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Systematic Review of Lessons Learned from the Tanzania Mainland Health Financing System towards the Introduction of Universal Health Coverage in Zanzibar

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Authors' contributions

This work was carried out in collaboration among all authors. All authors read and approved the final manuscript.

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ABSTRACT

Health financing is a core component of healthcare systems that has an impact on the performance of the overall health system, like delivery and accessibility to primary care. A well-established and implemented health financing system could serve as a remedy to address these issues. In Zanzibar, healthcare services are completely offered by the government. In this intern underperforming economy, healthcare is suffering from chronic underfunding resulting in satisfactory quality and poor health outcomes. To overcome this issue, the Revolutionary Government of Zanzibar is working with several stakeholders to review the health financing strategy and improve the quality of care as it strives to achieve Universal Health Coverage (UHC). We

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conducted the main search for this review on information from current editions of academic journal articles and other countries' health system reports and websites based on the method of a systematic literature review from 09 August 2022 to 13 December 2022. Consequently, our review describes the concerns and challenges learned found to hinder the implementation of the health insurance system in Tanzania Mainland during the period 2015–2022. The papers identified in the systematic literature search were checked for their relevance concerning the review-defined objective. We included all types of studies, quantitative and qualitative studies, as well as mixed methods. Specifically, our analysis started with the concept of health-financing mechanism, enrollment status, management skills (poor collections and management of the revenue), community involvement, and fraud including delay of reimbursement to their influence on the goals and intermediate objectives of UHC. This systematic has found that the health insurance schemes encounter both structural and operational issues which subsequently result in low uptake of the schemes. Therefore, to achieve universal health coverage, the Government of Zanzibar should consider winning the battle before the fight by doing community sensitization to conquest national support while also maintaining local accountability and developing strong strategies that will protect the scheme against any fraud intended to occur during its implementation.

Keywords: Health insurance; health system; health financing system; healthcare systems.

1. INTRODUCTION

1.1 The Concept of the Health Financing

"Health financing is a core component of healthcare systems that can ensure the country moves closer to universal health coverage through enhancing service coverage, financial security, and financial resources to ensure a sufficient health system that covers the collective health requirements of all people" [1]. "It is a critical component that has an impact on the performance of the overall health system, like delivery and accessibility to primary care. As a result of the high cost of services, millions of individuals are unable to utilize them today. Despite paying out of pocket, many others receive substandard services" [2].

A well-established and implemented health financing system could serve as a remedy to address these issues. The main come-up implemented by WHOs focuses on health financing central part functions include revenue-raising, pooling of funds, and purchasing of services [3]. Moreover, all the countries have guiding principles on which services the populace is entitled to, indeed on the off chance that is not expressly, expressed by the government through the expansion of those services not secured, are more often than not paid for by the patients. "The fifty-eighth World Health Congress, held in 2005, recognizes universal health coverage (UHC) to the general public as committed agenda by the World Health Organisation member states. According to WHO," UHC means that all people receive the health services they need without suffering financial hardship when paying for them. The full spectrum of essential, quality health services should be covered including health promotion, prevention and treatment, rehabilitation, and palliative care" [4]

1.2 Tanzania Health System Context

"Tanzania is a low-and middle-income country in eastern Africa with, an estimated population of 56 million people in 2016. There are 31 administrative regions in Tanzania (26 regions on the mainland and 5 regions in Zanzibar Tanzania), and the majority of the population (70%) live in rural areas the country's life expectancy for both males and females is 59.9, and 63.8 respectively" [5]. "Tanzania's health system follows a hierarchical structure, from village dispensaries and community-based activities at the base (under the responsibility of local government authorities) to ward, district, and regional level hospitals, and finally referral and national hospitals" [5]. "Tanzania lay down a track toward state-owned healthcare in 1967 during Arusha Declaration, but in the face of rising costs, cost-sharing policies were implemented beginning in the 1990s; today the government runs four health insurance systems together with multiple private options, but the vast majority of the population remains uninsured, leading to significant inequities in access to care" [6]. Tanzania's 4th Health Sector Strategic Plan (2015-2020) provides for a new health financing strategy aimed at helping the country achieve universal health coverage, by addressing the multifaceted applied health insurance market.

1.3 Health Financing System in Tanzania

Tanzania's healthcare financial system is highly separated by a variety of sources of funding. Healthcare is primarily funded internally by domestic sources, 64%, and 36% by external sources. According to the National Health Account 2015/2016, the relative percentages of total health care costs by funding source are General tax (34%), health insurance (8%), out-of-pocket (22%), and donor support (36%). In Tanzania, about 6% of gross domestic product (GDP) is invested in health care, and 12% of government spending is in health care, but still below the Abuja declaration target of 15%. As per the latest health sector survey of 2018,33% of Tanzanians have health insurance.1% is covered by private health insurance and another scheme. Tanzania also has an exemption and abandonment policy to protect poor and vulnerable groups (pregnant women, children under 5 years old, and elderly people over 60 years old) from the financial risks of out-of-pocket medical expenses. However, the implementation of this policy is weak [7].

1.4 Universal Health Coverage in Tanzania

Tanzania is in the process of transforming its health financing system to attain universal health coverage. There has been a fractional conversion from input-based to output financing and some funds are now flowing straightly from the Ministry of Finance and Planning to health facilities which enhances self-sufficiency in prioritization of the expenditure at the facility level.

“Universal Health Coverage is the state whereby all individuals and communities take the delivery of the health care service they require without having financial problems. It incorporates a complete range of important, high-quality health services, from health promotion to prevention through treatment, rehabilitation, and palliative care throughout one's life” [1]. Achieving the goal of universal health coverage requires ensuring access to quality medical services without financial difficulties it is a political goal in many countries. Thus, routine assessment of financial risk protection and fairness assessment funding and service provision track national progress toward this universal goal Coverage target [1].

“The Government of the United Republic of Tanzania is dedicated to ensuring universal health coverage through the provision of quality health services to all its citizen without risk of financial hardship. Financial resources for health are scarce and need to be carefully managed to ensure efficient and equitable service provision. total health expenditures per capita were 28.5 USD in 2017 or 2.5% of GDP. This reflection is below the standard used to achieve universal health coverage of (86 USD per capita or 5% of GDP)” [5].

1.5 Universal Health Coverage in Zanzibar

“In Zanzibar, healthcare services are completely offered by the government. In this intern underperforming economy, healthcare is suffering from chronic underfunding resulting in satisfactory quality and poor health outcomes. To overcome this issue, the Revolutionary Government of Zanzibar is working with several stakeholders to review the health financing strategy and improve the quality of care as it strives to achieve Universal Health Coverage (UHC). PharmAccess is among the partner that going to provide technical assistance to the Zanzibar Government which include a 5-year insurance plan to re-design the financing strategy of the current healthcare system and implement a digital model for quality improvement. Zanzibar is currently developing a health financing strategy to provide a medium to long-term road map for a sustainable and integrated health financing system” [8].

To gain a greater understanding of concerns and challenges learned from Tanzania Mainland Health Financing, we undertook a comprehensive systematic review of both quantitative and qualitative evidence with the specific aim to explore concerns and challenges towards the introduction of universal health coverage in Zanzibar.

2. METHODS

We conducted the main search for this review on information from current editions of academic journal articles and other countries’ health system reports and websites based on the method of a systematic literature review from 09 August 2022 to 13 December 2022. The following series of keywords were used for searching (health insurance, experience towards enrollment of members and utilization of Health insurance, Tanzania health insurance, social

health system, insurance agency, reimbursement and payment mechanism, quality of care, utilization of health care services, collections and management of the revenue, Perception toward health insurance, Tanzania).

The literature search using the above chain of keywords was conducted in PubMed, African Journal of Educational Studies in Mathematics and Sciences, BMC, and Google Scholar. The date of the literature search was fixed between 1 Jan 2015 and 31 March 2022. Consequently, our review describes the concerns and challenges learned found to hinder the implementation of the health insurance system in Tanzania Mainland during the period 2017–2022. The papers identified in the systematic literature search were checked for their relevance concerning the review objective defined above. We included all types of studies, quantitative and qualitative studies, as well as mixed methods and reviews. Only English-language papers that reported on empirical studies, were included in the list of relevant publications. Further, the list of papers obtained was limited by a set of criteria. We excluded papers from countries other than Tanzania Mainland, as well as papers reporting on studies that were beyond the scope of our objective.

The papers and reports were analyzed by applying the method of directed qualitative thematic analysis. Thematic Analysis is considered the most appropriate for any study that seeks to discover using interpretations. It provides a systematic element to data analysis. It requires a selection of key themes in advance and subsequently, extracting and analyzing contents related to these themes [9]. Specifically, our analysis started with the concept of health-financing mechanism, enrollment status, management skills (poor collections and management of the revenue), community involvement, and fraud including delay of reimbursement to their influence on the goals and intermediate objectives of UHC.

3. RESULTS AND DISCUSSION

Twelve papers met the inclusion criteria. The PRISMA flow diagram (Fig. 1) presents the results of the search in detail. The findings from these 12 papers were synthesized into five analytical themes which represent a synthesis and interpretative analysis of 14 descriptive codes. These analytical themes and descriptive codes are presented in Table 1. Hence, Table 1 shows core themes and their respective codes on concerns and challenges faced by the health financing system in Tanzania mainland.

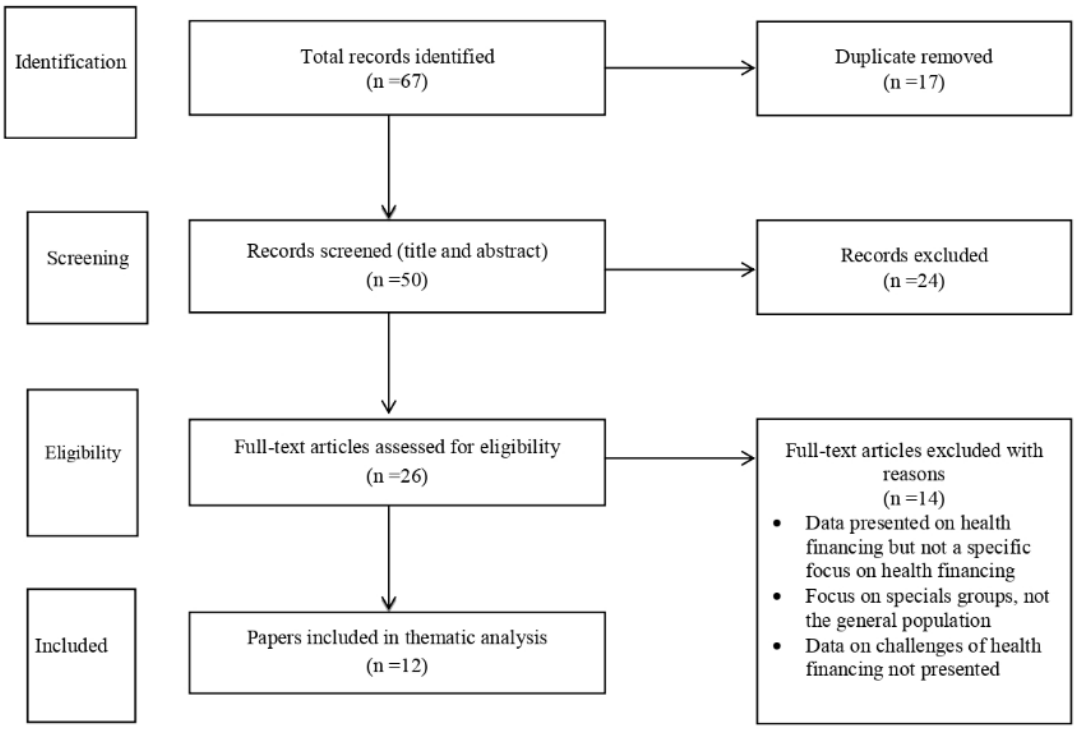

Fig. 1. The PRISMA flow diagram presents the results of the search in detail

Table 1. Themes, codes, and characteristics of the papers

Themes	Respective codes	Author(s)	Year published	Study setting	Study type/design
Low enrollment of members	Lack of enough knowledge about benefits	Simime Benjamin	2015	Kwimba District	Cross-sectional
		Ndomba & Maluka	2019	Mtwara District	Descriptive qualitative case study
		E.Abraham et al.	2021	Morogoro municipality	Qualitative study
	Perception toward health insurance	Simime Benjamin	2015	Kwimba District	Cross-sectional
		E N Chomi et. al,	2015	Kongwa and Mpwapwa districts	Cross-sectional
	Low income	Ntuli A. Kapologwe et. al,.	2017	Singida and Shinyanga region	Cross-sectional
Inadequate management skills	Poor collections and management of the revenue	R. Kigume and S. Maluka	2021	Kinondoni Municipality, Kibaha Town Council, Iringa Municipality and Songea Municipality	Descriptive qualitative case study
	Expansion of the scope of services coverage	P.J. Amani et al.	2021	Igunga and Nzega districts	Explanatory qualitative study
Inadequate community involvement	Poor social marketing strategies	Ntuli A. Kapologwe et al.	2017	Singida and Shinyanga region	Cross-sectional
	Community Engagement and Collaboration	Doris O. Afriyie et al.	2021	Dar es Salaam, Dodoma and Kilimanjaro.	Qualitative research design
Poor quality care	Poor and inconvenient services provided	Simime Benjamin	2015	Kwimba District	Cross-sectional
		Alphoncina Kagaigai et. al,	2021	Bahi and Chamwino districts	cross-sectional household survey
	Lack of enough accessibility to medicines and testing facilities	Ndomba & Maluka	2019	Mtwara District	Descriptive qualitative case study
		Fadhili H. Mgumi et. al,	2018	Mkalama District	Cross-sectional
		P.J. Amani et. al,	2021	Igunga and Nzega districts	Explanatory qualitative study
Fraud	Misuse of membership cards	Shazy Amasha	2015	National Health Insurance Fund (NHIF) head office	Qualitative case study design
	Delay of reimbursement				
	Inaccuracy information filled by health providers to the patient forms				

3.1 Analytic Theme 1: Low enrollment of Members

Researchers have acknowledged health insurance as a valuable tool in health financing. Despite its significance, subscription paralysis has been observed in Tanzania for this product. People who can afford health insurance are also either ignorant or aversive towards it. The review found that the participant enrollment status is still low, which is caused by various factors, including lack of knowledge of benefits, lack of community awareness, lack of community participation and involvement, perception of health insurance, and low income. Various authors have reported this in their studies as a hindrance to joining or utilizing both public and private health insurance.

Lack of enough knowledge about benefits: The potential advantages of effective knowledge management are significant. A sound knowledge management system will make it easy to find and reuse relevant information and resources across the program. Many studies have reported that many communities on Tanzania's Mainland lack enough knowledge about health insurance benefits. "According to a survey conducted by Ndomba and Maluka (2019) in the Mtwara district, their data analysis from both Mtwara rural and urban districts showed mixed results whereby the majority of respondents, especially non-insured, had very little knowledge of the CHF scheme. In Mtwara Urban, the majority who participated in the FGDs reported that it was the first time they had heard about CHF" [10]. "Also, the study conducted by Abraham et al. [11] among people working in the informal sector in Morogoro, Tanzania, revealed that an essential attitudinal barrier reported by those who were not insured that there is limited awareness of the iCHF scheme among informal workers because most of them do not understand well about health insurance" [11]. This finding is in line with that of having inadequate knowledge of the rudimentary principle of the operation of a social health insurance scheme [12].

Perception toward health insurance: "*Perceptions* of the quality of *health* service could have immense impacts *on* enrolment. According to a survey it was found that the majority of community members support a redistributive policy, but there are indications that the support and willingness to contribute to its achievement are influenced by the perceived benefits, amount of subsidy considered, and trust in the scheme management. These present important issues for consideration when designing redistributive policies" [13]. Also, the majority of Kwimba people perceived the services offered by the health insurance scheme as poor quality as a result they do not prefer to join the scheme [14].

Low income: Family or household income is the income shared by people living in the same household. A study conducted in the Mtwara region shows that income can be among the predictors of joining or utilization of community health insurance. Low-income earners (persons at risk of poverty) are considered less likely to join the scheme compared to high-income earners despite their health status. Their low-income status was mentioned as the reason for low enrollment in the CHF scheme in Mtwara Region. Non-insured respondents, especially those from Mtwara rural, who participated in the survey, reported that they were unable to pay TZS 10,000 (equivalent to 5 USD) per annum [10]. Also, the study conducted at Mkalama District revealed the same results as Mtwara, but the study mentioned that poverty was among the factors identified as attributing to low enrolment in the scheme [15].

3.2 Analytic Theme 2: Inadequate Management Skills

To perform the functions of management and to assume multiple rules, managers must be skilled to fulfill some activities or tasks. Also, a robust public health system requires a financially stable system to ensure efficient and effective healthcare delivery to the community. Effective public *financial management* ensures public *health* funds are used to deliver services in the best way possible whereby the poor performance of the managers at any level can bring the system to negative results. The following are two factors that result in the poor performance of the health insurance system in Tanzania.

Poor collections and management of the revenue: This is one of the reasons for the failure of community-based health insurance schemes in Tanzania. According to a study conducted in four urban districts in Tanzania describe that during the establishment of TIKA in 2009, the scheme was launched in 2012 and 2015. According to district health managers, gathering opinions from the community members and ministerial approval of by-laws took the most time due to the legal process needing to follow

many procedures, and the approval of the by-laws took a long time. After the submission of by-laws, there were several rounds of comments which almost a year as a result of the delay in the implementation of the insurance services to the communities. Health insurance provides the access to healthcare and protects the community from certain costs. But health insurance had failed to provide equitable access due to limited service benefits and restricted use of services within schemes. Although elderly perspectives varied widely across the domains of responsiveness, insured individuals generally expressed dissatisfaction with their healthcare [16].

Expansion of the scope of services coverage: "Emergency medical expenses may result in severe financial distress, By buying health insurance, people believe that assured of financial stability during an illness but according to a survey it is revealed that some services can not be accessed while using these financial schemes in Tanzania, therefore according to the literature, it was suggested that the national health insurance policy should be revisited to improve its implementation and expand the scope of service coverage. Strategic decisions are required to improve the healthcare infrastructure, increase the number of healthcare workers, ensure the availability of medicines and testing facilities at healthcare centers, and reduce long administrative procedures related to health insurance" [16].

3.3 Analytic Theme 3: Lack of Community Involvement

Community participation can be loosely defined as the involvement of people in a community in projects to solve their problems. People cannot be forced to participate in projects which affect their lives but should be given the opportunity where possible. Community participation is regarded as an important tool for successful health sector development and health insurance schemes but the scheme faces a key challenge as many community members are not aware of the importance of the health financing system whereby according to a review more energy is needed to convince community members to join insurance the scheme [17]. Also, the study conducted in the Kwimba district revealed that community members were reportedly not involved in the local organization and management of the CHF scheme at the ward level. Health Committee has been found inactive in some wards and also reported not to carry out its responsibilities as required by the CHF Act of 2001. Failure to accomplish their responsibility has led to poor performance of the scheme. The study concluded that the majority of the respondents do not participate in the local organization structure of the CHF scheme at their ward level [14].

Poor social marketing strategies: Marketing strategy allow an organization to concentrate its limited resources on the greatest opportunities to increase sales and achieve sustainable competitive advantage. *Health* insurers can implement content *marketing* to improve brand recognition, attract new customers, and stay engaged with their current members. "Market strategies can be barriers or facilitators to enrollment and re-enrollment into the community health funds/Tiba Kwa Kadi (CHF/TIKA) in Tanzania, a study by Kapologwe et. al, 2017 found that This study indicated that a low level of utilization of available social marketing strategies is one of the barriers for attracting members to join the schemes. The study recommends that there is a need for applying various social marketing strategies and considering different facilitating for the growth and sustainability of the scheme as we move towards universal health coverage" [18].

Community Engagement and Collaboration: "community engagement in the introduction and implementation of national health insurance is useful for holding everyone accountable, and it is very important for addressing inequalities in health. A study by Afriyie et. al, 2021, identified that community engagement and collaboration are standard practices when developing national policies such as for iCHF in Tanzania. Evidence shows that routine practices of implementing health financing reforms can be achieved when multiple actors engage in delivering health insurance outputs and share a coherent view of their roles and purpose" [19].

3.4 Analytic Theme 4: Poor Quality Care

Another factor that was identified is poor quality care. Poor quality care leads to sicker patients, more disabilities, higher costs, and lower confidence in the healthcare industry. According to studies synthesized during this analysis, the quality of care was a result of poor and inconvenient services provided and/ or lack of enough accessibility to medicines and testing facilities in the health care centers.

Poor and inconvenient services provided: National health care system's major challenge is to provide appropriate health products and services in a reasonable, reliable, and efficient manner accessible to the majority of the population**.** These products comprise of shortage of drugs, medicine, medical supplies, medical equipment, diagnosis, and lack of referral services. The study conducted by Kagaigai et al. [20], about the influence on perceptions towards enrolment decisions into community-based health insurance schemes, did mention that community members could not join CHF because of the poor services provided. Also, another study revealed that community members find no need to enroll in health insurance schemes because even those with CHF cards are not treated well only priority is given to those who pay cash. In the same study, findings indicated poor quality of services because of drug stock-out. The study reported it is common to find health facilities running short of essential medicines or reagents [10,14]. The study by Kagaigai et al. [20] indicated that lack of enough accessibility to medicines and testing facilities is the major problem but also convenience as exemplified by the location and opening hours of insurance offices is another major issue that led to poor enrollment status of health insurance system in Tanzania [20].

3.5 Analytic Theme 5: Fraud

Health insurance fraud is a crime that entails great financial and human losses. This false or misleading information is provided to a health insurance company in an attempt to have them pay unauthorized benefits to the policyholder, another party, or the entity providing services. The offense can be committed by the insured individual or the provider of health services. This occurs when a dishonest healthcare provider or customer intentionally submits or causes someone else to submit false or misleading information. This is done to obtain more payments for medical expenses than were incurred. Also, it was reported that some clients misuse the membership cards as they tend to give them to other unauthorized people hence rising the cost burden of the insurance authorities. Health insurance fraud can affect all parties [21-23].

4. CONCLUSION

This systematic has found that the health insurance schemes encounter both structural and operational issues which subsequently result in low uptake of the schemes. Therefore, to achieve universal health coverage, the Government of Zanzibar should consider winning the battle before the fight by doing community sensitization to conquest national support while also maintaining local accountability and developing strong strategies that will protect the scheme against any fraud intended to occur during its implementation.

CONSENT AND ETHICAL APPROVAL

It is not applicable.

COMPETING INTERESTS

Authors have declared that no competing interests exist.

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