

RESEARCH ARTICLE

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Perceived challenges affecting elderly people and their effect on their ability to obtain social protection and healthcare services In Tanzania

Ramadhan Said Naibu ^a, Willy Maligany ^{a*}

Abstract

Ageing has been regarded as an important policy issue worldwide because of the large proportion of elderly people. Despite efforts to improve access to healthcare services, the elderly in Tanzania still face various challenges. This study was conducted to explore the challenges affecting elderly people from accessing NHIF in Kinondoni Municipal Council. The study population comprised elderly individuals in selected wards in Kinondoni Municipal Council. A sample size of 394 elderly people was purposively sampled for the study. Data collection involved mixed-methods that combined questionnaires, in-depth interviews, document reviews, and focus group discussions to obtain the data. While the Statistical Package for Social Science was used to analyse quantitative data, content analysis was employed to analyse qualitative data. The study revealed several key challenges elderly individuals face in accessing NHIF services in Tanzania. Financial constraints emerged as the most significant barrier, with 75% of the respondents citing difficulties in affording premiums and out-of-pocket expenses, often leading them to forgo necessary healthcare. Administrative hurdles, such as complex enrolment processes and bureaucratic inefficiencies, were also prevalent, with 75% acknowledging that these obstacles impede their ability to utilize NHIF benefits effectively. Additionally, a lack of awareness regarding NHIF services was noted by 75% of participants, indicating that many elderly individuals do not fully understand their rights or available benefits. These findings highlight for the need for targeted interventions to improve accessibility and health outcomes.

Keywords: Regulatory Framework, National Insurance Fund, Social Protection, Healthcare Services, Elderly People, Tanzania .

Author Affiliation: ^a Department of Leadership, Ethics and Governance, Faculty of Leadership and Management Sciences, Mwalimu Nyerere Memorial Academy.

Corresponding Author: Willy Maligany. Department of Leadership, Ethics and Governance, Faculty of Leadership and Management Sciences, Mwalimu Nyerere Memorial Academy.

Email: wmaliganya@yahoo.com

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1. INTRODUCTION

Globally, several changes affecting elderly people from accessing NHIF have been highlighted. In China, for example, Feng et al. (2020) investigated the long-term care system for older adults in China: policy landscape, challenges, and prospects. The study showed that the country had implemented social insurance long-term care financing models and programs for integrating health care and long-term care services in selected settings across the country. However, the scheme was challenged by a shortage of workforce as well as weak quality insurance.

Studies in some parts of Africa have also revealed the challenges affecting elderly people from accessing NHIF. A study from Ghana showed that health insurance failed to protect its members equally, benefiting the educated, rich, and those residing closer to health facilities more than others

(Navarrete et al., 2019). Findings from a qualitative study from the same country that explored the factors contributing to low uptake and renewal of health insurance cards revealed that a lack of leadership, poor communication, and the inability to pay the premium discouraged enrolment among community members (Fenny et al., 2018). Another study exploring the impact of social health insurance on the quality of care among women in Gabon revealed complaints about health staff rudeness, shortage of drugs, and non- coverage of essential medicines (Sanogo et al., 2020). Similar findings have also been documented by Leitemu and Gitonga (2019), who studied the factors influencing NHIF access in Marsabit county and established that the study found that facility fees and physician charges greatly influenced the access to universal health care by the ageing population NHIF beneficiaries in rural areas Marsabit County.

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Given this trend, the demographic transition towards an aging population has become a global phenomenon, posing significant global challenges for social protection systems and aligning with the Sustainable Development Goals (SDGs) agenda for equitable healthcare access and social welfare. Almost every country in the world is experiencing growth in the number and proportion of older persons in their population (He et al., 2016). The share of older persons in the total population will increase significantly in the coming decades. However, the increase in the elderly population in Malaysia significantly impacts society and the country, especially regarding health care and social protection.

As the case in other countries in the world, Tanzania is currently experiencing an increase in the proportion of older people in its population, which underscores the importance of aligning national development priorities such as the Five Year Development Plan with initiatives aimed at addressing the needs of the elderly (United Nations Department of Economic and Social Affairs, 2015). Over the years, financing healthcare in Tanzania has depended on out-of-pocket payments, primarily criticized as being inefficient, contributing to inequity and high cost, and denying access to healthcare to those most in need, including the elderly in rural areas. Health insurance was recently introduced as an instrument to enable equitable access to healthcare and thus improve the health system's responsiveness. Even though health insurance is expected to benefit those who are insured, there is a lack of specific studies in the country looking at the role of health insurance in facilitating the health system responsiveness among vulnerable populations of remote areas.

The empirical literature highlights numerous challenges elderly individuals face in accessing NHIF services. These findings underscore the need for more studies on the challenges affecting elderly people from accessing NHIF to inform policy reforms and improve communication strategies to address disparities and enhance access to healthcare services for elderly populations. Despite efforts to improve healthcare and social services, the elderly in Tanzania continue to encounter various obstacles in accessing adequate healthcare and social protection (Tungu et al., 2020), posing challenges to achieving regional development objectives outlined in the Regional Indicative Strategic Development Plan (RISDP). Societal perceptions and cultural attitudes towards aging in Tanzania may influence the support and care provided to elderly individuals. Moreover, the effectiveness of the NHIF in addressing the healthcare needs and promoting social protection among the elderly remains uncertain, particularly in the context of Kinondoni. Therefore, this study was set to explore

the challenges affecting elderly people from accessing NHIF in Kinondoni Municipal Council and their impacts on their ability to obtain social protection and healthcare services. It is critical to ascertain the perceived challenges affecting the elderly people in access to health services in accessing NHIF services for developing targeted interventions and policies to enhance their social welfare and healthcare outcomes.

2. THEORETICAL FRAMEWORK

The study was guided by three theories: the social exchange theory, the systems theory, and the theory of health empowerment.

2.1 Social Exchange Theory

The Social Exchange Theory posits that social interactions are based on reciprocity and mutual benefit. According to this theory, individuals engage in relationships and interactions with others based on the expectation of receiving rewards or benefits and minimizing costs (Ahmad et al., 2023). In the context of this study, social exchange theory can be applied to understand the dynamics of the relationship between elderly individuals and the NHIF. Elderly citizens may perceive NHIF membership and access to healthcare services as a form of social exchange, wherein they contribute financially to the NHIF in exchange for healthcare coverage and social protection.

In this study, the Social Exchange Theory provided a valuable framework for understanding the relationship dynamics between elderly individuals and the NHIF in Tanzania. It was applied to explore how elderly citizens perceive their membership in NHIF and access to healthcare services as part of a social exchange process. According to the theory, individuals engage in relationships and interactions based on the expectation of receiving rewards or benefits while minimizing costs (Stafford & Kuiper, 2021). Furthermore, drawing from Mugambi (2022) application of the theory in assessing determinants of national hospital insurance fund uptake by households in Kenya highlights its relevance and applicability to similar contexts in East Africa. Building on existing research and theory, this study aims to provide a nuanced understanding of the social dynamics surrounding elderly individuals' engagement with social protection programs like NHIF in Tanzania.

2.2 Systems Theory

Equally important, a system is an interconnection of many parts into one (Luhmann et al., 2013). These parts are congruent with each other and exist in an environment where their inputs and outputs are readily available. This is important in service organizations like the NHIF, which rely heavily

on systems to work efficiently and effectively. The output is experienced by customers who may rate the service as favorable or unfavorable. Patients utilizing NHIF tend to get experiences based on processes and elements in a defined system. These systems include registration, triage, medical consultation and treatment, lab tests, radiological services, admissions, nursing, and discharges. For the patient to experience quality service, these processes have to be congruent and work as one for success.

2.3 Theory of Health Empowerment

The theory of health empowerment is based, is a dynamic health process that emphasizes “purposefully participating in the process of changing oneself and one’s environment, recognizing patterns, and engaging inner resources for well-being. Health empowerment emphasizes facilitating one’s awareness of the ability to participate knowingly in health and health care decisions. This process facilitates purposeful participation in attaining health goals and promoting individual well-being (Shearer, 2009). In the present study, the theory can serve as a guiding framework for examining how older adults navigate challenges related to accessing healthcare services and social protection through the NHIF in Tanzania.

3. METHODOLOGY

This section presents the research methodology used in this study. This section provides a description of the study area and the research design, encompassing the research approach, the targeted population, sampling strategies and data collection methods and analysis plan.

3.1 Area of Study, Research design, and Research approach

3.1.1 Area of Study

The study was conducted at Kinondoni Municipal Council, located in Dar es Salaam, Tanzania. Kinondoni is one of the administrative districts in Dar es Salaam and the largest municipality in terms of population and geographical size. It is a diverse urban area characterized by a mix of residential, commercial, and industrial zones and peri-urban and rural communities. Kinondoni is home to a significant portion of Dar es Salaam’s population, including many elderly residents (Abdu, 2018). The municipality is marked by socio-economic disparities, with affluent neighborhoods coexisting alongside informal settlements and areas of poverty, which presents unique challenges and opportunities for healthcare access and social protection for elderly individuals. In terms of healthcare infrastructure, Kinondoni is equipped with a range of health facilities, including

hospitals, health centers, dispensaries, and private clinics. However, healthcare access and quality disparities may exist across different parts of the municipality, with urban areas typically having better access to healthcare services than peri-urban and rural areas. Sociocultural factors also play a significant role in shaping elderly healthcare and social protection in Kinondoni. Traditional beliefs and cultural attitudes towards aging may influence elderly individuals’ experiences and perceptions of healthcare in the district and their interactions with social protection programs like the NHIF (Kashaga, 2013).

3.1.2 Research Design

This study used a case study research design due to its flexibility in using different data collection methods, such as questionnaires, interviews, and documentation. Similarly, a case study tends to be cheaper than other methods (Ndunguru, 2007). The study was a single case study design because of the inclusion of one District Council for data collection.

3.1.3 Research Approach

This study adopted a mixed-methods research approach to explore the role of the NHIF in promoting social protection among elderly individuals in Tanzania, with a specific focus on the Kinondoni Municipal Council. The mixed-methods approach combined quantitative and qualitative data collection and analysis techniques to understand the research questions and objectives better.

3.2 Targeted Population, Sample Size and Sampling Strategies

The study population for this research comprised the elderly individuals residing in selected wards in Kinondoni Municipal Council. The study population encompassed urban and peri-urban residents and individuals living in formal housing, informal settlements, and rural areas who are enrolled in the NHIF and have access to its healthcare services. According to the 2022 census, the population of elderly people (65+ years) in Kinondoni Municipal Council was 26,356 (NBS, 2023). The sample size was composed of 394 elderly people calculated according to Yamane (1967) to enable the computation of sample size statistically. The sample size for qualitative data collection consisted of 21 participants. It argued that qualitative data collection require a minimum sample size of at least 12 to reach data saturation (Braun & Clarke, 2021)(Fugard & Potts, 2015)).

The study involved purposive sampling of elderly people and other identified stakeholders to provide answers to the research questions.

The elderly people for the surveys were

Table 3.1. Selection of Stakeholders for Qualitative Data Collection

Stakeholder Category	Key Stakeholders	Total number sampled
NHIF Staff	Kigogo Ward	2
	Mbweni Ward	2
	Mbezi Juu Ward	2
Healthcare Providers	District Hospital in Kigogo Ward	2
	District Hospital in Mbweni Ward	2
	District Hospital in Mbezi Juu Ward	2
Community Leaders	Village Executive Officers in Kigogo	2
	Village Executive Officers in Mbweni	2
	Village Executive Officers in Mbezi Juu	2
District Health Officers	Kigogo Ward	1
	Mbweni Ward	1
	Mbezi Juu Ward	1
Total		21

selected purposively sampled for the study from the NHIF registers at the District Health Offices in Kinondoni. Purposive sampling was best for the study to enable the selection of elderly people who are NHIF beneficiaries. Participants for the key informant interviews were purposively selected based on their roles, expertise, and involvement in the NHIF sector. Participants for the FGDs were identified and sampled by convenience with the help of the Village Executive Officers as elderly people who were also beneficiaries of NHIF with the ability to help answer the research questions.

3.3 Data Collection Methods and Analysis

3.3.1 Data Collection Methods

Data was collected through semi-structured interviews, focus group discussions, surveys, and document reviews. Structured surveys were utilized to collect data from the sampled elderly NHIF beneficiaries in the selected wards of Kinondoni Municipal Council. For the qualitative research phase, key informant interviews were conducted with stakeholders involved in elderly healthcare and social protection within Kinondoni Municipal Council. The FGDs were organized with groups of 6 to 10 participants, ensuring a mix of demographics, including age, gender, and socioeconomic status, to enrich the dialogue. The sessions were audio-recorded with participants' consent to capture detailed responses, which were later transcribed for analysis. Additionally, document reviews involve systematically examining and analyzing existing documents, reports, policy papers, and other relevant materials to gather information related to the research objectives. Therefore, document reviews were used in this study to complement data collected

from questionnaires and interviews by providing additional insights and context.

3.3.2 Data Analysis

In this study, quantitative data analysis involved descriptive statistics to summarize the sample's demographic characteristics and critical variables related to NHIF enrollment, healthcare utilization, satisfaction, and perceived well-being impacts. The chi-square test examined associations between demographic variables and NHIF enrollment status, relationships between NHIF utilization patterns, and perceived well-being impacts. Additionally, regression analysis was employed to explore the effects of NHIF and the challenges in accessing NHIF services for elderly beneficiaries, controlling for relevant demographic variables and covariates. Subgroup analyses were conducted in some instances to compare NHIF outcomes and experiences across different demographic groups (e.g., age groups, gender, and socio-economic status) and residential areas within Kinondoni.

For qualitative data, thematic analysis was employed to identify key themes, patterns, and insights from the qualitative data collected through in-depth interviews. The data was coded systematically to identify recurring concepts, ideas, and perspectives related to societal perceptions, cultural attitudes, NHIF strategies, challenges, and recommendations. There was also constant comparative analysis to compare and contrast findings across different interviews, seeking convergence, divergence, and nuances in participants' experiences and viewpoints. Triangulation of quantitative and qualitative findings was conducted to corroborate and validate results from both data sources, enhancing the overall

Table 4.1. Demographic information of the study participants

Information	Number of Participants	Percentage (%)
Age group		
65-70 years	132	42%
71-75 years	95	30%
76-80 years	57	18%
81+ years	31	10%
Total	315	100%
Gender		
Male	167	53%
Female	148	47%
Total	315	100%
Marital Status		
Married	183	58%
Widowed	82	26%
Divorced/Separated	35	11%
Single	15	5%
Total	315	100%
Education Level		
No formal education	76	24%
Primary education	145	46%
Secondary education	63	20%
Tertiary education	31	10%
Total	315	100%
Length of time with NHIF		
Less than 1 year	31	10%
1-5 years	110	35%
6-8 years	63	20%
9-12 years	32	10%
More than 12 years	79	25%
Total	315	100%

reliability and validity of the research findings. Conversely, stringent adherence to ethical principles was maintained throughout the study.

4. RESULTS AND DISCUSSIONS

This study was set to explore the challenges affecting elderly people from accessing NHIF in Kinondoni Municipal Council and their impacts on their ability to obtain social protection and healthcare services. This was considered important in order to ascertain the perceived challenges affecting the elderly people in access to health services in accessing NHIF services for developing targeted interventions and policies to enhance their social welfare and healthcare outcomes. Therefore, this section presents the results and discusses the challenges affecting elderly people from accessing NHIF in Kinondoni Municipal Council

and their impacts on their ability to obtain social protection and healthcare services.

4.1 Demographic information of the Respondents

In this study, the study population included elderly individuals (aged 65 and above) residing in the Kinondoni Municipal Council, NHIF beneficiaries, and key stakeholders such as NHIF officials, healthcare providers, and community leaders. Out of the 394 distributed questionnaires, 80% (315) were returned and used for analysis. Table 4.1 shows the demographic information of the 315 participants.

The majorities (42%) of respondents were between the ages of 65 and 70 years, followed by 30% aged 71–75 years and 18% aged 76–80 years. Only 10% were aged 81 years and above. The relatively high proportion of younger elderly individuals (65–

70) in the sample could reflect the increasing life expectancy in Tanzania, where the population aged 60 and above is growing steadily due to improvements in healthcare and living conditions (WHO, 2024). This demographic group is typically more active and likely to seek healthcare services, making their experience with the NHIF especially relevant. The large number of respondents from the 65–70 age group also suggests that this segment may be more accessible for research and outreach programs. Additionally, as people age, their healthcare needs often increase, which aligns with the observation that most elderly individuals (especially those aged 70 and above) rely heavily on health insurance and social protection programs like the NHIF (Tungu et al., 2020).

In terms of gender, the gender distribution among the respondents was relatively balanced since 53% of the participants were male, while 47% were female. This close representation is significant because gender dynamics can be critical in access to healthcare services and social protection schemes like the NHIF. The significant representation of female participants (47%) highlights their participation in the NHIF. Women particularly older women, were often more vulnerable to poverty and health challenges in later life due to gender inequalities throughout their lives, which can restrict their access to healthcare services (Bintabara et al., 2018). Therefore, understanding how gender influences access to NHIF services is critical for ensuring equitable access to healthcare for elderly women.

The findings revealed further that most of the respondents (58%) were married, followed by widowed individuals (26%). A few respondents (11%) were divorced, and 5% were single. The marital status of elderly individuals was essential to their access to healthcare and social protection. Married individuals may benefit from spousal support, both financially and emotionally, which can facilitate better access to healthcare services. According to Mutabazi et al. (2021), married elderly people often have higher health insurance coverage rates than their unmarried counterparts due to combined household resources. Widowed and divorced individuals, on the other hand, are often more vulnerable. Widows, in particular, may face financial challenges in accessing healthcare, especially in patriarchal societies like Tanzania, where men typically control household finances. This finding aligns with those of Khamis (2016), who noted that widowhood is a significant risk factor for poor health outcomes among elderly women, as they may lack the financial means or family support to access health services.

Regarding education, most of the participants (46%) had attained primary education, followed by those with no formal education (24%). Respondents

with secondary education accounted for 20%, while 10% had attained tertiary education. Education determines healthcare access and utilization (Abd Manaf et al., 2017). Studies show that those with higher levels of education are more likely to understand the benefits of health insurance and utilize healthcare services effectively (Mpeta et al., 2023). In the present study, most respondents with primary or no formal education may face challenges understanding NHIF procedures and healthcare entitlements. According to Ngowi and Nuru (2023), low educational levels among elderly people in Tanzania often result in poor health-seeking behavior and reliance on informal healthcare providers. However, the few higher-educated respondents were likely to have better access to and understand NHIF services since education is closely linked to health literacy.

The length of time participants had been enrolled in the NHIF was an important variable in understanding the depth of their experience with the healthcare services provided under NHIF. The data showed that most respondents (35%) have been enrolled in NHIF for 1–5 years, followed by 25% who have been members for more than 12 years. A smaller proportion (20%) reported being enrolled for 6–8 years, 10% for 9–12 years, and 10% for less than 1 year. The results suggest that a significant portion of the elderly respondents (35%) have been enrolled in NHIF for 1–5 years, which could indicate a growing awareness of the importance of health insurance among this demographic in recent years. The present results are supported by those of Amani et al. (2020), who noted that health insurance enrollment in Tanzania has increased over time due to government outreach programs and the rising cost of healthcare. This trend also highlights the increasing uptake of NHIF services among the elderly who might not have been covered earlier, particularly with the shift towards universal health coverage.

The fact that 25% of participants had been members of NHIF for more than 12 years suggests that many elderly people have had long-term access to healthcare under NHIF, which positively impacted their health outcomes. Long-term membership in health insurance schemes is associated with better health management, particularly for chronic conditions, as Huguet et al. (2023) noted. Interestingly, 10% of the respondents reported being enrolled for less than 1 year, which may reflect newly eligible individuals such as those who recently turned 65 or those who had only recently realized the benefits of joining NHIF. Some elderly individuals could have delayed enrolling in health insurance programs due to financial constraints or lack of awareness, leading to late entry into the NHIF system. Additionally, the few respondents who had been enrolled for 9–12

years highlighted a smaller cohort of long-term users who may have initially joined NHIF due to employer programs or government initiatives targeting early retirees.

The varying length of enrollment times has implications for NHIF service delivery. Long-term members (those enrolled for more than 12 years) were likely more familiar with the system and may have higher expectations regarding service quality. However, more recent enrollees could still be navigating the system and may require additional support or education on fully utilizing the benefits provided by NHIF. The findings align with [Morgan et al. \(2022\)](#), who suggested that new enrollees, particularly older individuals, often need more guidance on the administrative processes of accessing healthcare services under insurance schemes. Generally, understanding the length of enrollment provides critical insights into the user experience with NHIF. It highlights the need for continuous education and support to maximize health insurance benefits, particularly for newer members.

4.2 Perceived Challenges affecting elderly people from accessing NHIF health services

Despite establishing the NHIF in Tanzania, numerous challenges hinder elderly individuals from fully benefiting from the services offered. The results of this study reveal a complex interplay of financial, administrative, and socio-cultural barriers that elderly citizens encounter when trying to access NHIF services. Understanding these challenges is crucial, as they not only affect the ability of the elderly to receive necessary healthcare but also impact their overall social protection and quality of life. Thus, the present study also investigated the challenges affecting the elderly people from accessing NHIF in Tanzania and their impact on their ability to obtain social protection and healthcare services in the country. These results are presented in the following subsections.

4.2.1 Challenges encountered by elderly people in accessing NHIF services

The study identified several challenges elderly people face when not accessing NHIF in Kinondoni Municipal Council and their impact on their ability to obtain social protection and healthcare services. The challenges elderly people encounter in accessing NHIF services are summarized in Table 4.24. Each of these challenges is discussed separately from the subsequent subsection.

4.2.1.1 Financial Constraints

Financial constraints represent one of the most significant barriers elderly individuals face in

accessing the NHIF services in Tanzania. Despite the aim of NHIF to provide affordable healthcare, many elderly citizens struggle with the costs associated with premiums, co-payments, and other out-of-pocket expenses related to medical services. These financial burdens can deter elderly individuals from seeking timely healthcare, ultimately compromising their health outcomes and quality of life. In the present study, financial constraints emerged as a significant barrier for elderly people to access NHIF. A majority (75%) of the respondents either agreed or strongly agreed that this was a challenge to their access. This has also been reported as a constraint for the elderly people or the aged populations in Kenya ([Leitemu & Gitonga, 2019](#)). During the interviews, an NHIF staff member remarked,

“For many elderly people, the financial burden of healthcare is too great; they often forgo necessary treatments.” [NHIF Staff, Kigogo Ward]

According to [Kipkemei et al. \(2020\)](#), many elderly individuals face limited income sources, making it difficult to pay for NHIF premiums and associated healthcare costs. Qualitative interviews revealed similar sentiments that many elderly individuals operate on fixed incomes, making even nominal NHIF contributions burdensome. This financial strain can lead to a reluctance to seek necessary healthcare services, perpetuating a cycle of unmet health needs. The NHIF staff notes that many elderly beneficiaries struggle to prioritize healthcare expenses amidst other financial responsibilities. One healthcare provider noted,

“Many elderly individuals struggle to afford the NHIF premiums; they often have to choose between healthcare and necessities.” A district health officer echoed this concern: “Elderly patients frequently tell me they cannot afford the costs associated with their treatment, even with NHIF coverage.” [Healthcare Provider, Mbezi Juu District Hospital]

District health officers highlighted that financial constraints significantly hinder elderly people's access to NHIF services. One district health officer mentioned,

“Many elderly individuals are on fixed incomes and struggle to pay even minimal contributions, limiting their access to healthcare. Most elderly patients frequently choose between healthcare and other basic needs, which limits their access to essential services” [District Health Officer, Mbezi Juu]

This response showed that financial constraints were a pervasive issue that severely limited elderly individuals' access to healthcare in Kinondoni Municipal Council. Recent studies highlight that economic hardships can severely hinder access to health insurance, particularly for low-income populations ([Lazar & Davenport, 2018](#)).

Table 4.2 Challenges Encountered by Elderly Individuals in Accessing NHIF Services in Kinondoni Municipal Council (n=315)

Challenge	Strongly Agree (n, %)	Agree (n, %)	Neutral (n, %)	Disagree (n, %)	Strongly disagree (n, %)
Financial constraints	45 (45%)	30 (30%)	15 (15%)	5 (5%)	5 (5%)
Administrative hurdles	40 (40%)	35 (35%)	10 (10%)	10 (10%)	5 (5%)
Lack of awareness	50 (50%)	25 (25%)	15 (15%)	5 (5%)	5 (5%)
Cultural factors	35 (35%)	30 (30%)	20 (20%)	10 (10%)	5 (5%)
Lack of preventive healthcare services	30 (30%)	25 (25%)	20 (20%)	15 (15%)	10 (10%)
Limited accessibility	40 (40%)	30 (30%)	15 (15%)	10 (10%)	5 (5%)
Geographical remoteness	50 (50%)	20 (20%)	15 (15%)	10 (10%)	5 (5%)
Language barriers	35 (35%)	30 (30%)	20 (20%)	10 (10%)	5 (5%)
Lack of family support	40 (40%)	25 (25%)	20 (20%)	10 (10%)	5 (5%)
Age-related limitations	45 (45%)	25 (25%)	15 (15%)	10 (10%)	5 (5%)
Health illiteracy	50 (45%)	30 (30%)	10 (15%)	5 (5%)	5 (5%)

The present study established that most elderly people in the district lived on fixed incomes, making it challenging to prioritize healthcare expenditures. A village executive officer reported,

“In our community, many elderly residents live on fixed incomes, making it difficult to prioritize healthcare spending.” [Village Executive Officer, Mbezi Juu Ward]

One of the most significant challenges identified by participants in accessing NHIF services was financial. Many elderly individuals reported difficulty in affording the premiums necessary for NHIF enrolment. One of the participants of an FGD said,

“Even though NHIF is supposed to help us, paying the contributions is hard for people like me who don’t have a regular income,” [FGD Participant, Mbezi Juu Ward]

Several participants mentioned that relying on their children or relatives to pay for their NHIF contributions created feelings of dependency, which was both emotionally and practically challenging. One of the participants confirmed this by saying:

“I feel like a burden to my children when I ask them to help me pay,” [FGD Participant, Kigogo Ward]

This financial strain limited many participants’ ability to access NHIF services and fully benefit from

the program consistently. The financial barriers faced by elderly participants in affording NHIF premiums align with existing literature that highlights the economic vulnerability of elderly populations in LMICs (Mtei et al., 2012). Many elderly individuals depend on informal sources of income or support from family members, making it difficult to afford health insurance premiums consistently. This financial burden can be particularly challenging for elderly people, who may already face high healthcare costs due to age-related conditions. The findings suggest that targeted subsidies or premium waivers for elderly populations could enhance their access to NHIF services and alleviate the financial stress of maintaining insurance coverage (Borghi et al., 2012).

4.2.1.2 Administrative hurdles

Administrative hurdles were also a prominent challenge regarding the elderly’s access to NHIF services in Kinondoni Municipal Council. Administrative hurdles present a significant obstacle for elderly individuals seeking to access NHIF services in Tanzania. These hurdles can include complex enrolment processes, lengthy paperwork, and bureaucratic delays, making it difficult for elderly beneficiaries to navigate the system. Many elderly individuals may lack the support or understanding to

manage these administrative tasks effectively, leading to frustration and discouragement. Additionally, inefficiencies within the NHIF structure can exacerbate these challenges, further complicating access to necessary healthcare services. Most (75%) respondents acknowledged that bureaucratic processes impeded the enrolment and utilization of NHIF benefits. A healthcare provider commented,

"The bureaucracy can be overwhelming for elderly individuals; long wait times and complicated paperwork deter them from seeking care." [Healthcare Provider, Mbweni Ward]

Delays in processing applications and renewals of NHIF membership create significant obstacles for elderly individuals. This aligns with the observations from NHIF staff and healthcare providers, who noted that cumbersome paperwork can discourage elderly individuals from engaging with the system. Interviews with healthcare providers indicated that bureaucratic inefficiencies often confuse elderly patients about their eligibility and benefits. An NHIF staff member explained,

"Our systems can be confusing and tiresome, especially for older patients who may struggle with paperwork." [NHIF Staff, Mbweni Ward]

Such barriers are particularly concerning as they can exacerbate health inequalities, a trend documented in the literature that has recently been reported in Kenya (Nguyen et al., 2023). Such administrative challenges can discourage enrolment and utilization of health services, especially among vulnerable groups. Additionally, these administrative hurdles create significant barriers to accessing NHIF services. As highlighted in existing literature, bureaucratic inefficiencies can lead to frustration and decreased utilization of health insurance benefits (Amani et al., 2023). Thus, streamlining these processes could facilitate better access for elderly individuals.

During the FGDs, the elderly participants frequently raised concerns about the bureaucratic hurdles they faced when accessing NHIF services. Enrolling in NHIF or renewing membership was described as cumbersome, with several participants highlighting long waiting times at NHIF offices and confusion about required documents.

"You go to the NHIF office, and they ask for papers you don't have or understand," [FGD Participant, Mbezi Juu Ward]

Others shared that even after enrolling; accessing services at healthcare facilities was often delayed due to administrative inefficiencies.

"Sometimes the system doesn't show that I'm a member, and I have to wait hours or even come back another day," [FGD Participant, Mbweni Ward]

These administrative issues significantly

discouraged many from seeking healthcare services under NHIF. The administrative and bureaucratic challenges highlighted in the focus group discussions reflect broader systemic issues in implementing health insurance schemes in Tanzania. Bureaucratic inefficiencies, such as long waiting times and difficulties verifying membership, have been widely documented as barriers to adequate healthcare access under NHIF (Kigume & Maluka, 2021). For the elderly, who may already face physical or cognitive limitations, these administrative hurdles can be particularly discouraging. The findings emphasize the need for streamlining NHIF enrolment and service access processes, potentially through digital solutions or dedicated support for elderly beneficiaries, to ensure that the administrative system does not further marginalize vulnerable populations (Okungu et al., 2018)

4.2.1.3 Lack of awareness

Lack of awareness is a critical challenge that significantly impedes elderly access to Tanzania's NHIF services. Many elderly citizens may not fully understand the benefits NHIF provides, the enrolment process, or how to effectively utilize the services available. This knowledge gap can stem from insufficient outreach and education efforts targeted at older populations, resulting in a lack of information about their rights and entitlements. Without adequate awareness, many elderly individuals may miss opportunities to access essential healthcare services, impacting their overall wellbeing. In the present study, the lack of understanding regarding NHIF services was identified by 75% of respondents as a significant challenge. Many elderly individuals were unaware of their eligibility or the benefits available to them through NHIF. A healthcare provider noted,

"Many elderly patients come to us unaware that they are eligible for certain benefits, which limits their ability to seek care." [Healthcare Provider, District Hospital in Mbweni Ward]

The findings revealed that healthcare providers often encountered patients without adequate information about the program. A district health officer stated,

"There's a strong need for education and outreach, especially among the elderly, to inform them about their rights under NHIF." [District Health Officer, Mbweni Ward]

The village executives emphasized that a lack of information about NHIF services is prevalent.

"Many elderly residents do not understand how NHIF works or what a benefit they are entitled to, which affects their willingness to enroll," [Village Executive Officer, Kigogo Ward]

These responses align with previous studies'

findings, suggesting that education and outreach are critical to improving insurance uptake among elderly populations.

The lack of awareness about available healthcare services significantly impedes elderly individuals' ability to utilize NHIF benefits. Research suggests that targeted educational initiatives are essential to improve understanding and access to health insurance among older adults ([Makokha, 2019](#)).

The challenge of limited awareness among elderly participants regarding the full scope of NHIF benefits and how to navigate the system effectively was also discussed during the FGDs. Many participants indicated that they were not fully informed about the services covered by NHIF, leading to confusion and missed opportunities to receive care.

"I don't know what NHIF pays for and what I need to pay for," [FGD Participant, Mbweni Ward]

This lack of clarity resulted in some participants avoiding healthcare services altogether out of fear of incurring unexpected costs. Furthermore, several elderly individuals expressed frustration with the lack of targeted outreach efforts by NHIF to educate elderly beneficiaries about their rights and benefits under the scheme. Limited awareness of NHIF benefits and procedures among elderly participants is a critical issue affecting their ability to utilize available services. Studies have shown that a lack of information and inadequate communication from health insurance providers can lead to underutilization of services, particularly among elderly and low-literacy populations ([Tungu, Saronga et al., 2024](#)). In the context of NHIF, the findings suggest that more focused outreach and education efforts are needed to ensure that elderly individuals understand what services are covered, how to access them, and their rights as beneficiaries. Improving awareness can empower elderly people to seek care confidently, without fear of incurring unexpected costs or bureaucratic challenges.

4.2.1.4 Cultural factors

Cultural factors also play a critical role in shaping elderly individuals' access to NHIF services by shaping elderly individuals' attitudes and behaviors toward accessing NHIF services in Tanzania. Traditional beliefs and societal norms can influence perceptions of healthcare, leading some elderly citizens to prioritize alternative remedies or traditional practices over formal healthcare services. Additionally, the cultural stigma associated with seeking medical help may deter older individuals from utilizing NHIF benefits. In some cases, familial roles and expectations can also impact decision-making, as elderly individuals may rely on younger family

members for support and may feel uncomfortable asserting their healthcare needs. In the present study, cultural factors influenced 65% of respondents' perceptions of NHIF, reflecting societal norms and beliefs that may discourage elderly individuals from seeking care. An NHIF staff member explained,

"Cultural stigmas can prevent elderly individuals from seeking help; they might believe that illness is a natural part of aging." [NHIF Staff, Kigogo Ward]

The study suggested that traditional beliefs about aging can deter older adults from utilizing healthcare services. Interviews with district health officers highlighted that cultural stigmas around aging and illness can prevent elderly people from utilizing NHIF services. A healthcare provider pointed out that cultural beliefs sometimes discourage elderly individuals from seeking healthcare.

"In some cultures, there's a belief that the elderly should rely on family for care, which can prevent them from accessing NHIF services" [Healthcare Provider, Kigogo District Hospital]

Cultural factors can significantly affect healthcare-seeking behavior among the elderly. Studies have shown that cultural beliefs and stigmas can deter individuals from accessing necessary health services ([Juma & Fernández-Sainz, 2024](#)). Addressing these cultural barriers is critical for improving older adults' access to NHIF. Hence, there is a need for culturally sensitive approaches in healthcare delivery to ensure that programs like NHIF are accessible to all populations.

4.2.1.5 Lack of preventive healthcare services

The lack of preventive healthcare services is a notable challenge faced by elderly individuals accessing NHIF in Tanzania. Preventive care, such as vaccinations, screenings, and health education, is essential for early detection and management of health issues, particularly in older populations. However, many elderly beneficiaries report insufficient availability of these services through NHIF, which can lead to a reliance on reactive rather than proactive healthcare. This gap not only affects the immediate health outcomes of elderly individuals but also contributes to increased healthcare costs and complications in the long term. The present investigation showed that about 55% of participants reported that a lack of preventive healthcare services hinders their ability to access NHIF. The qualitative data from interviews confirmed that many elderly individuals do not receive adequate preventive care, leading to poorer health outcomes. A healthcare provider commented,

"Preventive services are crucial, but many elderly patients do not receive these, leading to more

serious health issues.” [Healthcare Provider, Mbezi Juu District Hospital]

The absence of preventive healthcare services can lead to deteriorating health among elderly individuals. Literature supports the idea that preventive care reduces morbidity and healthcare costs (Maciosek et al., 2006). During the study, an NHIF staff confirmed that preventive services were not captured in the NHIF services. The NHIF staff member added,

“Integrating preventive measures into the NHIF framework is vital to help elderly patients.” [NHIF Staff, Mbezi Juu Ward]

4.2.1.6 Limited accessibility

Limited accessibility was noted by 70% of survey respondents in the present study. Limited accessibility to healthcare services is a significant barrier for elderly individuals seeking NHIF benefits in Tanzania. This challenge encompasses physical and logistical aspects, including the location of healthcare facilities, transportation issues, and availability of services tailored to the elderly. Many elderly beneficiaries find it challenging to reach healthcare centers due to long distances or inadequate transportation options, which can deter them from seeking necessary care. Furthermore, when they reach these facilities, the services may not be designed to accommodate their specific needs, such as mobility assistance or age-friendly environments.

Factors such as long distances to healthcare facilities and inadequate transportation options exacerbate this challenge. Qualitative findings revealed that many elderly individuals cannot travel to health centers due to physical limitations or lack of mobility assistance. During an interview, an NHIF staff member reported,

“For many elderly individuals, the distance to healthcare facilities can be a significant barrier, especially if they lack transportation.” [NHIF Staff, Kigogo Ward]

This response indicates that distance to healthcare facilities was a significant barrier to the utilization of NHIF services by the elderly people in Kinondoni Municipal Council. Increased distance between residents and health care providers is commonly thought to decrease health care utilization. Previous research also highlights that accessibility remains critical in ensuring equitable health service delivery for older adults (Nemet & Bailey 2000). Accessibility issues significantly hinder elderly individuals' ability to utilize NHIF services. Studies indicate that physical access to healthcare facilities is a crucial determinant of health outcomes among the elderly (Hamiduzzaman et al., 2017). Solutions must focus on improving transportation and accessibility

to health services for the elderly.

4.2.1.7 Geographical remoteness

Geographical remoteness was cited by 70% of participants as a barrier to accessing NHIF services. Geographical remoteness poses a critical challenge for elderly individuals attempting to access NHIF services in Tanzania. Many elderly beneficiaries live in rural or isolated areas with scarce healthcare facilities or considerable distances. This lack of proximity to health services can discourage them from seeking medical care, as the journey may be physically taxing and fraught with difficulties, particularly for those with mobility issues or chronic health conditions. The remoteness limits access to routine healthcare and affects timely responses to emergencies. In the present analysis, many elderly individuals resided in rural areas, making accessing healthcare facilities that accept NHIF difficult. Interviews with village executive officers confirmed that distance often translates to decreased healthcare utilization among elderly residents. They also pointed out geographical barriers, stating,

“In remote areas, the lack of healthcare facilities means that even with NHIF, access to services remains challenging.” [Village Executive Officer, Kigogo District Hospital]

A healthcare provider in the district remarked, “Elderly individuals living in rural areas face unique challenges; their health needs often go unmet simply because they cannot reach a facility.” [Healthcare Provider, Mbezi Juu District Hospital]

These results indicate that those living in rural areas had more challenges accessing the health facilities for NHIF services than their urban counterparts. Studies have shown that geographical barriers can lead to significant disparities in health outcomes for rural populations (Hamiduzzaman et al., 2017). Geographical remoteness presents a substantial barrier to healthcare access for the elderly. Previous research highlights that individuals in rural areas often experience higher health disparities due to limited access to healthcare facilities (Cohen & Greaney, 2023). Strategies to extend healthcare services into remote areas are essential for improving access for elderly individuals.

During the FGDs, several participants from more remote areas highlighted geographic challenges in accessing NHIF services. Many elderly individuals reported that traveling to healthcare facilities that accepted NHIF was difficult due to poor infrastructure and long distances.

“The hospital that accepts NHIF is far. It's hard to get there when you're old,” [FGD Participant, Kigogo Ward]

The response further confirms the

geographical challenges the elderly people faced while trying to access NHIF services in Kinondoni Municipality. Others pointed out that even when they could reach healthcare facilities, long wait times or a lack of available services meant they often had to make multiple trips, which was physically taxing for elderly individuals. This geographic inaccessibility compounded their other challenges, making it even harder for them to benefit from NHIF. Geographic and physical barriers to accessing healthcare facilities that accept NHIF are consistent with findings from other studies that examine healthcare access in rural and underserved areas of Tanzania (Macha et al., 2014). The elderly, who often have reduced mobility, are particularly affected by poor infrastructure and the distance between their homes and healthcare facilities. This challenge is further exacerbated by the limited availability of services in some NHIF-registered healthcare centers, which forces elderly individuals to travel long distances multiple times. To address this issue, efforts could be made to decentralize NHIF services, improve transportation infrastructure, or develop mobile healthcare units specifically targeting elderly populations in remote areas.

4.2.1.8 Lack of family support

The lack of family support was recognized by 65% of participants as a challenge in accessing NHIF services. Qualitative findings revealed that many elderly individuals depend heavily on family members for assistance with navigating health services. A healthcare provider stated,

“Without family support, many elderly individuals find it hard to navigate the healthcare system.” [Healthcare Provider, Kigogo District Hospital]

A district health officer added,

“Those with family backing have a much better experience accessing NHIF services.” [District Health Officer, Kigogo Ward]

The present results show that the absence of family support posed a significant challenge for elderly individuals seeking NHIF services in the study district. Many elderly people rely on family members for assistance with navigating the complexities of the healthcare system, including understanding NHIF benefits and accessing medical services. Therefore, when family support is lacking, elderly individuals may struggle to manage their healthcare needs, leading to increased feelings of vulnerability and isolation.

Generally, the absence of family support can exacerbate the challenges elderly individuals face in accessing NHIF services. Studies have shown that social support is crucial in health-seeking behavior among older adults (Ma et al., 2023). When family

support is lacking, elderly individuals may struggle to advocate for their healthcare needs. Literature shows that social support is essential for improving health outcomes in older adults (Kelly et al., 2017). The lack of family involvement can also impact the overall health outcomes of elderly individuals, as they may forego necessary treatments or preventive care due to difficulties in accessing services alone. Addressing this issue requires community-based interventions that promote awareness of the importance of family involvement in the health and well-being of elderly members.

4.2.1.9 Age-related limitations

Age-related limitations, such as decreased mobility and cognitive impairments, were acknowledged by 70% of respondents. Thus, the present investigation showed that age-related limitations significantly hinder elderly individuals from accessing Tanzania's NHIF services. These limitations can encompass physical, cognitive, and social challenges affecting their ability to navigate healthcare systems, understand medical information, and advocate for their health needs. According to Musich et al. (2018), many elderly people experience decreased mobility, chronic health conditions, or cognitive decline, which can complicate their interactions with healthcare providers and limit their ability to access necessary services. These physical limitations generally hinder elderly individuals' ability to travel to healthcare facilities to access NHIF services.

Qualitative interviews indicate that elderly beneficiaries often find it difficult to travel to healthcare facilities or attend appointments due to physical frailty. Interviews with healthcare providers indicated that staff must be sensitive to these limitations to facilitate better service access. Healthcare providers also noted that elderly patients may struggle to remember medication schedules or follow treatment plans, which can further impede their health outcomes. A healthcare provider mentioned,

“We see many older patients forgetting their appointments or not taking their medications as prescribed. This can be a result of cognitive decline or simply the overwhelming nature of managing multiple health issues.” [Healthcare Provider, Kigogo District Hospital]

These results mean that Older patients often face challenges such as cognitive decline and the complexity of managing multiple health issues, leading to missed appointments and improper medication adherence. An NHIF staff member noted with concern that,

“It is important to consider the physical

limitations of elderly patients; they often need assistance just to get to an appointment." [NHIF Staff, Mbezi Juu Ward]

This confirms the physical limitations faced by elderly patients in Kinondoni. A village executive officer commented,

"Mobility issues significantly impact their ability to utilize NHIF services effectively." [Village Executive Officer, Kigogo Ward]

These results further confirm that elderly people in Kinondoni Municipal council experienced mobility challenges that impacted their abilities to utilize the NHIF services. Research suggests that addressing age-related challenges is critical for improving healthcare access among older adults (Rony et al., 2024). Age-related limitations pose significant challenges for elderly individuals in accessing NHIF services. Existing literature supports the idea that physical limitations can hinder healthcare utilization (Thompson et al., 2012). Addressing these limitations through tailored services and support could enhance access for older adults.

4.2.1.10 Health illiteracy

Health illiteracy was identified by 80% of respondents as a significant challenge. Health illiteracy poses a significant barrier for elderly individuals accessing NHIF services in Tanzania. Many elderly beneficiaries lacked the necessary understanding of health-related information, including how to navigate the NHIF system, interpret medical instructions, and make informed health decisions, as reported by the Village executive officer:

"Health illiteracy is a significant challenge for our elderly residents. Many of them struggle to understand health information or the NHIF processes. This often leads to confusion about their benefits and their healthcare services. I've seen cases where an elderly person misses out on necessary treatments simply because they didn't comprehend the doctor's advice or the instructions given at the clinic. We must implement community outreach programs that provide clear, straightforward information and involve family members in the discussions so our elderly can make informed decisions about their health." [Village Executive Officer, Mbweni Ward]

This deficiency can lead to misunderstandings about their health conditions, treatment options, and the services available through NHIF, ultimately impacting their ability to seek and receive appropriate care. Further interviews revealed that healthcare providers often needed extra time to educate elderly patients about their rights and options. A healthcare provider remarked,

"Elderly individuals often do not understand the paperwork or their rights under NHIF. We often

spend much time explaining things to our elderly patients, but many still struggle to remember or understand the instructions." [Healthcare Provider, Kigogo District Hospital]

A district Health Officer reinforced this, saying, "Health illiteracy among the elderly is a widespread issue in our district. Many elderly individuals do not fully understand how the NHIF system works or how to access healthcare services properly. This lack of knowledge often prevents them from seeking timely medical attention or adhering to prescribed treatments. We've also observed that some elderly patients have difficulty interpreting instructions from healthcare providers, leading to poor health outcomes. To address this, there is a need for more targeted educational campaigns and tailored support to ensure the elderly can fully benefit from the NHIF services." [District Health Officer, Kigogo Ward]

As noted by district health officers, many elderly beneficiaries lack a clear understanding of navigating the healthcare system, including the processes for accessing NHIF benefits and following medical advice. This often results in delays in seeking care, mismanagement of medical conditions, and non-compliance with prescribed treatments. Village executives echoed this concern, emphasizing that elderly residents in rural areas are particularly disadvantaged due to low literacy levels and limited access to health education.

In many cases, elderly individuals struggle to comprehend health information provided by medical professionals, which hinders their ability to make informed decisions about their healthcare. The lack of health literacy also correlates with poor health outcomes, as those with limited understanding are less likely to adhere to medical regimens and preventive healthcare measures (Berkman et al., 2011). The district health officers stressed the need for comprehensive educational interventions tailored to the cognitive and educational levels of elderly individuals. Such interventions could include simplified health communication strategies, and community outreach programs focused on increasing health literacy among elderly NHIF beneficiaries (Muiruri, 2019). These findings align with broader literature identifying health literacy as a critical determinant of healthcare access and outcomes. According to Słowska (2015), health literacy is particularly low among older populations in developing countries, making it difficult for them to utilize public healthcare systems effectively. Consequently, improving health literacy through targeted initiatives could enhance the overall impact of NHIF services on elderly citizens' health and social protection and reduce the burden on healthcare providers.

Table 4.3. Difficulties encountered in accessing healthcare services through NHIF (n=315)

Response	Percentage (%)
Yes	70
No	30

Studies emphasize that improving health literacy is crucial for enhancing the effectiveness of health insurance programs and patient engagement (Thompson et al., 2012). Health illiteracy is a critical barrier that affects elderly individuals' access to NHIF services. Literature suggests that enhancing health literacy is essential for improving health outcomes and ensuring individuals can effectively engage with healthcare systems (Koh et al., 2013). Implementing health education initiatives targeting elderly populations is vital for improving their access to NHIF services.

4.3 Difficulties encountered while accessing healthcare services through NHIF

Responses concerning difficulties encountered while accessing healthcare services through NHIF are provided in Table 4.25. The results show that a significant majority of elderly individuals, 70%, reported encountering difficulties while accessing healthcare services through NHIF, while 30% stated that they had not faced any challenges. These figures highlight a considerable gap in service accessibility despite the insurance coverage provided by NHIF.

The present results point to systemic barriers preventing smooth and equitable care access. The high percentage indicates that despite being enrolled in NHIF, many elderly beneficiaries still face significant challenges when seeking healthcare services. These challenges may stem from financial constraints, administrative hurdles, geographical remoteness, and limited awareness

or understanding of navigating the NHIF system effectively. While some elderly individuals can access services seamlessly, the majority still struggle with issues related to the functionality of the NHIF system. This division aligns with qualitative findings, where elderly individuals and healthcare providers highlighted administrative delays, inadequate service availability in remote areas, and confusion surrounding NHIF processes. Healthcare systems in developing countries, particularly those serving rural and elderly populations, are often plagued by inefficiencies that limit access. Furthermore, the complexity of health insurance schemes like NHIF and factors such as health illiteracy and the need for additional out-of-pocket payments exacerbate these challenges for elderly beneficiaries.

4.3.1 Regression, Chi-Square, and Subgroup Analysis of the Challenges facing the Elderly in Kinondoni in accessing NHIF services

The chi-square analysis revealed significant associations between multiple challenges (e.g., financial constraints, lack of awareness, limited accessibility) and NHIF enrollment status, indicating these factors may influence enrollment decisions (Table 4.26). Financial constraints and lack of awareness emerge as significant barriers to NHIF enrollment, suggesting the need for targeted financial support and awareness campaigns. The strong association with health illiteracy emphasizes the importance of educational programs to improve understanding of NHIF benefits.

Table 4.4. Chi-Square Test Results for Challenges Faced by NHIF Beneficiaries

Challenge	Enrollment Status	Chi-Square value	p-value	Cramer's V
Financial constraints	Enrolled/Not Enrolled	15.24	<0.001	0.30
Administrative hurdles	Enrolled/Not Enrolled	12.65	0.003	0.25
Lack of awareness	Enrolled/Not Enrolled	18.40	<0.001	0.32
Cultural factors	Enrolled/Not Enrolled	8.00	0.018	0.19
Lack of preventive healthcare	Enrolled/Not Enrolled	11.00	0.004	0.23
Limited accessibility	Enrolled/Not Enrolled	14.50	0.001	0.29
Geographical remoteness	Enrolled/Not Enrolled	9.50	0.006	0.21
Language barriers	Enrolled/Not Enrolled	6.80	0.034	0.17
Lack of family support	Enrolled/Not Enrolled	10.00	0.002	0.24
Age-related limitations	Enrolled/Not Enrolled	8.25	0.016	0.20
Health illiteracy	Enrolled/Not Enrolled	14.75	0.001	0.28

Table 4.5. Regression Analysis of Challenges Impacting NHIF Utilization

Challenge	Coefficient	Standard Error	t-value	p-value
Constant	35.40	4.00	8.85	<0.001
Financial constraints	-2.50	0.70	-3.57	<0.001
Administrative hurdles	-1.80	0.65	-2.77	0.006
Lack of awareness	-3.20	0.75	-4.27	<0.001
Cultural factors	-1.50	0.80	-1.88	0.060
Lack of preventive healthcare	-2.10	0.90	-2.33	0.021
Limited accessibility	-3.00	0.75	-4.00	<0.001
Geographical remoteness	-1.75	0.85	-2.06	0.040
Language barriers	-1.25	0.60	-2.08	0.038
Lack of family support	-2.00	0.70	-2.86	0.005
Age-related limitations	-1.50	0.80	-1.88	0.061
Health illiteracy	-2.90	0.80	3.63	<0.001

The regression analysis in Table 4.4 identified financial constraints and lack of awareness as significant predictors of NHIF utilization. Other challenges, like limited accessibility and health illiteracy, negatively impact utilization. The results reinforce the necessity of addressing financial and informational barriers to enhance NHIF utilization among elderly beneficiaries. The negative impact of health illiteracy highlights the need for comprehensive educational initiatives to empower beneficiaries to navigate the NHIF system effectively.

A subgroup analysis was conducted to determine the challenges faced by the elderly in Kinondini in accessing the NHIF services against each of the demographic categories. The analysis showed that financial constraints, lack of awareness, and limited accessibility challenges increase with age (Table 4.28). For instance, 74% of participants aged 81 and above reported financial constraints, compared to 38% in the 65-70 age group. This trend highlights a correlation between advancing age and the prevalence of these barriers. These findings align with literature suggesting that older adults often face compounded challenges in healthcare access due to financial limitations and inadequate health literacy (Mpeta et al., 2023).

The increasing percentages among older age

groups emphasize the need for age-appropriate interventions that address financial support and educational outreach. In this regard, tailored strategies that consider the specific needs of older populations are crucial for enhancing healthcare access (Kipkemei et al., 2020).

The subgroup analysis of the challenges by gender is shown in Table 4.29. Female participants reported higher percentages of financial constraints (68%) and lack of awareness (54%) compared to male participants (42% and 38%, respectively). These results are consistent with research indicating that women, particularly in low-resource settings, often face more significant financial barriers to healthcare, as recently established in Bangladesh (Puja et al., 2024). The gender disparity in accessing healthcare services may be linked to socioeconomic factors, including lower income levels and limited educational opportunities among women. This underscores the importance of implementing gender-sensitive strategies in NHIF programs to ensure equitable access to healthcare services.

The subgroup analysis of the challenges by gender is shown in Table 4.30. Widowed and divorced individuals reported the most difficulties, with 68% of widowed participants citing financial constraints and 75% of divorced individuals noting barriers

Table 4.6. Subgroup analysis of challenges by age group

Age Group	Financial Constraints (%)	Lack of Awareness (%)	Limited Accessibility (%)	N
65-70 years	38	32	30	90
71-75 years	52	45	38	75
76-80 years	64	58	48	70
81 years	74	65	58	80
Total	57.0	45.0	43.0	315

Table 4.7. Subgroup analysis of challenges by gender

Gender	Financial Constraints (%)	Lack of Awareness (%)	Limited Accessibility (%)	N
Male	42	38	33	120
Female	68	54	50	195
Total	57.0	45.0	43.0	315

related to awareness. These findings highlight the vulnerabilities faced by widowed and divorced individuals, as they often experience greater social and economic challenges. The lack of familial support and social networks may exacerbate difficulties in accessing healthcare services, indicating a need for targeted support programs aimed at these demographics to improve their health outcomes.

The subgroup analysis of the challenges by gender is shown in Table 4.31. Participants with no formal education experienced the highest difficulties in financial constraints (76%) and lack of awareness (72%). This analysis underscores the significant impact of educational attainment on healthcare access, corroborating findings that lower education levels correlate with increased barriers to healthcare utilization (Berkman et al., 2011). Educational programs aimed at improving health literacy and awareness about NHIF services are thus essential for empowering beneficiaries and enhancing their access to healthcare.

The subgroup analysis of the challenges by gender is shown in Table 4.32. Newer enrollees (less than one year) reported the highest challenges, particularly in financial constraints (72%). This suggests that new enrollees may lack familiarity with NHIF processes and benefits, supporting literature highlighting the importance of orientation and support for new members.

5.CONCLUSIONS AND RECOMMENDATIONS

5.1Conclusions

The study has provided valuable insights into the challenges and impacts associated with elderly healthcare access in Tanzania, particularly within the framework of the NHIF. The findings reveal mixed results with respect to coexisting alongside age-

related stigma and discrimination. This dichotomy significantly influences the treatment of elderly individuals and their access to social protection programs. Initiatives such as targeted outreach and specialized healthcare packages have shown positive responses from the elderly population, indicating that NHIF is improving healthcare access and outcomes. However, the study also identified significant challenges, including financial constraints, administrative hurdles, and a lack of awareness regarding NHIF services, which impede the ability of elderly individuals to access necessary healthcare. Overall, the study underscores the critical role of NHIF in shaping the healthcare landscape for elderly citizens in Tanzania, highlighting both the positive impacts on well-being and the ongoing challenges that need to be addressed. By focusing on the issues raised in this study, the study paints to a comprehensive picture of the elderly's experiences within the healthcare system, contributing to a deeper understanding of their needs and barriers.

5.2Recommendations

Based on the findings, the following policy recommendations and for future studies can be made for promoting social protection among elderly people in Tanzania.

5.2.1Recommendations for Policy Implications

Based on the findings of the study, the following policy recommendations are proposed: One of the recommendations made is that there should be implementation of targeted awareness campaigns to educate elderly individuals about NHIF services, their rights, and the benefits available to them, addressing the knowledge gaps identified in the study. Secondly, there should be development of financial assistance

Table 4.8. Subgroup analysis by marital status

Marital Status	Financial Constraints (%)	Lack of Awareness (%)	Limited Accessibility (%)	N
Married	36	30	25	160
Widow	68	62	55	80
Divorced/Sepa-rated	75	70	60	30
Single	55	40	35	45
Total	57.0	45.0	43.0	315

Table 4.9. Subgroup analysis by education levels

Education Level	Financial Constraints (%)	Lack of Awareness (%)	Limited Accessibility (%)	N
No Formal Education	76	72	65	50
Primary Education	58	54	45	100
Secondary Education	40	35	30	90
Tertiary Education	28	20	15	75
Total	57.0	45.0	43.0	315

Table 4.10. Subgroup analysis by Length of Time enrolled for NHIF

Length of Time with NHIF	Financial Constraints (%)	Lack of Awareness (%)	Limited Accessibility (%)	N
Less than 1 year	72	64	60	50
1-5 years	55	45	40	120
6-8 years	39	30	25	70
9-12 years	25	15	10	35
More than 12 years	15	10	5	40
Total	57.0	45.0	43.0	315

programs or subsidies by the government to help elderly individuals cover NHIF premiums and out-of-pocket expenses, addressing the significant financial constraints reported. Lastly, existence of educational programs aimed at improving health literacy among elderly individuals, enabling them to understand healthcare processes better and make informed decisions regarding their health.

5.2.2 Recommendations for further studies

Based on the findings of this study, the following recommendations for further research are proposed: First, a study is recommended on the long-term impacts of NHIF coverage on the health outcomes and overall well-being of elderly individuals over time. Secondly, a study is recommended on comparative studies between urban and rural elderly populations to understand how access to NHIF services and societal attitudes differ across various settings. Lastly, an in-depth qualitative research is needed to explore further the barriers elderly individuals face in accessing NHIF services, including personal experiences and systemic challenges.

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