

Health Systems Strengthening: A Panacea to Improving Consumption of Public Healthcare Services in Northern Namibia: A Cross Sectional Study

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Abstract

The aim of the study was to assess the impact of health systems strengthening on the consumption of public healthcare services in Northern Namibia. The study assessed how the following components of health systems strengthening influence the consumption of public health care services; (1) timeliness and readiness of services rendered, (2) health workforce competence, (3) health information systems, (4) availability of essential medicines, (5) healthcare financing and lastly (6) leadership and governance. We used a quantitative descriptive cross-sectional study design. 672 respondents were identified using the purposive sampling technique and a well-structured Likert-scaled questionnaire was used for the interviews. Collected information was entered into data sets and analysis was done using Excel and Statistical Package for Social Sciences (SPSS) version 23.0 software. The results were that over 95% of the respondents strongly agreed with each of the factors assessed. Health systems strengthening remains an important factor in the delivery of health services. This was taken note of when 48% of the participants agreed that a good competent health workforce determines their choice of healthcare facility when they are not feeling well. This was further augmented when 49% of the participants agreed that healthcare financing influences people's choice to go and seek healthcare services from government facilities. It was concluded that health systems strengthening is the cornerstone for improved consumption of public health care services in Northern Namibia. We recommend that governments should develop strong health systems at all levels of health service delivery.

Keywords: *Consumption, Health Systems Strengthening, Public Healthcare Services.*

Introduction

Health remains an imperative element of human well-being because investing in healthcare has significant direct impacts on output and on the fiscal growth of nations and not investing also has detrimental effects [1].

In recent years, significant progress has been achieved in delivering health-related interventions that are designed to achieve goals relating to improving maternal and child health and reducing mortality and ill health due to HIV/AIDS, tuberculosis, and malaria. It is increasingly apparent, however, that the gains have been neither universal nor sufficiently

broad-based and sustainable [2]. Progress at the national level has not necessarily resulted in gains for the most vulnerable population groups; in some instances, progress has stagnated or been reversed [2].

There is mounting evidence that health systems that can deliver services equitably and efficiently are critical for achieving improved health status. Thus, many global health initiatives now incorporate attention to health systems strengthening the support they provide to countries. While this increased attention to the strengthening of health systems is welcome, it would not be sustainable in the absence of a

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sound monitoring strategy that enables decision-makers to accurately track health progress and performance, evaluate impact, and ensure accountability at country and global levels [2, 3].

This implies the need to define core indicators of health system performance while developing and implementing appropriate sustainable measurement strategies to generate the required data [4].

A health system needs staff, funds, information, supplies, transport, communications and overall guidance and direction to function. Strengthening health systems thus means addressing key constraints in each of these areas [4, 5].

A health system may be described as a set of cultural beliefs about health and illness that forms the basis for health-seeking and Health-promoting behavior; The Institutional arrangements within which that behavior occurs; and the socioeconomic/political/physical context for those beliefs and institutions [4].

The WHO framework describes health systems in terms of six core components or “building blocks”: (a) service delivery, (b) health workforce, (c) health information systems, (d) access to essential medicines, (e) financing, and (f) leadership/governance.[2]. It is from these six building blocks that a well-functioning health system is defined.

The private healthcare industry in Namibia is among the most advanced in Africa. Private healthcare providers help in controlling and managing healthcare solely based on insurance schemes. 46% of the country’s population lives within the poverty margin and half of them are below the poverty line [6]. Most of these people are found in rural areas [7]. This, therefore, means that not many of them can afford health insurance, and they obtain healthcare from mainly public healthcare facilities.

Northern Namibia has a population of 986,756; it’s a semi-desert area with poor road access except for the urban areas [31].

Consumption of public healthcare services has been widely studied in the developed world

and a few African countries like Uganda and to some extent Kenya. However, it remains a virgin area in most African countries not excluding Namibia. This, therefore, means that the factors that contribute to the low consumption of public health care services in Namibia and the Northern part are not well understood.

One study done at the Kibera sub-county of Nairobi in the Republic of Kenya had contradicting findings. About 70 per cent of the respondents did not visit public hospitals despite them being closer than alternative facilities. This population opted to visit other facilities for healthcare services. Surprisingly those healthcare facilities opted to charge more than public hospitals in terms of cost and were not better in quality and efficiency of services offered [8, 28, 29]. It was also found in one study that public healthcare facilities have better quality and readily available drug supplies which are the main determinants of quality [9].

From these interesting findings from other studies, it can be concluded that the factors that influence the consumption of public healthcare services are not clearly understood especially in Northern Namibia, we therefore designed this study to assess the impact of health systems strengthening on the consumption of public healthcare services in Northern Namibia.

The purpose of the research project was to analyze what factors could be contributing to the low consumption of public healthcare services in Northern Namibia notwithstanding the government initiatives to subsidize the cost of healthcare service delivery at public health facilities within the country.

The study focused on assessing the impact of health systems strengthening on the consumption of public healthcare services. We also assessed how the following components of health systems strengthening influence the consumption of public health care services; (1) timeliness and readiness of services rendered, (2) health workforce competence, (3) health information systems, (4) availability of essential medicines, (5) healthcare financing and lastly (5)

leadership and governance.

Consumption of public healthcare services has been widely studied in the developed world and a few African countries like Uganda and to some extent Kenya. However, it remains a virgin area in most African countries not excluding Namibia. This, therefore, means that the factors that contribute to the low consumption of public healthcare services in Namibia and the Northern part are not well understood, and this poses a major challenge to the government when addressing issues about the accessibility of public healthcare services by the local population.

One study done at the Kibera sub-county of Nairobi in the Republic of Kenya had contradicting findings. About 70 per cent of the respondents did not visit public hospitals despite them being closer than alternative facilities [8]. It was also found in one study that public healthcare facilities have better quality and readily available drug supplies which are the main determinants of quality [9].

Based on these findings from other studies, it can be concluded that the factors that influence the consumption of public healthcare services are not clearly understood especially in Northern Namibia and this study, therefore, was conducted to address this knowledge gap to particularly assess the impact of health systems strengthening on the consumption of public healthcare services.

The general objective of this study was to analyze the factors that influence the consumption of public healthcare services by residents of Northern Namibia focusing on the impact of health systems strengthening.

The specific objectives were to:

1. To assess how the delivery of health services in a timely and ready manner influences the consumption of public healthcare services in Northern Namibia.
2. To determine how the competence of healthcare workers influences the consumption of public healthcare in Northern Namibia.

3. To assess how a well-functioning health information system influences the consumption of public healthcare in Northern Namibia.
4. To find out how healthcare financing affects the consumption of public healthcare in Northern Namibia.
5. To find out how leadership and governance affect the consumption of public healthcare in Northern Namibia and lastly.
6. To find out the impact of the non-availability of essential medicines on the consumption of public healthcare services in Northern Namibia.

Research Methodology

Selection of Study Area

The study was conducted in Northern Namibia which has a population of 986,756, and this is the largest population in the country [31]. We selected the four main hospitals that have the highest catchment population in the northern part. These hospitals included Oshakati Intermediate Hospital, Engela District Hospital, Eenhana District Hospital and lastly Okongo District Hospital.

Sample Size Determination

The study targeted both healthcare providers and healthcare consumers. The healthcare providers were 18 doctors, 10 pharmacists, 282 nurses, and 10 health records officers. A total of 352 consumers were the respondents in this study. The overall sample size was 672 participants.

According to Newing, a population is a set of sampling units that a scholar may be interested in [11]. In this type of study, there are accessible populations in which a conclusion can be made [12].

The study used a multistage sampling technique, purposive to identify the sampling units for healthcare facilities, a census survey for healthcare workers and systematic sampling for patients. Lavrakas described purposive as a judgmental sampling technique [14]. Miller,

Yang and Kothari described it as a deliberate selection of units from a universe [15, 16]

Some of its main benefits include cost effectiveness, quickness, correctness, and quality of the information [17]. The process of sampling includes population definition, sampling frame, method of sampling, the size of the sample and sample plan. Lavrakas describes it as a subset of elements drawn from a greater populace [14].

A questionnaire which is Likert scaled was used to collect the primary data. The respondents were identified by way of convenience sampling from internal informants who were mainly hospital healthcare workers.

Data Collection

Data was collected using a well-designed questionnaire. Likert scales were used in this study. This was chosen because the data collection tool helps the respondents to react easily, and also helps condense responses more accurately [18, 27, 30]. This study used the Likert Scale because it communicates interval properties to respondents, and therefore creates data that can be related to an interval scale.

Additionally, the data collected from the Likert scale can be evaluated easily through standard techniques which are factors analysis [19]. The benefits of this are Easy to make and use also it's easily understood by the respondents. The study used ordinal scaled data for the measurement of all the objectives largely because the study was qualitative.

According to Burns and Grove, data collection is the accurate and systematic collection of information in relation to a research question using an appropriate method [20]. A questionnaire will be used in this study. Yang argued that questions are always linked to the study questions in research [21].

According to Newing, questionnaires entail a sequence of specific, typically short enquiries that are asked orally by an investigator or replied to by the respondent by if they are self-administered [11]. Primary data was collected

through the administration of questionnaires to healthcare providers and clients in selected public hospitals. Primary data according to Kothari is original in nature and newly collected data [10]. Whereas Morrison et al. state it as an issues that is new to study [22]. According to Louis, Lawrence, and Morrison primary data means issues that are unique in the study [23] and Ember and Ember defined it as information gathered by an examiner in several field locations clearly for a comparative study [24, 25, 26].

Statistical Analysis

The primary coded data was entered and analyzed using Excel and SPSS version 23. Inferential statistics was used to analyze the participants' demographics as well as assess how the different components of health systems strengthening influence the consumption of public healthcare services in Northern Namibia.

Results and Discussion

Demographic Data

672 questionnaires were distributed and only 628 were filled to indicate the different demographic characteristics. Table 1 represents the participants' demographic data. From this table 367 (58.6 percent) were female, and 261 (41.4%) were male. For age, 236 (38%) were between 18-25 years, 231 (37%) were 26-35 years, 105 (17%) were 36-45 years, 33(5%) were 46-55years and 23 (4%) were above 55 years of age.

From table 1, it is shown that most of the respondents had secondary education 318(51%), 125(20%) possessed a diploma, 60(10%) had primary level education, 58(9%) had bachelor's level, 53(8%) never attended school at and 14 (2%) had master's level of education.

Qualitative Analysis

All the respondents had a general understanding of how health services are very critical in their communities. They had various expectations concerning service delivery from

the healthcare workers and the government. Most of the participants were not familiar with the term health systems strengthening but they had their own interpretation which was indicative that they knew what they were discussing.

Component 1: Service Delivery

In this component of health systems strengthening, the participants were given this statement and they were required to respond whether they strongly agreed, agreed, neutral, disagreed or strongly disagreed.

“I would prefer seeking for health care where service delivery is timely and readily available.”

As reflected in Figure 1 below, 33% of the respondents agreed that timely delivery of services strongly influences as to which facility they go to for healthcare.

This was further confirmed by another 35% who equally agreed that readily timely services are fundamental. 9% disagreed and one of the respondents is quoted below with this statement.

“I don’t think timely service delivery is possible in public health facilities. First, they are crowded and there are very many sick people. Service delivery should depend on how sick someone is and not necessarily a first come first serve making timely delivery very difficult. Therefore, me, I do not consider when visiting the facilities”?

Another participant is quoted as follows; *“I don’t like going to public health facilities because the workers are very slow and you spend a lot of time there, I would request them to be quick and offer services very fast as most have other businesses to attend to.”*

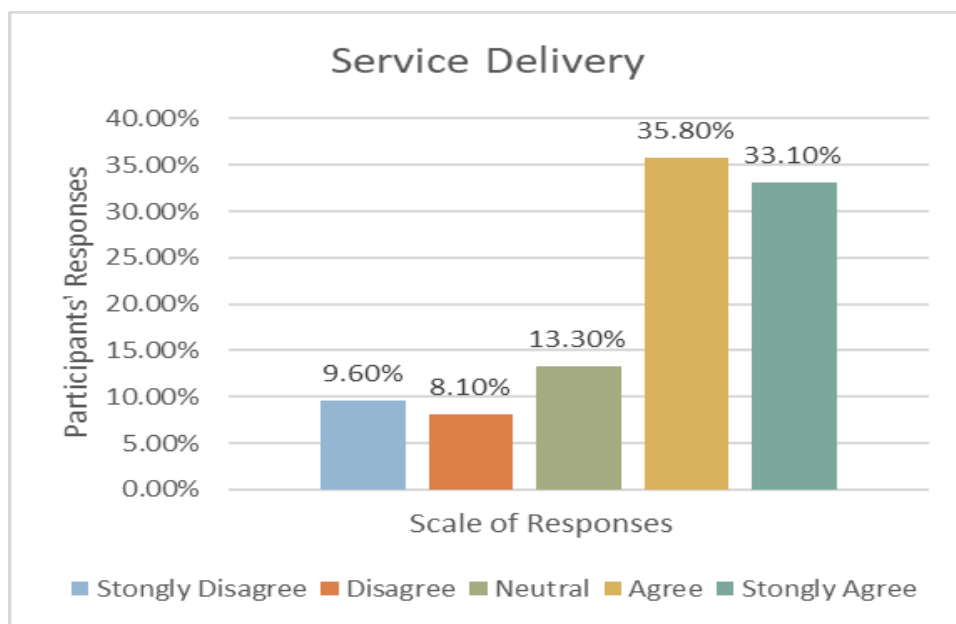


Figure 1. Participants’ Responses on Service Delivery

Component 2: Competence of Healthcare workers

In this component of health systems strengthening, the participants were given the statement below and they were required to respond whether they strongly agree, agree, neutral, disagree or strongly disagree.

“A good competent health workforce determines my choice of healthcare facility

when I am not feeling well”.

From figure two, 47% of the respondents agreed that competent work is an important component of health systems strengthening. 18% strongly agreed and 21% couldn’t decide whether a competent workforce determines their choice of facility for healthcare services. One participant was quoted saying.

“My understand is that all the people working in hospitals know what they are doing, so as for

me I don't think about their competence, I just visit the facility.”

Another participant strongly disagreed with the statement as quoted.

“Provided there is someone to attend to me

when I visit the hospital, I really don't think many of us think about the competence of these people working in hospitals, how do you determine competence anyway?”

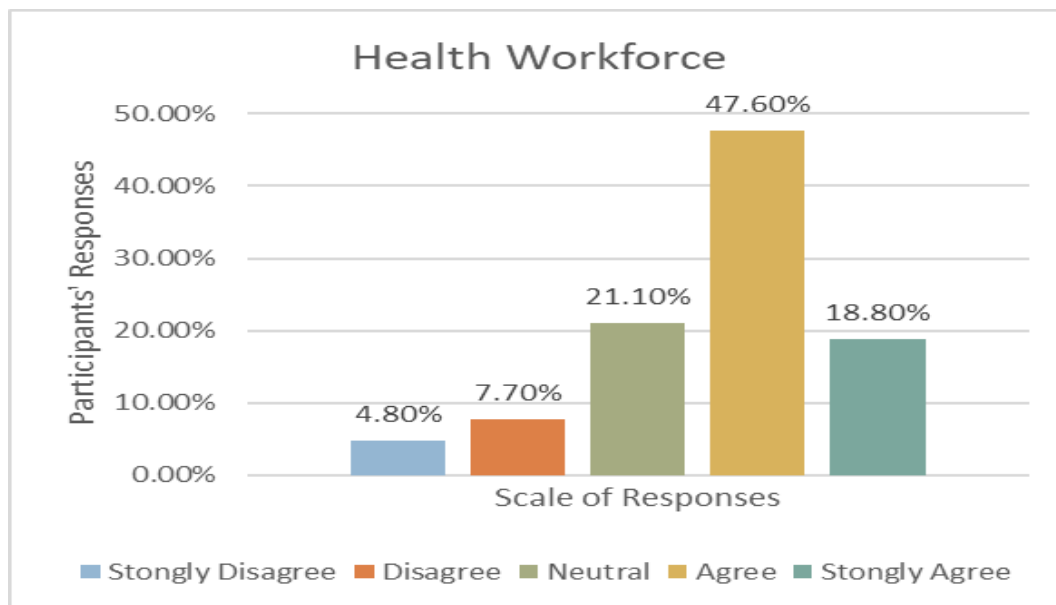


Figure 2. Participants’ Responses on Health Workforce

Table 1. Socio-Demographic Characteristics of Participants

Variable	Description	Frequency	Percent
Gender	Female	367	58.6
	Male	261	41.4
	Total	628	100
Age	18-25 Years	236	38%
	26-35 Years	231	37%
	36-45 Years	105	17%
	46-55 Years	33	5%
	Above 55 Years	23	3%
	Total	628	100
Education level	Masters	14	2%
	Bachelors	58	9%
	Diploma	125	20%
	Secondary	318	51%
	Primary	60	10%
	Never went to school	53	8%
	Total	628	100

Component 3: Health Information System

In assessing this component of health systems strengthening, the participants were given the

statement below and different responses like strongly agree, agree, neutral, disagree or strongly disagree were recorded as seen in Figure 3.

“Having a well-established and functioning health information system influences where I choose to go for treatment whenever am sick.”

From Figure three below, 47.2% of the participants agreed that a functional information system is essential for the health sector as this helps to deliver much-needed information to the patients. A further 18.3% strongly agreed that it is crucial to have information systems in place.

There was 20% of the participants who did not understand the importance of health information systems and therefore they could neither agree nor disagree. One respondent is quoted saying.

“I really don’t know what this information thing is all about, what matters is the doctor giving me my treatment, if I get well that’s what I need, I never really consider it when deciding which facility to visit”?

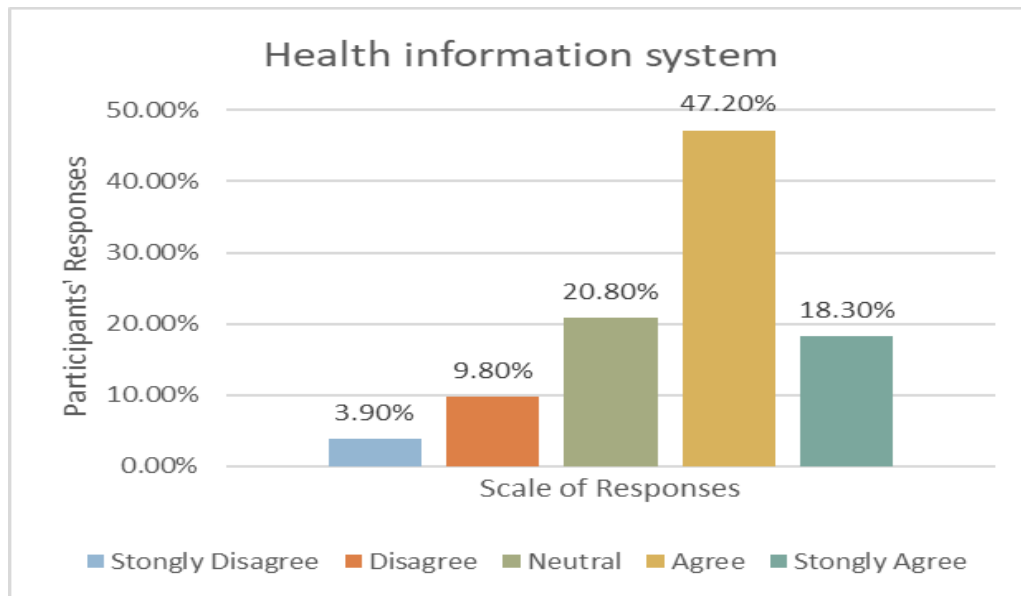


Figure 3. Participant's Responses on Health Information Systems

Another participant said,

“When it comes to giving feedback, health education, a good information system is very important because it will help to have readily available data to pass on to the masses. I may not really look out for this issue when visiting a health facility, but it is very important” There was a 3.9% that disagreed saying health information system does not influence their choice of health facility to visit when they are sick.

Component 4: Healthcare Financing

This was assessed by requesting the participant to choose whether they strongly disagree, disagree, neutral, agree or strongly agree with the statement below.

“I believe healthcare financing influences people’s choice to go and seek healthcare services from government facilities.” The

responses are summarized in Figure four.

From Figure 4, it was found that 49% of the participants agree that healthcare financing is a fundamental determinant for the consumption of public healthcare services. Another 18.7% strongly agreed that healthcare financing is a very strong component of health systems strengthening. One participant is quoted saying *“Finances are needed in every aspect of life, and it is therefore not surprising that healthcare delivery needs finances. I therefore look at what services are offered as predictor of good finance before I visit any health facility when am sick.”*

There are 20% that were not aware of healthcare financing and therefore could not agree or disagree whether this influences their choice of facility to visit for medical services. One participant is quoted saying “The government is expected to give enough resources to hospitals, they need these resources

because of the high cost of living, you go hospitals, and they are dirty because they don't have enough money to buy cleaning agents. I don't really look at what finances are given to a facility before visiting them" There is a 9.3% that disagreed that healthcare financing influences their choice of healthcare facility. One respondent is quoted saying "I don't

consider this all thing of healthcare financing, expect the government to offer money to hospitals, I therefore don't task myself with this, I just visit."

2.7% of the participants strongly disagreed that healthcare financing influences their choice of healthcare facility to visit when they are not feeling well.

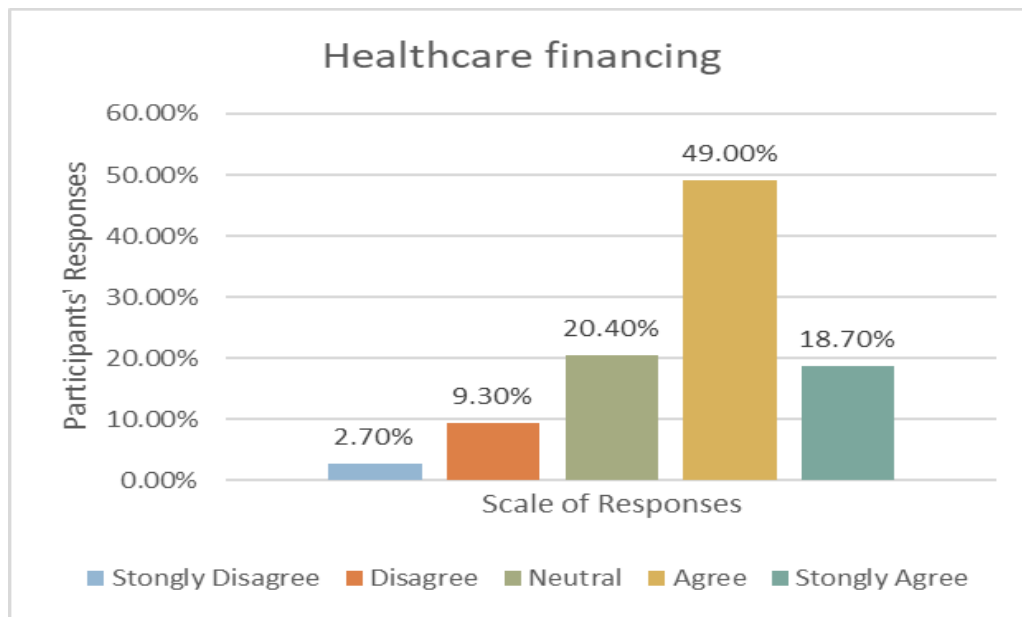


Figure 4. Participants Responses on Healthcare Financing

Component 5: Leadership and Governance

This component was assessed the same way the previous four were assessed and the responses are summarized in Figure 5.

The participants were given the statement as follows; "A health facility with good leadership and governance offers better healthcare services."

In Figure 5, 34% of the respondents strongly agreed that good governance and leadership for a given health facility influence their decision to visit that facility. It was highlighted by 39.7% of the participants who equally agreed that leadership is fundamental for health systems strengthening to achieve good service delivery.

One participant made the following remarks.

"Good leadership affects the way services are offered at a hospital, it is therefore very important for the hospital leadership to be very

close to the people, take in their components and give feedback from time to time. It is of no doubt that I consider a health facility with good leadership before I go there for medical treatment."

13.8% of the respondents could neither agree nor disagree with whether the leadership of the health facility affects their choice of where to go for medical treatment.

7.2% of the respondents strongly disagreed and 5.4% disagreed that good leadership and governance affect their choice of a health facility. One participant is quoted making these remarks,

"I really don't bother myself with the leadership of a hospital, what matters to me is the availability of nurses and doctors to treat. The government should ensure that there is good leaders."

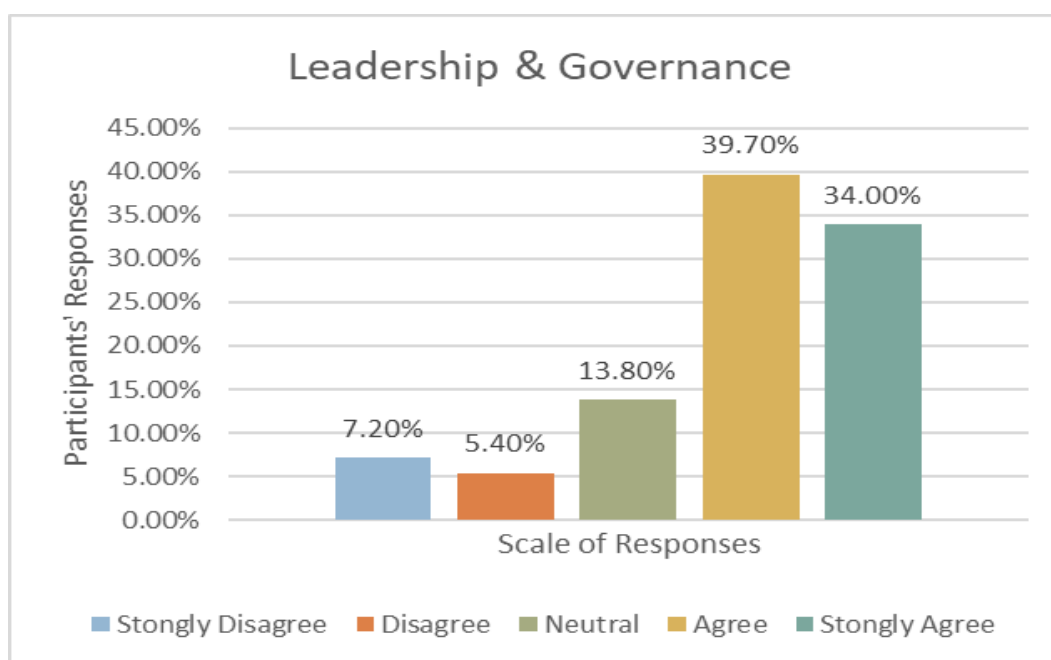


Figure 5. Participants' Responses on Leadership and Governance

Another respondent is quoted as follows,

“There is a lot of corruption in those hospitals, the leaders just take the medicines and misappropriate funds which should be used to develop the hospitals and offer good services, those leaders need to be supervised by the directors from time to time.”

Component 6: Essential Medicines

This was assessed by requesting the participant to choose whether they strongly disagree, disagree, neutral, agree or strongly agree with the statement below.

“Residents prefer visiting health care facilities where essential medicines are readily available.”

In Figure 6, 51.5% of the respondents agreed that the availability of essential medicines influences their choice of health facilities to visit. 22.5% of the respondents strongly agreed that the availability of essential medicines is very important whenever they decide on which hospital to visit.

The following remark was quoted from one mother,

“My son died because there was no medicine

in one hospital and we were required to buy the medicines, unfortunately we couldn't get the treatment on time and my son died, I therefore appeal to government and national medical stores to ensure that essential medicines are available in hospitals.”

18% could not disagree nor agree as to whether the availability of essential medicines influences the choice of health facility. One person stated as follows.

“I cannot base my choice of a facility to visit when am sick on the availability of essential medicines, sometimes you may not be aware of the available medicines or these medicines are available today and out the other day, all I do is visit the facility and am told what is available.”

5.7% of the participants disagreed with the statement and of them said as follows.

“I don't go to hospital for only essential medicines but for many other services. So, if I must think about essential medicines all the time before I visit the facility, it is not good, therefore I don't.”

2.7% of the participants strongly disagreed that they would prefer visiting health facilities where essential medicines are readily available.

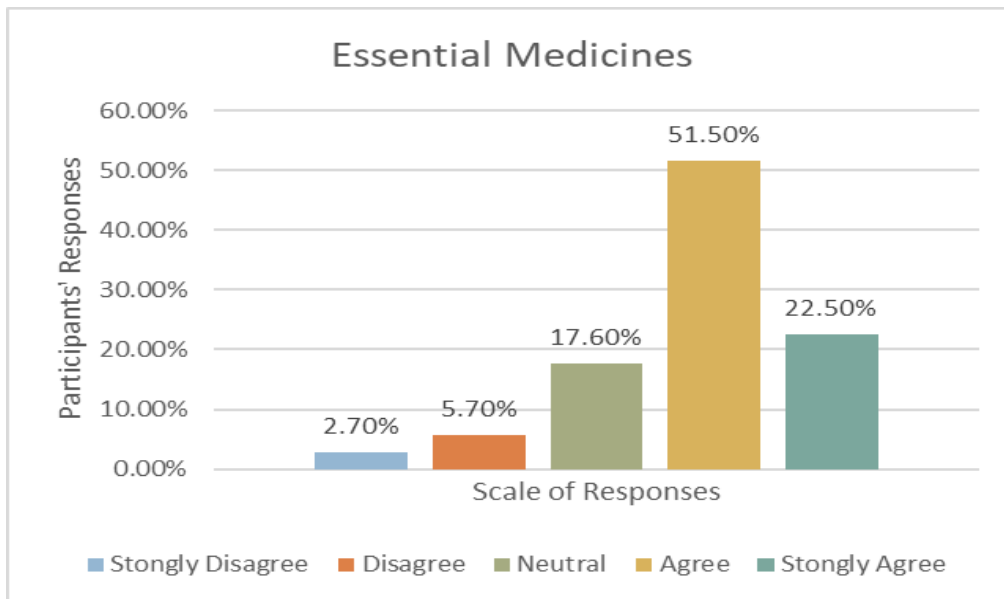


Figure 6. Participants Responses on Essential Medicines

Overall Assessment of Health Systems Strengthening

Figure 7 summarizes the responses on whether health systems strengthening influences the consumption of public healthcare services in Northern Namibia

In Figure 7, it was observed that 45% of the respondents agreed that having strong health

systems is a key factor that greatly influences the consumption of public healthcare services. 24% strongly agreed, and 18% could not agree or disagree whether health systems strengthening influences the consumption of public healthcare services. 8% of the participants disagreed that health systems strengthening greatly impacts the consumption of health services from public facilities.

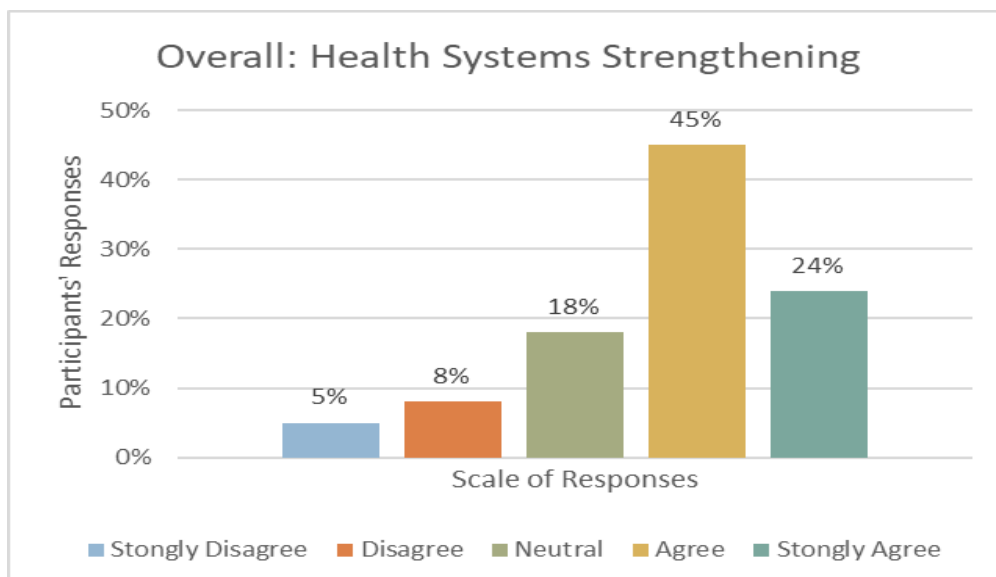


Figure 7. Overall Responses from Participants on Health Systems Strengthening

The provision of health care services in resource-limited settings poses a very big challenge ranging from the non-availability of

utilities and human resources for health to the attitudes and perception of the local population. Despite the speculations and assumptions as to

what factors influence the consumption of public healthcare services, this area is not well understood and not so many studies have been conducted to establish what exactly these determinants are. In this study, we explored the influence of health systems strengthening on the consumption of health services from public health facilities.

The study results indicate more females visit the public healthcare facilities than males as seen from the demographic characteristics. This can be attributed to the fact that females have better health-seeking habits than males. This partly can be explained by the fact that females escort their sick children to hospitals more often than males do.

With regards to the components of health systems strengthening that influence the consumption of health services from public facilities, they were significantly linked as more respondents either agreed or strongly agreed; Service delivery (33%), Health information system (47.2%) Healthcare financing (49.7%) Health workforce (47.6%), Leadership and governance (39.7%) and lastly Essential medicines (51.5%).

The major component under health systems strengthening that influences healthcare consumption within public facilities is essential medicines. Medicines are essential in the sense that they are needed in emergency cases, patients may not afford to buy certain drugs and if not, available it hinders service delivery tremendously. Healthcare financing remains a big issue and it was also observed in this study as a major component. Finances are needed in all aspects of service delivery from remunerations to purchasing the utilities needed within the hospitals. It is therefore important that governments allocate a big percentage of the budget to healthcare financing as this component cuts across all the other components of health systems strengthening.

Concerning service delivery, it is highly observed that timeliness and readiness remains an important issue of concern in many public

hospitals. Emergencies are not always treated as they are supposed to be, and the turnaround times for each area of service delivery are delayed. The people find it hard to visit these facilities because of the time they spend in these facilities. It therefore goes without saying that timely delivery of these services greatly influences their consumption.

Health information systems are needed to build strong health systems as these are channels used to keep patients' data, health education and giving feedback. If people are made aware of their health issues through the display of the data, this will greatly influence health habits and will also increase the consumption of public healthcare services.

It also stood out that a competent health workforce greatly influences the choice of health facilities that people visit. This calls for continued medical education such that the healthcare workers are equipped with the necessary skills and knowledge for service delivery. With the increasing practice of evidence-based medicine, the healthcare workers need constant updates if they are to remain relevant in the field of medicine and therefore improved service delivery.

Leadership and governance are critical components of health systems strengthening. Without good leadership in a health facility, all the other components will be affected. This explains why the different facility heads need to be equipped with the necessary skills and knowledge to enable them to be better managers and meet the expectations of the people they serve within these health facilities. Good visionary leaders are needed for proper service delivery, and they need to be free from influence peddling if they are to perform their services well.

Strong health systems are the backbone of health services and the consumption of these services offered. A good competent health workforce rendering timely and ready services significantly impacts the consumption of public health services. It is similarly important that

there is a well-functioning health information system, that makes access to needed information easy. Leadership and good governance cannot be detached from health because if we were to do so, the entire health system would collapse. This therefore emphasizes the fact that leadership is much needed if the local people are to obtain health services from public health facilities. Finally, you cannot talk about health systems strengthening without emphasizing the importance of healthcare financing. A well-financed healthcare system will attract the masses to seek healthcare from public facilities. This therefore calls for the different governments to prioritize health at the time of budgeting.

Health systems strengthening is a panacea to improving the consumption of healthcare services offered by public institutions if we pay attention to these six components.

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Conclusion

Strong health systems are vital if citizens are to seek healthcare services from public facilities. The different health entities must invest more in health as this will make all the remaining components of health systems strengthen and functional. This will improve health service delivery at all levels.

In a nutshell, there is a need to ensure that health systems are strengthened starting with healthcare financing and making sure that a competent health workforce team is in place. Once all these issues are addressed, the citizens will be attracted to visit public health facilities for medical care and therefore health systems strengthening could be a panacea to improving the consumption of healthcare services offered by public health facilities.

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