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CLINICAL GOVERNANCE AND QUALITY OF HEALTH SERVICES IN PUBLIC HEALTH FACILITIES: EVIDENCE FROM THREE COUNCILS IN TANZANIA
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ABSTRACT

Objective: **Our objective was to assess clinical governance and the quality of health services in public primary health facilities in three councils of Arusha Region.**
Participants: **We conducted a study involving 270 clients from 19 primary health facilities in three councils in Arusha Region.**
Methods: **We conducted a cross-sectional study. The clients were selected using multistage-cluster sampling. Data were collected using exit interview and observation. A descriptive statistical method was used to analyse data.**
Results: **We found that health facilities had the key policies and structures for quality improvement and limited governance for quality of health services. In total,109(43%) of the clients reported receiving all the prescribed medicines and 230 (85%) of the clients had a positive experience with care processes. Also, 181(72%) of the clients were satisfied with the health services and 230 (85%) of clients had confidence and trust in public primary health facilities.**
Conclusion: **This research has generated valuable evidence on governance and the quality of health services offered in public primary health facilities in three councils of the Arusha Region. Our research has indicated that: facilities had limited governance for quality of health services and clients had limited access to essential medicines; the majority of clients had a positive experience with the processes of health care; the majority of clients were satisfied with health services offered and had confidence and trust in public primary health facilities. The**

empirical evidence of this study should inform quality improvement efforts in the studied councils and Tanzania.

INTRODUCTION

Quality of health services has become a major agenda in low-middle-income and developed countries' (LMICs) health systems[1,2]. To achieve universal health coverage by 2030, governments are required to provide high-quality health services to individuals, families and populations. Quality health services maintain or improve health and are person-centred, meaning that they are "respectful of and responsive to individual preferences, needs, and values." [3].

A review of available evidence suggests clients in LMICs' health systems still receive poor and not client-centred health services[1,2]. Furthermore, the evidence shows limited empirical evidence to inform quality improvement efforts at various levels of the health systems in the LMICs [1,2]. As a consequence of the little evidence, there are international calls to conduct research to produce evidence that will inform efforts to improve the quality of health services [1,2,3]. Specifically, there are calls for understanding the foundations for quality health services, care processes, and outcomes(impacts) of health services.

In Tanzania, policymakers are concerned with the low quality of health services offered in health facilities [4]. Through health policy, policymakers direct various actors to improve the quality of health services at all levels of the health system. Moreover, the current health sector strategic plan directs health managers and health service providers to "ensure availability of the quality of essential health services and interventions" to the population [5] (p.43). Specifically, the strategic plan calls for providing "people-centred care" and institutionalising "patient survey in the health sector" to inform quality improvement efforts (p.43-44) [5]. Despite these calls, there is limited empirical evidence and understanding related to the status of the quality of health services provided to clients and how health services are client-centred in Tanzania due to many factors, which include: limited competencies to conduct quality research, fragmented and infrequent assessment of the quality of health services; lack of reliable and valid tools for assessing quality of health services. To address some of these gaps, we planned and conducted this study. The study's main objective was to assess clinical governance and the quality of health services in public primary health facilities in three local government authorities (also referred to as councils) of the Arusha Region. Specifically, our study focused on priority quality research issues identified by WHO and quality experts[1,2]: clinical governance and leadership, clients' access to essential medicines, clients' experience with the care process, and clients ' reported quality outcomes in the public primary health facilities.

RESEARCH METHODS

Theoretical frameworks

This research was guided by two quality improvement frameworks (models): the Framework for High-quality Health Systems [2] and the Framework for Person-centred Measures of Health System Quality and Responsiveness[3]. The frameworks were used to guide the selection of issues to study, data

collection, and data analysis. Based on the frameworks, this study focused on three key elements: 1) foundations of quality services (clinical governance and leadership and essential medicines); 2) clients' experience with care processes (respect and dignity, communication, and service time); and 3) quality outcomes (clients' satisfaction and clients' confidence and trust).

Research design and setting

We conducted a descriptive cross-sectional study, which is appropriate for characterising and estimating parameters of health services and public health outcomes to inform priorities and interventions [6]. The study was conducted in three councils of the Arusha Region: Arusha City, Arusha District, and Meru District Councils in Tanzania Mainland, which has 26 Regions and a decentralised health system with four levels: National, Zonal, Regional and Council levels. The council level has council hospitals, health centres and dispensaries; all of these provide primary health services to the population.

Sample and sampling method

The target population of this study was the clients who had received health services in public primary health facilities in the Arusha Region. Our study involved a sample of 270 clients from the Arusha City Council, Arusha District Council, and Meru District Council. The client sample was drawn from 19 primary public health facilities: three council hospitals; eight health centres; and eight dispensaries. We included clients in our study who were 18 or above years and clinically stable. We excluded clients who were below eighteen years old and who were clinically unstable. The clients were selected using a multi-stage sampling method. In the first stage, three councils were selected using a purposeful sampling method. In the second stage, public primary health facilities were selected using a simple random sampling method. In the third stage, clients who were seeking health services from the selected primary health facilities were recruited in the study.

Data collection and tools

Data were collected using exit interview and observation [2, 7-8]; data were collected from June to July 2022. Data collectors were trained in data collection and were supervised during data collection. Data was collected using a structured questionnaire and checklists. The questionnaire and checklist items(questions) were adopted and adapted from previous research[1,2,7]. The questionnaire was used to collect data on the primary study variables: clinical governance and leadership, clients' access to medicines, clients' experience with care, clients' satisfaction, and clients' confidence and trust. Clients' access to essential medicines is defined as the percentage of clients who have received prescribed medicines at the health facility and was assessed using a single closed question. The clients' experience with care processes was measured using 8 Likert-type items with responses ranging from 1(strongly disagree) to 5 (strongly agree). Clients' satisfaction and confidence and trust in health facilities were measured using three (3) and four (4) Likert-type items, respectively. The five items had responses ranging from 1(strongly disagree) to 5(strongly agree), and the other two items had a rating scale ranging from 1(low-quality score) to 10 (highest quality score). In addition, the checklist was used to collect complementary data on the physical availability of essential medicines in public primary health facilities (council hospitals, health centres and dispensaries). The checklists had items that assessed clinical governance and leadership (in terms of the presence of quality-related policies, structure, tools, and practices) and the physical

availability of essential medicines[7] in a dispensing room or medical store of a health facility. Moreover, the demographic variables of clients (e.g. sex, age, education, marital status) were each measured using a single closed-ended question.

Data analysis and reporting

Data were analysed using a descriptive statistical method recommended by WHO and experts 2[7,8] using SPSS version 23. Descriptive methods were used to generate descriptive statistics such as average, frequency, and percentages [9]. Preliminarily, we conducted an exploratory factor analysis and reliability assessment. Exploratory factor analysis was done to determine the latent factors (dimensions) of the questionnaire items measuring clients' experience, satisfaction, confidence and trust in public primary health facilities [10]. The exploratory analysis identifies a three-factor solution, and an item was deemed to load to a factor when loading was 0.3≤ [9]. Eight items loaded to the first factor, which was named clients' experience with processes of care. Three items loaded adequately without cross-loading to the second factor; the second factor was named clients' satisfaction with health services. Four items loaded to the third factor without cross-loading to other factors. The third factor was named as clients' confidence and trust in public health facilities. The loadings for all items in the three factors-solution ranged from 0.372 to 0.920, which suggested that the included items were good indicators for the factors.

After factor analysis, internal consistency reliabilities assessments for the questionnaire items measuring clients' experience, clients' satisfaction, confidence and trust were conducted. The reliability findings indicated that questionnaire items had acceptable (Alpha=0.755) to very good (Alpha=0.88) reliability[10]; inter-item correlation means ranged from 0.493 to 0.646. We followed recommended observational, descriptive, and quality standards for reporting research information and findings [6,11,12].

Ethical considerations

The study was conducted according to the National Health Research and Ethics guideline [13]. After obtaining ethical approval to conduct the study, permission to conduct the study was sought from the Council Executive Directors of the three councils. Oral consent was obtained from each client after presenting key information. A specific identification number was assigned to each client's questionnaire to ensure confidentiality.

RESULTS

Sample characteristics

This study involved 270 clients with a mean age of 31 years, the majority (73%) of the clients were female, and above half (58 %) came from rural areas. Regarding education, 40% of clients had primary education, and 36% had secondary education. Most clients (43%) received care from health centres, 33% obtained care from dispensaries and 24% from hospitals. In terms of council, 47 % of clients were from the Arusha City Council, 28% from the Arusha District Council and 25% from the Meru District Council.

Governance and leadership for quality care

Regarding clinical governance and leadership, eighteen (95%) of the health facilities had a quality improvement team or coordinator, standard treatment guideline, infections and prevention control guideline and suggestion box. Moreover, 15 (79%) of the health facilities had received supportive supervision in the past six months from the council health management team, and 15 (79%) had some

tools that were inappropriate for assessing the quality of health services. Only 13 out of 19 health facilities (68%) used the suggestion boxes effectively.

Clients' Access to and availability of medicines

One hundred and nine (43%) of the clients reported receiving all prescribed medicines and 53% received some of the prescribed medicines (Table 1). Nine (47%) out of the 19 health facilities surveyed had all tracer medicines.

Table 1

Clients' access to essential medicines

Sn	Indicator statement	Frequency(n)	%
1	Clients who did not receive any of the prescribed medicines	9	4
2	Clients who received some of the prescribed medicines	135	53
3	Clients who received all of the prescribed medicines	109	43

Note: 17 of the clients were not prescribed any medicine among the 270 clients

Clients' experience with care

Overall, 230 (85%) of the clients had a positive experience with care processes in the public primary health facilities in the studied councils (Table 2). Specifically, 232 (86%) of clients stated that their health providers treated them with respect and dignity. Also, 232 (86%) of clients stated that their clinicians communicated effectively, and 194 (86%) of clients reported that service time was appropriate; the majority of clients (62%) reported having waited less than 30 minutes before seeing the clinicians.

Table 2

Clients' who had a positive experience with care processes in the public health facilities

Sn	Indicator statement	Frequency(n)	%
	1.Respect and dignity		
1	Clients who never experienced a lack of attention from health facility staff	229	85
2	Clients who stated that the health facility staff treated them with respect	237	88
3	Clients who stated that the clinician involved them in making decisions about their care and treatment	230	85
	Average	*232*	*86*
	2. Communication		
4	Clients who reported that the clinicians at the health facility always listened to what they said during the consultation	238	88
5	Clients who reported that the clinicians in the health facility explained things clearly	237	88
	Average	*238*	*88*
	3. Health service time		
6	Clients who stated that the waiting time before seeing the clinicians was appropriate	217	80
7	Clients who stated that the clinician spent enough time with them during the consultation	232	86

8	Clients who reported that they did not have problems with the waiting time at the health facilities	217	80
	Average	*222*	*82*
	Clients(average) who had a positive experience with the care process	230	85

Clients' satisfaction, confidence and trust

One hundred and eighty-one (72%) of the clients were satisfied with the health services provided in public health facilities (Table 3). In addition, on average, 230 (85%) of clients had confidence and trust in public health facilities.

Table 3

Clients' satisfaction, confidence and trust in public primary health facilities

Sn	Indicator statement	Frequency(n)	%
	1. Clients' satisfaction with health services		
1	Clients who rated the services they have received as good or excellent at the health facility	183	68
2	Clients who were likely to recommend (6-10 score) the services provided by the health facility to their friends.	182	68
3	Clients who were likely to recommend (6-10 score) the services provided by the health facility to their family members.	178	66
	Average	181	72
	2. Clients' confidence and trust in public health facilities		
1	Clients who believed that the health facility works pretty well and that only changes are needed to improve health facility delivery	222	82
2	Clients who thought that the health facility handled improving basic service well	228	84
3	Clients who were confident that if sick they would receive the most effective treatment in facilities	235	87
4	Clients who were confident that if their family members get sick tomorrow, they could get the care that is needed	235	87
	Average	230	85

DISCUSSION

Summary of findings

Using a client's and primary healthcare perspective, we assessed the quality of health services in the three councils of the Arusha Region. Our study has generated useful evidence that enhances our knowledge of the quality of primary health services in Tanzania regarding: clinical governance and leadership; clients' access to essential medicines; clients' experience; clients' satisfaction; and clients' confidence and trust in the public health facilities.

Comparison with other literature

Regarding clinical governance and leadership, the studied health facilities have almost all of the required key structures and policies to support quality improvement [1,2,7,8]. On the other hand, some of the studied health facilities had received inadequate numbers of supportive supervision, inappropriate tools for assessing the quality of health services and did not use effectively suggestion boxes to collect complaints and suggestions from the clients to promote accountability for the quality of health services[1,2,7,8].

On average, 43% of the clients accessed the essential medicines (received all prescribed medicines) at the primary health facilities. This finding corresponds to the very low level of clients' access to medicines (<50%) [14]. Also, this finding implies a shortage of essential medicines in the public primary health facilities, as documented in the National Health Policy [5].

Overall, 85% of the clients had a positive experience with care processes in the public primary health facilities in the studied councils. The overall high positive clients' experience in this study is supported by the previous findings in Indonesia, and Germany [15,16]. Specifically, in this study, 86% of clients stated that their health providers treated them with respect and dignity. The study finding on respect and dignity almost corroborates findings reported by other researchers in Indonesia and German [15,16]; researchers in these countries reported that 94 to 95% of clients reported that health workers treated clients with respect and dignity. On the other hand, the research finding is contrary to findings reported by Kruk et al. [2], who showed that 66% of people reported positive user experience in LMIC. Also, 86% of clients stated that their clinicians communicated effectively. Similar studies conducted in other settings reported almost similar findings, indicating that 90-95 % of the clients stated that the health workers communicated effectively with their clients [15,16]. In this study, 86% of clients reported that service time was appropriate. In a similar study conducted in Indonesia by Couturier et al. [15], 65% of the clients reported that time was inappropriate: there was a long waiting queue to obtain services. In our study, the majority of clients (62%) reported that they waited for less than 30 minutes before seeing the clinicians. In Nigeria, the majority (74%) of service users waited between 60 and 120 minutes to be registered and additional time to see a service provider [17].

About 72% of the clients were satisfied with health services provided in public health facilities. This finding is corroborated by previous research in Tanzania[18] and is contrary to the findings reported by Kruk et al. [2], who showed that only 42% to 49% of respondents were satisfied with offered health services. Moreover, 230 (85%) of clients had confidence and trust in public health facilities. The finding on confidence and trust is contrary to the finding reported in previous research reported by Kruk et al. [2], who showed that only 24% of people in LMICs had confidence and trust in health facilities and health systems.

Implication to theory and practice

We generated evidence to inform the quality improvement frameworks that guided this research. The exploratory analysis findings suggest that clients' experience items are related to one dimension, as suggested by Kruk et al. [2] rather than three dimensions suggested by Larson et al.[3]. Hence, our findings support the quality improvement framework proposed by Kruk et al.[2]. Moreover, our exploratory factor analysis findings support the proposition that clients' satisfaction with care and clients' confidence and trust in health facilities are two distinct client-reported outcomes as suggested by Kruk et al.[2]. Our research has implications for practices of assessing the quality of primary health services. Our findings suggest that health managers and researchers should use client experience items to represent one dimension of client experience. Also, in assessing the quality of health services, our factor analysis findings suggest that clients' satisfaction and client's confidence and trust should be treated as two distinct clients-reported outcomes.

Study strengths and limitations

We used a sufficiently large sample size of 270 clients and a tool with good reliability and construct validity. We used client exit interviews to collect data on the quality of health services; exit interviews may introduce biases in the reported research findings. However, client exit interview offers advantages in terms of recall accurateness, level of detail and linking information to a specific health facility [15]. Our study has not examined the relationships of studied primary variables; therefore, future studies should examine the relationships between clients' access to medicines, client experience and client-reported quality outcomes.

CONCLUSION

Using the client's perspective, this research has generated valuable empirical evidence on the client-centredness of health services offered in public primary health facilities in three councils. Our research has indicated that the majority of health facilities had key clinical governance and leadership structures and guidelines but lacked appropriate tools for assessing the quality of health services and supportive supervision was not done timely. Also, our research has indicated that: there is limited clients' access to essential medicines; the majority of clients had a positive experience with the processes of health care; the majority of clients were satisfied with health services offered by public health facilities and had confidence and trust in public health facilities. The empirical evidence of this study should be used to inform quality improvement efforts studied council and in Tanzania.

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