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Responsiveness of the Exemption Measure in Providing Healthcare Services among Older Persons in the Lindi Region, Tanzania

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Abstract
This study assessed the responsiveness of the exemption measure in providing healthcare services among older persons in the Lindi region. A cross-sectional research design using a mixed approach was conducted among 369 older persons (60+) living in Nachingwea and Kilwa districts. Data were collected through a questionnaire covering seven non-health aspects of care, based on the WHO responsiveness assessment framework. Descriptive analysis was used to determine the variable distribution, while binary logistic regression analysed the association between variables and Health Systems Responsiveness. The strength of association was determined using an adjusted OR (AOR) with a 95% CI, with statistical significance set at $p<0.05$. The overall responsiveness of the exemption measure was 60% poor. The choice (94.3%) and autonomy (70.8%) domains performed poorly, whereas confidentiality (84.7%) and dignity (54.7%) showed good performance. Multivariable logistic regression revealed that sex (AOR 0.578, 95% CI: 0.358-0.931), education (AOR 2.313, 95% CI: 1.116-1.549), specialists (AOR 1.614, 95% CI: 1.339-2.448), and place of residence (AOR 6.195, 95% CI: 3.591-10.687) were significantly associated with the responsiveness performance. Based on the findings, the exemption measure performed poorly in service provision to more than half of older persons. The Ministry of Health should expand geriatric services in public facilities and improve the choice of care and autonomy in healthcare provision.

Keywords: Responsiveness; Health Exemption; Healthcare; Older persons; Performance

1. Introduction
Assessing healthcare responsiveness is a key strategy for guaranteeing high performance when a country overhauls its healthcare system in service provision (Amani et al., 2020;

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Kapologwe et al., 2020; Mohammed et al., 2013). In responsiveness, the assessment involves the measures of non-health aspects of care, specifically focusing on how patients are treated and the environment in which they are treated (Murray & Frenk, 2000; Valentine et al., 2014; Yakob & Ncama, 2017). The essence is to monitor, evaluate, and communicate how well numerous aspects of the health system accomplish important goals (Valentine et al., 2009). The World Health Organisation's (WHO) responsiveness framework domains are used to assess healthcare service provision. The domains include: respect for dignity, autonomy, confidentiality, prompt attention, communication, choice of provider, and quality of amenities (Amani et al., 2021; Khan et al., 2021; Negash, Atnafu, et al., 2022a; Negash, Tsehay, et al., 2022b; WHO, 2000). This concept centres on the hospital's ability to meet patient expectations and service performance, thereby determining the quality of healthcare services (Khan et al., 2021).

Globally, the number of older persons has increased. In 2019, the number of older persons was 1 billion, and it is estimated that by 2030 this figure will rise to 1.4 billion, eventually reaching 2.1 billion by 2050 (WHO, 2022). As every country will experience this growth, particularly in developing countries, it suggests a significant demand for the initiation of various programmes to improve healthcare provision (Alavi et al., 2022; Dake & van der Wielen, 2020; Saka et al., 2019; WHO, 2022). Recent demographic data indicate a rapid growth rate of older persons in Africa above 2%, with their numbers rising from 34 million in 2005 to 74.4 million in 2020, and projected to outstrip other regions by 2050 (He, 2022; Velkoff & Kowal, 2006). Due to this demographic shift, several countries such as Botswana, Sri Lanka, Nepal, Senegal, Ghana, the Republic of South Africa, and Tanzania have been bolstering their health systems by introducing exemption policies to facilitate older persons' access to health services (Dake & van der Wielen, 2020; ICI, 2023; Pinto et al., 2020; Saka et al., 2019; Shrestha et al., 2021; Wickramarachchi et al., 2022). For instance, Ghana implemented the old-age premium exemption policy in 2005, allowing older persons to access free healthcare at all levels, covering nearly 95% of the disease burden (Dake & van der Wielen, 2020). In Senegal, the exemption policy for older persons was introduced in 2006, enabling them to access healthcare in hospitals at no charge (APHRC, 2023). These efforts align with specific targets outlined in the UN Agenda 2030 for Sustainable Development (SDG3)[1], and the goals[2] set by the WHO (Cassim & Tipping, 2022; Wickramarachchi et al., 2022; WHO, 2025). Most surveys on the responsiveness of health systems have been conducted in North America and Western Europe, but they are limited in Sub-Saharan Africa (Negash, Atnafu, et al., 2022a; Sutherns & Olivier, 2022; Valentine et al., 2014).

In Tanzania, the introduction of the exemption and waiver policy in 1994 along with its guidelines in 1997, represented significant steps taken by the government to address inequalities in healthcare for older persons who had previously been deprived of healthcare rights (Kaele, 2019; United Republic of Tanzania (URT), 1997, 2017). However, its implementation has faced numerous challenges, including insufficient drug availability, inadequate financial mechanisms, a lack of information regarding exemption categories, and bureaucratic procedures for accessing healthcare (Tungu et al., 2024). This suggests that policy declarations for equitable healthcare remain constrained by operational difficulties.

Studies examining the responsiveness of the exemption policy for older persons in Tanzania have yielded mixed results. A study by Amani et al. (2020) indicated that health insurance facilitates access to care; moreover, insured older persons report lower

[1] Good Health Well-being: Ensuring healthy lives and promoting well-being for all at all ages.

[2] Good health, responsiveness to the expectations of the patient, and fairness in the financial contribution in order to improve people's health status and well-being.

responsiveness in outpatient and inpatient services than their uninsured counterparts. A qualitative study by Amani et al. (2021) revealed that older insured individuals were dissatisfied with the scheme's service benefits and restricted usage. Furthermore, having health insurance was negatively associated with responsiveness in outpatient services for older persons (Amani et al., 2020). However, studies on the responsiveness of the exemption measure in providing healthcare services among older persons receiving free healthcare in public primary healthcare facilities remain limited. This study attempts to bridge the gap between policy implementation and responsiveness, ensuring that exemption measures effectively improve the healthcare of older persons. This study contributes knowledge on healthcare policy responsiveness and informs how well the current policy addresses the healthcare needs of older persons in the Lindi region.

2. Materials and Methods

2.1. *Study Area and Selection Criteria*

Figure 1 depicts Lindi region, the area of the study. The selection of the Lindi region as the study area was based on several criteria. Firstly, Lindi is one of the regions with the highest proportions of older persons, at 8.6% (above the 6% national average) in Tanzania (NBS, 2022b). Secondly, the region has fewer health professionals, with only 4 per 10,000 population. Thirdly,

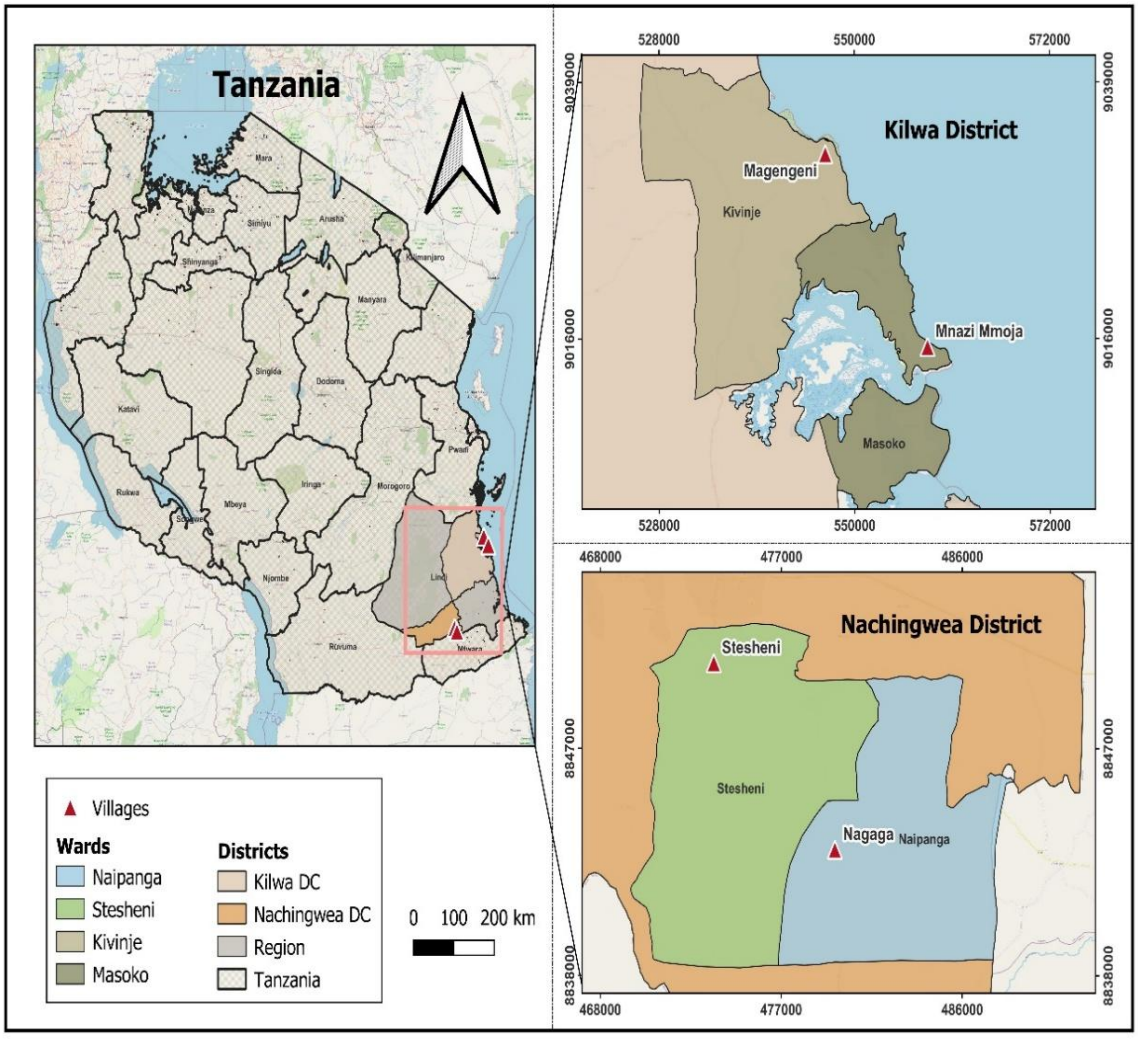

Figure 1: Location of the Study Area.

it had a lower number of health facilities, at a ratio of 2.5 facilities per 10,000 population (MoHCDGEC, 2019a). The selection of Kilwa and Nachingwea over the other districts within the Lindi region was primarily based on their large proportions of older persons, which is important to understand the healthcare needs of this demographic. Kilwa district had a population of 18,961 older persons, accounting for 18.5% of its total population, while Nachingwea district had 20,821 older persons, making up 20.3%. In contrast, other districts in the region had significantly smaller proportions of older persons: Ruangwa 18,265 (17.8%), Mtama 17,788 (17.4%), Lindi municipal 16,888 (16.5%), and Liwale 9,704 (9.5%) (NBS, 2022a).

2.2. *Study Design*

This study employed a cross-sectional research design using a mixed approach conducted among older persons (60+) living in Nachingwea and Kilwa, in the Lindi region. Both qualitative and quantitative data were merged to provide a comprehensive analysis and triangulation (Creswell & Creswell, 2018).

2.3. *Sample Size and Sampling Procedures*

The study employed various data collection methods, including individual household surveys, key informant interviews, focus group discussions (FGDs), and documentary reviews. Respondents were selected using a multistage technique consisting of four stages. In the first stage, two districts out of six were purposively selected for the study based on having a high proportion of older persons. In the second stage, two wards were randomly selected from each district. In the third stage, four villages (one from each ward) were randomly selected. In the final stage, a sample of 369 participants was drawn from the four villages. The sample size (Table 1) of the elderly households that constituted the older persons in the selected four wards was calculated using a 95% confidence level and a 5% precision level by applying Yamane's 1967 formula.

$$n = \frac{\mathrm{N}}{1 + \mathrm{N}\ (\mathrm{e})^2}$$

n = Sample size,
N = Population size,
e = level of precision or sampling error which is 5%

$$n = \frac{4{,}808}{1 + 4{,}808\ (0.05)^2}$$

Since there were N = 4,808 older persons in the study area, the sample size (*n*) for this study was 369 older persons from the selected four wards in the two districts. For each district, the proportional sample for each ward was obtained by using the formula; $\mathrm{n_y} = \frac{\mathrm{N_y}}{\mathrm{N}}\ \mathrm{n}$ whereas N represents a sampling frame in all studied wards, and n is the sample size of the study; $\mathrm{n_y}$ is a population sample in ward $_{\mathrm{y}}$; $\mathrm{N_y}$ represents a sampling frame or population size for the ward $_{\mathrm{y}}$. To obtain the gender proportion sample for each ward, the formula is P*n_y, where P is the gender proportion percentage, and represents the population sample in ward $_{\mathrm{y}}$.

The key informants (17) were purposefully selected for in-depth information as they possessed more information on the exemption measure and the provision of healthcare for older persons at public primary healthcare facilities (Creswell & Creswell, 2018). They included 1 delegate from the Ministry of Health, 2 district medical officers, 2 social welfare officers, 2 coordinators for non-communicable diseases, 2 hospital in-charges, 4 ward executive officers,

and 4 village executive officers. A total of 8 FGDs were conducted across the four villages. Each administrative village had 1 group comprising a mix of 6 older persons, both males and females, ensuring equal representation. The FGD participants were selected based on age and healthcare utilisation criteria (Amaliyar & Solanki, 2019; Lumme-Sandt & Virtanen, 2002). In the FGDs, this study involved older persons aged 60 and above who accessed healthcare under the exemption policy.

Table 1: Sample Size Distribution in the Study Area

District	Ward	Village	Sex	N	P = N/N_y(%)	N_y	P*n_y	n_y
Kilwa	Kivinje	Magengeni	M	831	45	1,836	63	**141**
			F	1,005	55		78	
	Masoko	Mnazimmoja	M	537	45	1,193	41	**91**
			F	656	55		50	
Nachingwea	Naipanga	Nagaga	M	226	46	490	17	**38**
			F	264	54		21	
	Stesheni	Stesheni	M	569	44	1,289	44	**99**
			F	720	56		55	
	Total			**4,808**			**n = 369**	

Source: (NBS, 2022b).

2.4. *Data Collection*

A closed-ended, structured questionnaire adopted and modified[3] from the WHO Multi-country health systems responsiveness survey was used to measure the seven responsiveness domains (Asefa et al., 2021; Kapologwe et al., 2020; Valentine et al., 2014; Yakob & Ncama, 2017). These domains assessed the performance of the 1994 exemption measure in providing equitable and necessary healthcare services to older persons. Respondents were asked to rate their experiences with healthcare received at public primary healthcare facilities using a seven-point Likert scale (responses coded 1-7), ranging from strongly disagree to strongly agree, in each domain. Then, the researcher selected the number on the tablet on behalf of the respondent. The 26-item questions were divided among seven domains: dignity (5 items), confidentiality (3 items), prompt attention (3 items), choice of healthcare providers (3 items), autonomy (3 items), quality of amenities (6 items), and clear communication (3 items) (Asefa et al., 2021; Bayeh et al., 2023; Negash et al., 2022b). Socio-demographic data, such as sex of respondents, education level, place of residence, number of children, living arrangements, and source of income, were collected to assess their association with responsiveness performance.

To ensure reliability, pre-testing of data collection tools was carried out with 30 participants in a randomly selected village in the Lindi district. Subsequently, Cronbach's Alpha[4] was used to measure the internal consistency of the data. The questionnaire was

[3] The researcher reframed/rephrased/shortened the original question but maintained the main theme of the question. For example, in dignity, the first question according to WHO was "...when you went to [name of health care unit/provider's office] the doctors, nurse, or other health care providers treated you in a respectful way" (Darby et al., 2003). In this study, the researcher shortened the question as "treated with respect", however, the question fulfilled its intention.

[4] A helpful coefficient for assessing the internal consistency of the items that shows how the items in the questionnaire are related to each other (Kotian et al., 2022).

considered reliable because the alpha value was 0.863, indicating good consistency. Afterwards, the questionnaire was administered face-to-face to the respondents.

2.5. *Data Analysis*

After the actual field survey, the collected data were transferred into a Microsoft Excel database and entered into the Statistical Package for Social Sciences (SPSS) version 26. Data cleaning was performed before the statistical analysis.

The proposed WHO non-health domains were used to assess the performance of Health Systems Responsiveness (HSR) of the exemption measure. After dividing the 26-question items among seven domains, each question was rated on a seven-point Likert scale (responses coded 1-7), ranging from strongly disagree to strongly agree. After the analysis, the score for each domain was found to be 5-35 for dignity, 3-21 for confidentiality, 3-21 for prompt attention, 3-21 for choice of healthcare providers, 3-21 for autonomy, 6-42 for quality of basic amenities, and 3-21 for clear communication. The outcome variable was measured by 7 domains with 26 items. All the 26 items were summed, resulting in scores ranging from 47 to 154, which were then dichotomised using the demarcation threshold formula as: $\frac{\text{Totalhighscore} - \text{Totallowestscore}}{2} + \text{Totallowestscore}$ (Asefa et al., 2021; Bayeh et al., 2023; Negash, Tsehay, et al., 2022b). Subsequently, those who scored above 100.5 were considered "good performance", while those scoring below 100.5 were considered "poor performance" (Bayeh et al., 2023; Negash, Tsehay, et al., 2022b). The 7 domains were also analysed separately and categorised as "good" or "bad" using the same threshold formula (Bayeh et al., 2023; Negash et al., 2022b). Both descriptive and inferential analyses were employed.

The descriptive results were described in frequencies, percentages and tables. Both bivariable and multivariable binary logistic regression analyses were performed with a 95% confidence interval. Binary logistic regression was used to examine the association between the factors and HSR of the exemption measure. Bivariate logistic regression was conducted, and those values with a *p-value* of less than 0.25 were subjected to multivariate analysis to identify significant factors to performance. Age, place of residence, sex, educational level of respondents, availability of specialists, and exemption IDs were entered in the multivariable analysis. In the final, multivariable logistic regression analysis, the factors associated with the responsiveness performance were identified.

Qualitative data from interviews and FGDs were analysed using content analysis. The steps in content analysis include summing the information into condensed meaning units, coding them, forming categories from the codes, and establishing analytical interpretive connections between them.

3. Results and Discussion

3.1. *Results*

Socio-demographic Characteristics of Respondents

The results (Table 2) indicate that older persons aged between 60 and 69 comprised 40%; those aged 70 to 79 accounted for 33.15%; and 27.01% were aged 80 and above. Regarding gender, 54.66% were females, while 45.34% were males. With respect to education levels, over 62% had formal education (i.e., primary, secondary, and tertiary levels), whereas 38% had informal education. In terms of the number of children, more than 71.30% had fewer than five children. For living arrangements, 38% lived with their children, and only 8% lived alone. Concerning sources of income, the majority, 78.33%, depended on agriculture.

Table 2: Socio-demographic Profile of the Respondents

Variable in (%)	Nachingwea		Kilwa		Average
	Magengeni (n = 141)	Mnazimmoja (n = 91)	Stesheni (n = 99)	Nagaga (n = 38)	
Age					
60-69	45.39	39.56	45.45	28.95	39.84
70-79	26.95	28.57	32.32	44.74	33.15
80+	27.66	31.87	22.22	26.32	27.01
Sex					
Male	51.06	36.26	41.41	52.63	45.34
Female	48.94	63.74	58.59	47.37	54.66
Education level					
Informal	43.3	74.7	7.9	25.2	37.78
Primary	39	12.1	68.4	55.6	43.77
Secondary	9.9	6.6	10.5	15.2	10.55
Tertiary	7.8	6.6	13.2	4.0	7.9
Number of Children	70.92	70.33	80.81	63.16	71.30
Below 5	29.08	29.67	19.19	36.84	28.70
Above 5					
Living arrangement	8.51	15.38	3.03	5.26	8.04
Alone	5.67	4.40	16.16	2.63	7.21
With relatives	29.79	38.46	50.51	34.24	38.25
With children	40.43	23.08	26.26	31.58	30.34
With partner	15.60	18.68	4.04	26.32	16.16
With grandchild					
Source of income					
Farming	78.03	80.22	91.92	63.16	78.33
Public assistance	2.84	6.5	2.02	10.52	5.5
Remittance	19.13	13.19	6.06	26.32	16.17

Source: Survey data (2023)

Responsiveness of the Exemption Measure

The findings indicate that the overall performance score for the HSR in the exemption measure regarding healthcare provision for older persons was 60% poor (Table 3). The HSR's performance varied across the villages, with Nagaga village underperforming compared to all other villages at 80.1%. In contrast, Magengeni exhibited the least poor performance at 37.8%, compared to other villages.

Poor performance was observed in the domains of choice of care (94.3%) and autonomy (70.8%). This poor performance varied across the villages. The choice of care and autonomy were rated poorly in Nagaga village, at 100%, compared to other villages, with Magengeni showing the lowest score for autonomy at 14.3%. Good performance was observed in confidentiality at 84.7%, and in dignity at 54.7%. The magnitude of responsiveness performance also varied throughout the study area. Good performance in confidentiality and dignity was reported in Magengeni village, at 92.3% and 83.5% respectively, compared to other villages,

such as Nagaga, which scored 13.2% for dignity, and Stesheni, which scored 74.7% for confidentiality.

Table 3: Responsiveness of Health Service Delivery Covered by the Exemption Measure at Public Primary Healthcare Facilities in the Study Area

Domain	Performance score in (%)				
	Magengeni n=141	Mnazimmoja n=91	Nagaga n=38	Stesheni n=99	Average
Dignity					
Good	83.5	76.6	13.2	45.5	54.7
Poor	16.5	23.4	86.8	54.5	45.3
Autonomy					
Good	85.7	20.1	0	11.1	29.2
Poor	14.3	79.9	100	88.9	70.8
Confidentiality					
Good	92.3	85.1	86.8	74.7	84.7
Poor	7.7	14.9	13.2	25.3	15.3
Attention					
Good	50.5	46.8	2.6	33.3	33.3
Poor	49.5	53.2	97.4	66.7	66.7
Communication					
Good	28.6	24.6	21.0	60.6	33.7
Poor	71.4	75.4	79.0	39.4	66.3
Amenities					
Good	87.9	38.3	15.8	14.1	39.0
Poor	12.1	16.7	84.2	85.9	61.0
Choice of Care					
Good	6.6	5.0	0	11.1	5.70
Poor	93.4	95.0	100	88.9	94.3
Overall Performance					
Good	62.2	42.3	19.9	35.8	40.0
Poor	37.8	57.7	80.1	64.2	60.0

Source: Survey data (2023)

Factors Associated with the Responsiveness of Exemption Measure in Providing Healthcare Services in the Study Area

Binary logistic regression analysis was used to examine the association between sociodemographic factors and those related to responsiveness. Bivariate logistic regression was performed, and values with a *p-value* of less than 0.25 were subjected to multivariate analysis to identify factors significant to responsiveness performance. Ultimately, the sex of respondents, education level, availability of specialists, and place of residence were significantly associated with responsiveness performance in the study area.

The findings (Table 5) demonstrate that older males were less likely to report good HSR than older females (AOR 0.578, 95% CI: 0.358–0.931). The odds of good HSR were 2.3 (AOR 2.313, 95% CI: 1.116–1.549) times higher among those with formal education than those with informal education. Older persons who consulted specialists were nearly 2 times more likely (AOR 1.614,

95% CI: 1.339-2.448) to report good HSR than their counterparts. The odds of good HSR among older persons who utilised healthcare under the exemption measure in urban areas were 6.2 (AOR 6.195, 95% CI: 3.591-10.687) times higher than those who lived in rural areas.

Table 5: Bivariable and Multivariable Binary Logistic Regression Analysis of Potential Factors Associated with the Performance of the Exemption Measure in Healthcare Provision among Older Persons (n=369)

Variable	Response	COR (95% CI)	AOR (95% CI)
Sex	Female	Ref	Ref
	Male	0.655(0.431,0.994)	**0.578(0.358,0.931) ****
Age	60-69	Ref	Ref
	70-79	0.794(0.484,1.303)	0.886(0.490,1.598)
	80+	1.294(0.781,2.141)	1.201(0.646,2.236)
Education level of the respondent	Informal education	Ref	Ref
	Formal education	0.380(0.238,1.606)	**2.313(1.116,1.549) ****
Place of residence	Rural	Ref	Ref
	Urban	7.365(1.253,2.071)	**6.195(3.591,10.687) *****
Availability of specialists	No	Ref	Ref
	Yes	0.412(0.266,1.638)	**1.614(1.339,2.448) ****
Exemption ID	No	Ref	Ref
	Yes	2.522(0.982,6.476)	2.186(0.716,6.671)

Source: Survey data (2023)

Note: ** significant at $p<0.05$; *** significant at $p<0.01$
Bold values are significant
AOR: Adjusted Odds Ratio; COR: Crude Odds Ratio; CI: Confidence Intervals; ID: Identity Card

3.2. *Discussion*

This study assessed the performance of the exemption measure in providing healthcare services among older persons in the Lindi region.

Overall Responsiveness of the Exemption Measure

Based on the study results, the overall HSR performance of the exemption measure was poor. The reasons for this poor performance may include how healthcare providers interact with older persons when discussing treatment, or the fact that the exemption guidelines for older persons were not adequately implemented. This study shows that the poor performance score is higher than that conducted in India, 10.1%, Hadiya zone in Ethiopia, 53%, Dessie city, 45.8%, and Shewarobit, 55.3% (Abdo et al., 2021; Asefa et al., 2021; Bayeh et al., 2023; Pengpid & Peltzer, 2022). Nevertheless, the study finding is lower than the study conducted in Asagirt, 66.6% (Bayeh et al., 2023). The difference between this study and the previous ones can be attributed to sample size, respondents, time, settings and the availability of healthcare services. For example, the study in Shewarobit in Ethiopia involved 416 HIV/AIDS anti-retroviral users in public health facilities. In contrast, this study included 369 older persons who benefited from the exemption policy for accessing healthcare.

The results of this study suggest that the public primary healthcare facilities in the study area were not responsive enough for more than half of the older persons who required healthcare services under the exemption. A study in India found that good responsiveness

resulted from better healthcare service quality (Pengpid & Peltzer, 2022). During the discussion at Stesheni ward, one of the participants remarked, "*...the problem comes when deciding the type of medication to use following a health condition you have. Usually, we are not involved in the discussion".* Studies show that good responsiveness occurs when patients are satisfied with the healthcare services (Alhajri et al., 2023; Aljarallah et al., 2023; Ferreira et al., 2023). Nevertheless, most health officials in the study area admitted to receiving and treating older persons well. During hospital visits, older persons seemed to be prioritised in healthcare; however, they still waited in a queue for a long time to be attended by a doctor. This suggests that the public primary healthcare facilities in the study area may fall short in providing adequate healthcare services as expected for most older persons.

Responsiveness Performance Across the Domains

In the choice of care provider, participants were asked to rate on the given time to choose a healthcare provider, request consultations, and the ability to meet with an appropriate specialist for care. Among all the domains, the results indicate that the choice of care provider was the domain with the highest poor responsiveness. Furthermore, the study results are comparable; however, they are higher than those conducted in Shewarobit in Ethiopia, which found that 73.1% of respondents reported poor performance in this domain (Asefa et al., 2021). The probable reason for the poor performance in the choice of care may stem from the inadequate number of healthcare workers and the unavailability of the appropriate specialists, which limits patients' opportunities to choose or consult. Previous studies have shown that older persons need specialists (geriatricians) who are essential as they specialise in the care of older persons, possessing the knowledge to assess, understand, and treat older persons (Edzie et al., 2021; Essuman et al., 2019; Lester et al., 2019). However, previous studies have revealed that there is a limited number of geriatricians in Africa, and they are unavailable in other countries, including Tanzania (Buowari, 2022; MCT, 2022; WHO, 2017). During a focus group discussion, one respondent from Magengeni said, *"It is difficult to choose a doctor you need because we are treated by the one who is available or on duty".* A health official echoed this viewpoint, noting a shortage of healthcare specialists and a lack of geriatric services in the study area. An interview with a health worker in Nachingwea revealed that the district hospital has only 112 health workers, with no geriatrician. Similarly, the Kilwa district reported no geriatrician among its 102 health workers in the district hospital. This figure is below the required minimum of 200 health workers for the district level (MoHCDGEC, 2019b). Due to the inadequate number of health workers, specialists, and geriatricians, older persons may not receive appropriate treatment, which could lead to poor health among this demographic. This suggests that older people do not have the right to choose a healthcare provider for their health challenges.

The findings show that autonomy ranked as the second poorest performer among the seven domains. The performance score for this domain in the study area differs from a study conducted in Southwestern Uganda, which showed good performance at 67.62% (Kibet et al., 2023). During a focus group discussion in Mnazimmoja, one participant stated, *"The doctor prescribed three types of medications for hypertension, but at dispensing, they gave me only two of them instead, without telling me more about the remaining one".* However, one of the hospital heads held a different view, stating that they always discuss treatments jointly with their clients across all service sections. The hospital head added that some clients may interpret information differently during discussions, while others might be too emotional and reactive. Older persons could feel emotional during healthcare interactions due to cognitive decline, life stress, and when treatments do not meet their expectations (Mather, 2013; Scheibe

& Carstensen, 2010). This indicates that although health workers aim to improve the health of older persons in the study area, they have not been sufficiently responsible for helping them decide on alternative treatment options. Older persons may be emotional or reactive, but they have the right to accept or refuse treatment. As Valentine et al. (2014) would put it, doctors should respect, support, and promote older persons' choices regarding treatment. In deciding about treatments, they should not act autonomously but within a provider-patient relationship where they can decide together (ibid.).

The findings of this study show that only the confidentiality and dignity domains performed well. The likely reason for their good performance in these two domains may be linked to the influence of the Community Scorecard project, which has been established in the district since 2016 by the Germany-based international cooperation (GIZ[5]). The project aimed to enhance community participation in healthcare evaluation and decision-making, as well as clarify the responsibilities of service providers in healthcare. This emphasised community health data management and dignity in healthcare (PoRALG, 2017). The findings of this current study align with the study conducted in the Asagirt district in Ethiopia, which indicated that the confidentiality and dignity domains scored similarly for good performance, each at 72% (Negash, Atnafu, et al., 2022a). Likewise, a study carried out in Tanzania found that confidentiality scored 86.7% and dignity 81.4%, both ranking highest among the assessed domains (Kapologwe et al., 2020). During the focus group discussions, many older persons in the study area expressed appreciation for being well-received and directed to their specific service windows before consulting a doctor. One of them in Naipanga ward stated, *"confidentiality is not a problem, older persons are provided health services in a room where the client interacts with the service provider. No other persons may intervene in the interactions".* One of the key informants interviewed in Kilwa seconded this, saying, *"consultation rooms are available for patient-doctor interaction to maintain privacy, and the healthcare providers are responsible for keeping all health history records"*. The previous studies have shown that dignity and confidentiality are prioritised in public primary healthcare facilities for older persons receiving healthcare under exemptions, as these aspects are perceived to be essential for their well-being (Kisvetrová et al., 2022; Lothian & Philp, 2001; Pageau et al., 2024; Roos et al., 2022). According to various literature, respect and maintaining health records improve communication, help decision-making, facilitate analysis, and ensure patient safety (Alomair & Pasha, 2024; Okolo et al., 2024; Wurster et al., 2024). This suggests that the public primary healthcare facilities in the study area ensured respect and privacy for older persons seeking healthcare services under exemptions.

Factors Associated with the Responsiveness of the Exemption Measure

In this study, the sex of the respondent was significantly associated with responsiveness performance. Older males were less likely to report good HSR than older females. This may be due to the domestic roles of females, primarily engaged in domestic and family responsibilities. This situation may enable them to receive better reception and spend less time in hospitals. This finding is consistent with studies in Nigeria, Kenya, and Saudi Arabia, which found that females were generally well-received and received prompt attention when seeking healthcare due to the high burden of domestic and other commitments (Kibiriti et al., 2024; Nikoloski et al.,

[5] It is a German based (Deutche Gesellschaft fur Internationale Zusammenarbet) international cooperation services for sustainable development. In collaboration with the Ministry of Health, Development, Gender, Elderly and Children (MoHDGEC), the community scorecard was established in four regions; Lindi (Kilwa), Mtwara (Nanyumbu and Newala), Mbeya (Busokelo), and Tanga (Handeni and Bumbuli) (PoRALG, 2017).

2022; Ogaji & Nwakor-osaji, 2020). However, a study in the United Kingdom (UK) revealed that women received poorer healthcare services than their counterparts (Winchester, 2021). Studies in Ethiopia and Iraq demonstrated that there was no association between responsiveness and socio-demographic characteristics (Bayeh et al., 2023; Srhan et al., 2024). According to the UN Women (2022), treatment responses are influenced by gender norms, roles, resource control, and power relations. It has been observed that the differences in responsiveness of healthcare under the exemption measure between males and females may vary across locations and contexts. Healthcare-seeking behaviours, healthcare systems, and socio-cultural factors such as family responsibilities may also influence it. However, the findings in the study area indicate that there is gender inequality in access to healthcare and treatment responses among older persons who are exempt from paying for healthcare in the study area.

In education, older persons with formal education were more likely to report good responsiveness from the exemption measure than those with informal education. A potential explanation is that educated older persons possess the knowledge and ability to seek information regarding exemptions and healthcare provision from various sources. One of the participants in Nagaga stated, *"Although there are limited campaigns on healthcare exemption at our village, when we go to hospitals, we can see and read some posters explaining that we will be given priority when seeing a doctor".* This is supported by the fact that 62.22% of older persons in the study area had formal education. The findings align with the study by Amani et al. (2020), which found that educational attainment among older persons was positively associated with the responsiveness of healthcare. However, a study in Ethiopia discovered that there was no association between the socio-economic characteristics of respondents and the performance of HSR (Negash et al., 2022b). The possible explanation for the difference is that people have different expectations and perceptions of how they are served and the availability of healthcare facilities in various localities. This suggests that educating older persons about the exemption policy could alleviate challenges in accessing and utilising healthcare services in the study area.

Based on the findings, older persons who benefited from the exemption policy and consulted a specialist for healthcare services were more likely to report good responsiveness than those who never consulted a specialist. Previous studies have shown that older persons who were exempted from paying for healthcare were able to see a specialist, had better access to quality care, experienced greater trust in health facilities, and improved health outcomes (Blumenthal et al., 2024; Cirulli et al., 2024; Kluwer, 2022; Sutherland et al., 2023). During the focus group discussions with older persons, it was revealed that some had not met specialists for their illnesses. One older person interviewed at Magengeni ward stated, *"There are neither specialists nor preventive education on Non-Communicable Diseases (NCDs) at our ward".* A health official corroborated this during an interview, noting the insufficient number of NCD specialists at the district hospital; however, education and awareness creation regarding NCD diagnosis, prevention, and control were being provided, especially in hospital settings. Reports from the WHO and other literature indicate that a shortage of specialists may lead to inadequate care for NCDs and poorer health status among older persons (Budreviciute et al., 2020; Kabir, Karim, & Billah, 2022; WHO, 2023). During data collection, a researcher found that only two physicians were trained in NCDs at the Nachingwea district hospital. One physician was attending to NCD patients, as the other had been sent for further training on NCDs. In Kilwa district hospital, only one physician was trained in NCDs. This highlights a critical shortage of NCD specialists in healthcare facilities who could serve older persons. Consequently, some older persons do not receive necessary healthcare from specialists in the study area.

Older persons living in urban areas were more likely to report good responsiveness in the exemption measure than those in rural areas. The probable reason might be that older persons in urban areas have better access to nearby healthcare services compared to their rural counterparts. Previous studies have also established a positive association between free healthcare responsiveness and urban residences (Dake & van der Wielen, 2020; Negash et al., 2022b). Urban areas tend to have more healthcare facilities, higher quality services, and advanced medical technologies that are accessible to older persons compared to rural areas, where they must travel longer distances, which can increase difficulties in accessing healthcare (Chi & Han, 2022; Shih et al., 2023; Zhang et al., 2017). During data collection, one participant from Nagaga village stated, *"We incur expenses on transport to reach the district hospital for NCD clinics, but others cannot manage the cost"*. However, one of the health officials remarked, *"There is a health centre in the village, but it cannot provide all health services; therefore, we provide referrals, especially to those with NCDs, for further healthcare to the district hospital".* The findings from the study area suggest that older persons in rural areas may perceive challenges in accessing healthcare in urban settings, which could hinder their ability to seek healthcare. Additionally, this population group experiences inadequate healthcare services under the exemption policy.

4. Conclusion and Recommendations

Based on this study, the overall responsiveness of the exemption measure in providing healthcare for older persons was poor, indicating that public primary healthcare facilities in the study area were not responsive enough for more than half of the older persons needing healthcare services. Poor performance was noted in the domains of choice of care providers and autonomy. However, good performance was observed in confidentiality and dignity. The study findings identified factors such as sex of respondents, education level, availability of specialists, and place of residence as being associated with responsiveness performance. This study recommends that the government, under the Ministry of Health, promote equity in access to healthcare, particularly by scaling up geriatric services and increasing the number of NCD specialists within public primary healthcare facilities. There is a need to improve healthcare service provision for older persons, especially regarding the right to choice of care and autonomy, to enhance the performance of services under the exemption measure.

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Ethical Approval and Consent to Participate

Ethical approval for data collection was obtained from the relevant authorities. Ethical clearance was granted by the Director of Postgraduate Studies (University of Dodoma) prior to data collection. The process of seeking permission for data collection in the study area began with the Lindi regional administrative authority (RAS) and the district executive directors (DED) of Nachingwea and Kilwa. Informed written consent to participate was obtained, outlining the objectives of the study. Respondents were made aware of their voluntary rights to participate or decline. We ensured respect for privacy, social statuses, and personalities and avoided any harm during data collection.

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