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# Patient's Perception on Factors for Choice of Healthcare Delivery at Public Hospitals in Dodoma City

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**Abstract:** Globally health is regarded as a human capital and thus healthcare delivery is treated as of crucial importance to all communities. Both non-price and price factors play a significant role in determining the patient's choice for healthcare delivery providers. Recently public hospitals have shown to face fairly growing community expectations, though they still perceived to have low quality healthcare, thus the intent of the study. Employing Chi-square and five point likert scale questions patient's choice and perception were assessed. The results show that there is greater relationship between age and patient's choices to attend at public hospitals, while education, sex and patient's occupation were not significant. Moreover, treatment cost, distance from the hospital, and location of the hospital and medicine availability were key indicators for patient's choice. Improvement of medicine availability and reduction of treatment cost is needed so as to attract patients in public hospitals. Since patient's choices are not completely rational, further research should be done on health outcome factors that influence patient's choice in order to integrate healthcare provider and health outcome factors towards improvements of quality health services at public hospitals.

**Keywords:** Choice, Healthcare Delivery, Perception, Public Hospitals

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## 1. Introduction

Globally health is regarded as a human capital and thus healthcare delivery is treated as of crucial importance to all communities [1-4]. In this respect all nations aim at achieving high quality health services that are accessible, safe, effective and affordable and to the patients.

The role of healthcare delivery mostly falls under government but with supplementing support of religious institutions, non-governmental organization, multilateral and bilateral agencies, refugee and disaster relief organizations United Nations organizations, and donor agencies [5-8].

In Tanzanian context, in order to enhance and captivate human capital available, the health policy targets to improve health and wellbeing of all Tanzanians. The policy focuses on ensuring access to basic health services to the population at risk, and encourages the health system to be more responsive

to the needs of the people [9]. To ensure achievement of stated policy objective, the recent health strategy, 'Health sector Strategic plan IV July 2015-2020' was adopted with the aim of reaching all households with quality health care that emphasizes on better performance of health facilities as well as individuals within health system [9].

Health and social welfare services in Tanzania are provided from grassroots level up through higher levels of care by both private and public sectors. The lowest level being community health care, then dispensaries and health centers at village and ward level, and followed by first level hospitals at district level, regional referral hospitals at regional level and; zonal and national hospitals at highest national level [10].

The choice of people to attend for healthcare delivery is of multi dimensional. Others choose basing on healthcare providers, and others on healthcare outcomes [11]. Normally, due to insufficient quality services at primary levels,

community trust hospitals compared to dispensary and health centers. In many economies, the existing health policies allow the patients to choose where to attend for healthcare services, either at private or public hospitals. However, studies has shown that non-price and price factors play a significant role in determining the patients choice on services provision which make them to latent utility as an outcome [11].

Although private hospitals are regarded to be superior in healthcare delivery, but recently public hospitals has shown to face fairly growing patient's expectations [12], as the health service provision is of most benefit to poor people and is the only way to achieve universal and equitable access to health provision. This is supported by [12] reports, which show that public hospitals are required to provide free treatment.

Despite that most of the people choose attending at public hospitals for healthcare delivery and the reforms made by the government, literature show that patients still perceive that they receive low quality of healthcare [2, 10] and [13-14]. Furthermore, it has been observed in public hospitals that health service provision is constrained by a number of factors including poor infrastructure, unavailability of medicine s and medical equipment and limited human resources [1-4]. Thus the study wants to explore the perception of patients on the factors influencing them to choose public hospitals for healthcare delivery.

## 2. Method

The study was conducted in Dodoma city municipality, Dodoma Region the capital city of Tanzania. It was selected because of the dominance of public compared to private hospitals (see table 1). Moreover, recently there has been an emphasis of the government headquarter offices and ministries to shift from Dar es Salaam to Dodoma, thus a population increase will have an implication on healthcare delivery due to the need of health as a human capital.

Cross-sectional research design was adopted that allowed the collection of data in public hospitals at single point of time. Both quantitative and qualitative data were collected from the patients attended at a public hospital on the day of enumeration by the use of both structured and unstructured questionnaires; and focus group discussion (FGD).

The questionnaires assessed the socio-demographic characteristics of the respondents, whereby age, sex, education and occupation of the respondent were used. They were used because were seen as important characteristics in determining choice of patients to attend for healthcare delivery [15-17]. Moreover the questionnaires assessed the perception of the patients on factors that determine their choice to attend at a public hospital for healthcare delivery.

The patients attended at a public hospital during the day of enumeration served as a sample frame. The sampling techniques used were simple random and judgmental sampling. Simple random sampling was used to collect data from the patients attended at the hospital and judgmental

sampling was used to obtain data from a key informant. A total of 96 respondents were attended for the data collection exercise.

Relationship between socio-demographic characteristics of the patients and the choice of the patients to attend at public hospital for healthcare delivery was established using Chi-square. The choice looked at whether the patient attends by his/her will or not.

The term perception of the patient on the factors to choose public hospital for healthcare delivery was analyzed by the use of a five point Likert scale with the options; strongly agree, agree undecided, disagree and strongly disagree [18].

On assessing it the following indicators were adopted from various studies and used; physicians and medical treatments, bedside care, staff care to the patients, waiting times, hospital facilities, staff competence and privacy, hospital organization, cleanliness of the hospital, distance, location of the hospital, treatment cost, population at the hospital, religious affiliation, political affiliation and medicine availability [19-22]. The indicators focused mostly on health provider and not on the outcome from healthcare delivery. This helped to know the behavioral characteristic implications to the public policy on healthcare providers in the Dodoma.

Moreover to know the factors that are significant in determining the choice of the patients to attend at a public hospital for healthcare delivery, Pearson Chi-square was used. Later the results were presented in the form of table and words.

## 3. Results and Discussions

### 3.1. Results

Dodoma municipality has five hospitals, three owned by the government, and two owned by Religious institutions. Moreover, there are thirteen health centers, fifty-two dispensaries as shown in table 1. The table indicates the domination of public facilities. The municipality has got the opportunity district, regional and specialized hospitals.

*Table 1. Number of Health Facilities in Dodoma City.*

Health Facilities	Public	Private	Total
Hospitals	3	2	5
Health centers	8	5	13
Dispensaries	36	16	52

Source: Dodoma Regional Hospital (2017).

#### 3.1.1. Socio-demographic Characteristics of the Patients

The study used 96 patients, among them 53.1% were females and 46.9% were males. Youth is the group that has shown to be attending more at public hospitals in the study elders, while no elder show up during the day of enumeration (See table 2). 47.9% of the patients has attended college education and few of them attended at least primary education, most of them being public employee (see table 2).

**Table 2.** Socio-demographic Characteristics of the Patients.

Variable	Number of Observations	Per cent
Sex of Respondent		
Male	45	46.9
Female	51	53.1
Age of Respondent		
15-35	79	82.3
35-64	17	17.7
Education Level		
Non Formal Education	11	11.5
Primary school Education	10	10.4
Secondary School Education	16	16.7
College	46	47.9
University Education	13	13.5
Occupation of Respondent		
Farming	26	27.1
Livestock Keeping	1	1.0
Business	13	13.5
Public Employee	35	36.5
Private Employee	17	17.7
Student	4	4.2

### 3.1.2. Correlation Between Socio-demographic Characteristics and Patient's Choice on Healthcare Delivery in Dodoma

In establishing this relationship, first the descriptive analysis of choice was done, and the results show that most of the patients choose to attend at public hospitals for healthcare delivery by their will. About 87.5% of the patients attended at the hospital by their will and the rest 12.5% are not of their will.

Using Pearson Chi-Square, the study investigated the correlation between the selected socio-demographic characteristics (education, age, sex and occupation) and the patient's choice. The results show that only age was significant and at 1% on determining the choice of the respondents on attending at public hospitals for healthcare

delivery in the study area, more specifically large group is youth who were 82.3%, the rest were adult 17.7% and elders didn't show up (see table 2). Moreover patient's occupation, education and sex have seen to be not significance socio-demographic characteristics on choosing to attend at public hospitals for healthcare delivery.

### 3.1.3. Patient's Perception on the Factors for the Choice of Healthcare Delivery at Public Hospitals in Dodoma

The study intended to explore the perception of the patients on the factors for their choice of healthcare delivery at public hospitals, the selected indicators has been shown in table 3 below Tracing on perception, the results show that the patients strongly agreed and agree on treatment cost, distance from the hospital, location of the hospital and medicine availability as the key indicators for their choice to attend at public hospitals for health care delivery (see table 3). Moreover the results revealed that the patients perceived that physicians and medical treatments, bedside care, staff care to the patients, waiting times, hospital facilities, staff competence and privacy, hospital organization, cleanliness of the hospital, population at the hospital, religious affiliation and political affiliation as not influential indicators for them to attend at public hospitals for healthcare delivery (see table 3).

Although cleanliness of the hospital, waiting time and religious affiliation were perceived by the patients to be not important indicators, but using Chi Square to investigate the important factors for patient's choice to attend at public hospitals for service delivery the indicators were significant at 5 % (see table 3). Moreover from their perception, the patients agreed on medicine availability and treatment cost as important indicators, the answer was similar when Chi-square used and the variables were significant at 1% and 5% respectively (see table 3).

**Table 3.** Patient's Perception and Determinants for the Choice of Public Hospitals for Healthcare Delivery in Dodoma City.

Indicator	Strongly Agree (%)	Agree (%)	Disagree (%)	Strongly Disagree (%)	Pr. Chi-Square
Physicians and medical treatments	0	20.8	67.7	11.5	0.126
Bedside care	0	10.4	65.6	24	0.380
Staff care to the patients	1	7.3	66.7	25	0.422
Waiting times	0	3.1	63.5	33.3	0.031**
Hospital facilities	1	11.5	52.1	35.4	0.093
Staff competence and privacy	1	16.7	37.5	44.8	0.122
Hospital organization	1	7.3	53.1	38.5	0.809
Cleanliness of the hospital	1	3.1	28.1	67.7	0.020**
Distance from the hospital	66.7	19.8	9.4	4.2	0.572
Location of the hospital	49	30.2	17.7	3.1	0.757
Treatment cost	88.5	8.3	1	2.1	0.045**
Population at the hospital	4.2	10.4	54.2	31.3	0.754
Religious affiliation	0	2.1	34.4	63.5	0.033**
Political affiliation	0	1	31.3	67.7	0.094
Medicine availability	20.8	50	10.4	18.8	0.000***

Asterisks \*\*\* and \*\* means significant at 1%, and 5% respectively.

NB: Option undecided is not seen in the table because no patient selected it.

## 3.2. Discussion

Most of the patients attend at public hospitals in Dodoma

city for healthcare delivery is of their will. The study also has shown that among the socio-demographic characteristics used age is very important indicator in determining patient's

choice [15-17]. The result has also shown that the group who attend mostly are youth who were about 82.3% and adults about 17.7%, though other studies has shown that elders is the group who attend in large percent in the hospitals due to the fear of their health than youth and adults. Education, sex and occupation [15] of the patients have shown to be not influential socio-demographic characteristics on choice to attend at a public hospital for healthcare delivery.

Furthermore using a five-likert scale the study investigated the perception of the patients on the factors for choice of healthcare delivery at public hospitals. By focusing on health provider characteristics the results show that the patients strongly agreed and agree on treatment cost [16] and [23-25] distance from the hospital [23] and [25-27], location of the hospital [23] and medicine availability [23-24] as the key indicators.

The choice has based much on non-personnel factors. The patients need short distance from the hospital; treatment cost to be minimal as it is observed in many public hospitals though quality is crucial and thus the patients choose the provider that best fits their needs [23]. Also the patients attend to the public hospital because the location is in township as well as the availability of medicine has shown to be very crucial.

Moreover to know the influential factors on patients choice to attend at a public hospital for healthcare delivery, Chi-square was used to establish the relationship and it was observed that cleanliness of the hospital [28-29] waiting time and religious affiliation were significant though were perceived by the patients to be not important indicators. This implies that even though patients perceived the indicators to of less significant, but in operationalization the public hospitals must consider them in order to attract more customers for service delivery. Medicine availability [15, 24] and treatment cost [16, 13, 25] were perceived by the patients to be important indicators for their choice as well Chi-square revealed that they are important factors for patient's choice.

## 4. Conclusion and Recommendations

### 4.1. Conclusion

The study investigated on the patient's perception on factors for choice of healthcare delivery at public hospitals in Dodoma City. Perception of the patients was measured by a use of a five-likert scale. The factors influencing patient's choice were obtained using Chi-square, which established the relationship between the selected indicators for patient's choice and patient's choice. The results show that 87.5% of the patients said that they attended at the hospital for their will and the rest 12.5% not by their will. In establishing the relationship between patient's choice and some selected socio-economic characteristics (education, age, sex and patient's occupation) Chi-square was used; whereby only age was significant at 1%, and large group being youth (82.3%) implying that youth is common group attending at public hospitals in Dodoma city.

Lastly using Chi-square to establish relationship between patient's choice and the choice selected indicators; medicine availability, religious affiliation, treatment cost and cleanliness of the hospital and waiting time were seen as influencing indicators for patient's choice. Though looking at their perception; religious affiliation, cleanliness of the hospital and waiting times were disagreed to be the indicators for their choice. The contradiction comes because the degree of choice for some patients is limited and most patients are unable to do have a complete rational choice.

### 4.2. Recommendations

Recently in order to capture the available customers and improve health of the communities so as to improve human capital there is a need for public healthcare providers to take into consideration on medicine availability, treatment cost, waiting times and cleanliness of the hospitals. Because patient's choices are not completely rational, in long run the indicators of choice for healthcare delivery that has shown to be not significant should be taken into consideration for public hospitals to attain income as well as improvement of human capital as a whole, hence quality service provision will be assured [23].

The study explored much on hospitals attributes towards patient's choice that is much more on health service provider. Further research is needed to explore factors influencing patient's choice to attend at public hospital basing on the health outcome. This will enable to integrate healthcare provider and health outcome factors towards improvements of quality health services at public hospitals.

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