introduction of the ambulance system known as the National Emergency Service. The government aimed to provide a free-of-charge ambulance service coordinated by a center in all 14 districts [36].

Other strategies used to increase attendance or access to health facilities and services include:

3.1 Encourage rural community people to cultivate multiple crops

In Sierra Leone, multiple crops include rice intercropped with cassava, yam, beans, millet, sorghum, benni, garden eggs, bitter balls, pepper, egusi, cucumber, and maize. After harvest, the farmer will sell some of these crops and use the money for multiple purposes including accessing health facilities and services. Planting multiple crops will militate against crop failure. In Sierra Leone, two-thirds of household families cultivate 12 different types of crops on 2 acres of land [37]. Household plan against food security strategy to prevent crop failure and reduces the risk of income shortage over cash income. An increase in crop production will lead to surplus, and excess crops produced will be sold to earn additional income which they will use to pay for medical bills when they attend health facilities, settle domestic issues and emergencies relating to initiation into secret societies, naming ceremonies, school fees, and unresolved problems within the families or neighbors [38]. The lack of income will prevent many people from accessing health facilities and services thereby leading to increased morbidity and mortality.

3.2 Cultivation of permanent crops

Cultivation of permanent crops such as coffee, cacao, cashew, organ, palm trees, rubber plantation, coconut, guava, kola trees, banana, and plantain. These crops were grown by our rural people for development such as the construction of dwelling houses, payment of school fees, initiation into secret societies, hiring of farm labor, settling bush conflicts, and emergencies such as payment for medical bills. Illnesses that require emergency operations cannot be settled with income from rice farming. These permanent crops were like savings banks and have been used for centuries. Today, the young generation does not grow crops but harvests what their parents have grown, and the yield of crops has drastically reduced. This has led to a shortage of income within the families and hence unable access health facilities. Tree crops currently employ 100,000 rural cacao producers in the country [39] with a total acreage of 235,749 ha, with Kailahun cultivating 114.125 ha, Kenema 58,086 ha, Kono 43,23 ha and Bo district 11,715 ha respectively [39]. This has forced the Government of Sierra Leone to develop long-term planning for expansion, modernization, and improved management to increase income and enhance [40].

3.3 Rotational sources of income

As time passed, rural community farmers had all-year-round income from their farming activities in Sierra Leone. They will plan at the end of the year what they intend to achieve the following year. The plan is based on the income they receive from various crops, animals, or activities they undertake as a family.

3.4 Case study

In the South and Eastern provinces of Sierra Leone, families plant coffee, cacao, ginger, orange, and rice. Rice is harvested between September, and November to the end of December. The rice is sold to buy clothing, shoes, and household condiments for the Christmas celebration. Coffee and cacao are harvested from November until the end of February; Ginger is harvested in the month of November to February end, while orange is harvested in the month of March and April. The harvest is sold, and proceeds are used for house construction, sometimes paying school fees, initiation into secret societies, and settling emergency medical bills. In some families, they will keep or set aside some amount of funds for emergencies. When a family member falls sick, money set aside will be used to send the ill person to health facilities, thus increasing access to health facilities and services. The current generation of abled-bodied men no longer follows this pattern of income generation, thereby reducing access to these facilities and services. Sometimes a portion of the proceeds is plowed back into farming and used to buy food during the lean period.

3.5 Rural transportation

Transportation is a significant bottleneck in accessing rural health facilities and services. About one billion people in rural communities are three miles or 2 km away from a regular road [41]. Aside from the availability of good roads, a large segment of the rural population needs help to afford the cost of transportation. Patients die in rural communities or on the way to medical facilities because they cannot afford the cost of paying for bikes, lorries, and taxis. Lack of safe access roads causes devastating effects on communities leading to high infant mortality in isolated communities [42]. Though the government has provided ambulances in all districts, only a few people can afford the cost. Providing transportation at a subsidized price will increase access to these facilities.

3.6 Education of rural organizations

Organizations raising awareness and educating rural communities on healthcare issues should be provided with adequate education on community social, traditional, and cultural norms. Understanding social behavior and traditional and cultural norms will help them to interact and live with people amicably. Such social cohesion will help increase access to health facilities and services because of the level of awareness of their health in the community. Health education will empower people to improve health care, disease prevention, and control [43]. Such knowledge gained will allow people to adopt healthier behaviors to attend health facilities when sick and use the services provided. Empowerment of this nature will not only help the individual but families, communities, and the nation to contribute to the achievement of the millennium development goal.

3.7 Training community health workers' socio-cultural lives in rural communities

Training community health workers on how to live in rural communities will be a step in the right direction. There are reports of healthcare workers, especially nurses using abusive language against and beating patients. In South Africa, patients refused to give birth in a hospital because they were beaten and scolded by nurses and discriminated against Kruger and Schoombee [44]. Understanding rural people's traditions and socio-cultural customs, will them appreciate you, and either party can live harmoniously. Some of the health workers today are from rural communities, but grew up and spend all their time in the cities or district headquarters towns. As such see rural people as inferior and discriminate against them. Dapaah [45] reported that some nurses discriminate and give preferential treatment to those they love. Such behavior scares people away from attending such health facilities because of a lack of respect [46, 47]. On the other hand, community health workers who understand community life put on a good attitude and live in peace with the people. Small and large health centers are most often flocked with people. Regular training on traditional and socio-cultural behavior will improve personal interaction between health workers and community people.

3.8 Increase incentives for professionals working in rural communities

Most people dislike working in rural communities. The provision of incentives will go a long way in retaining health workers. Retaining health workers in such a community will lead to a strong professional relationship between the healthcare giver and patients thereby improving the relationship between people in rural communities [48, 49]. In many parts of the world, the government and the private sector find it extremely difficult to retain health workers in rural communities [50]. It is vital to retain health workers in rural communities to provide health care and develop a professional relationship between the patient and the health worker to improve the health outcomes of the most defenseless population in the country [49].

3.9 Integrating traditional medicine into national health systems

The integration of traditional medicine into the national health care system will not only help people in rural communities but will meet the health care needs of people in developing and developed countries [51, 52]. In Africa, 80% of the population uses traditional medicine as their first line of healthcare [53]. In Ghana, for example, studies conducted on traditional medicine show treatment of different ailments such as diabetes, fever, foot rot, and stroke [54]. Aside from low-income countries, it is widely used in high-income countries such as France, the USA, Austria Canada, and Belgium [54]. Developing policies, by-laws, and regulations for providers and professionals will enhance rural community access to health facilities and assess services in remote communities.

3.10 Outreach or extension of the internship programs of health care students to rural communities

Students studying medicine and other health care professionals will be better able to convince people in rural communities to attend health facilities and access the

services available. Rural community people believe and develop confidence in young people who know how to talk to them when sent on such missions. The rural people do admire the health workers and even try to persuade their children to choose such a vocation. The bond between the two parties sometimes becomes so strong that the community people invite the health personnel into their homes. Such a relationship will boost confidence and increase the attendance of the rural people in the health facilities. Training community children to become healthcare professionals will increase attendance at health facilities and the use of health services.

3.11 Improved infrastructure

People in rural communities easily believe and trust the medical personnel and facilities they have in their communities. When the health center is well constructed and capacitated with adequate equipment, drugs, and trained personnel, rural people tend to frequent such facilities because they are assured of getting the needed services. It is a common saying in rural communities that the medical structure is fine when it has well-trained staff, equipment, and drugs In my village, people prefer seeking medical attention at the Masanka health facilities and Segbwema hospital because they have Europeans who know how to talk to patients and treat them well. People often find money to visit these health centers because of their outstanding performance. Once the trust has been established, they create a friendly relationship with the health personnel and frequently visit them when they are sick.

4. Conclusion

Diversification of income sources, improved infrastructure, and basic services, which include transportation facilities, and reduced cost of out-of-pocket medical bills in rural communities will help them access health facilities and services and increase life expectancy among people.

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