HEALTHCARE SERVICES DELIVERY TO ELDERS IN TANZANIA: ANALYSIS OF ENABLERS AND CHALLENGES IN SONGEA MUNICIPAL COUNCIL, TANZANIA

HEALTHCARE SERVICES DELIVERY TO ELDERS IN TANZANIA: ANALYSIS OF CHALLENGES AND ENABLERS IN SONGEA MUNICIPAL COUNCIL, TANZANIA

By

VICTORIA MTEGA

A Dissertation Submitted to the School of Public Administration and Management in Partial Fulfilment of the Requirements for Award of the Degree of Master of Research in Public Policy (MRPP) of the Mzumbe University,

2025

CERTIFICATION

We, the undersigned, certify that we have read and hereby recommend for acceptance by the Mzumbe University a dissertation titled **"*Healthcare Services Delivery to Elders in Tanzania: Analysis of Challenges and Enablers in Songea, Tanzania*"** in Partial fulfilment of the Requirements for Award of the Degree of Master of Research in Public Policy of the Mzumbe University.

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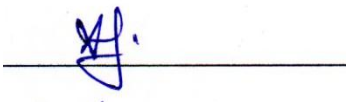
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I, **Victoria Mtega**, hereby declare that this dissertation is my original work and that it has not been presented and will not be presented to any other University for a similar or any other degree award.

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DEDICATION

I dedicate this work-study to my lovely family for their benevolence, prayer, and inspiration throughout my studies.

LIST OF ABBREVIATION

CHF	Community Health Fund
CHS	Council Health Services
D by D	Decentralization by Devolution
KMO	Kaiser-Meyer-Olkin
NCD	Non-Communicable Disease
NHIF	National Health Insurance Fund
PCA	Principal Component Analysis
PHC	Primary Health Care
UHC	Universal Health Coverage
VIF	Variance Inflation Factor
WHO	World Health Organization

ABSTRACT

Quality health care service delivery to elders is important for social economic development of any country. Despite this recognition, the provision of quality healthcare services to elders in Tanzania, particularly in upgraded health centers, remains a significant challenge despite improvements in infrastructure and service availability. This study examined **enablers and challenges** of healthcare delivery to **elderly patients**. The mixed research approach with explanatory sequential research design was employed. The study began with a survey questionnaire which was administered to 220 healthcare providers selected through simple random sampling. This was followed with 20 -depth interviews with geriatrics selected purposively from the upgraded health center in Songea Municipal Council. SPSS version 23 was employed to perform descriptive statistics, logistic regression and variable of p-value of less than 0.05 was statistically significant. Results showed that 69.5% of healthcare provider delivered sub-optimal healthcare services to elders. Factors like leadership support, staff training, and effective policies were important enablers while, challengess were shortages of resources and staff, as well as poor coordination between service units, hindered effective service delivery. Qualitative insights from elders highlighted both strengths and weaknesses, including challenges like drug stock-outs, long waiting times, and delays in emergency care, alongside positive experiences with trained providers offering proper diagnosis and treatment. The study concluded that heath care service delivery to **elders** in some areas, remain largely inadequate. The study recommends strengthening facility leadership, providing ongoing geriatric training, developing and implementing elder-specific policies, ensuring adequate staffing and medical supplies, and enhancing coordination through clear referral systems and integrated health records. Collaboration among government, healthcare providers, and communities is vital for sustainable improvement. Policy implications include prioritizing leadership development, standardized geriatric training, equitable staffing, and integrated service delivery models. **Establishing** shared care plans and efficient referral systems will promote continuity and quality of elder care. These measures are essential for creating a responsive, inclusive healthcare system to meet Tanzania's growing elderly population's needs

TABLE OF CONTENTS

CERTIFICATION i
DECLARATION AND COPYRIGHT ii
ACKNOWLEDGEMENTS iii
DEDICATION iv
LIST OF ABBREVIATION v
ABSTRACT vi
LIST OF TABLES xi
LIST OF FIGURES xii

CHAPTER ONE 1
INTRODUCTION AND PROBLEM SETTING 1
1.1 Introduction 1
1.2 Background of the problem 1
1.3 Statement of the problem 6
1.4 Objective of the Study 7
1.4.1 The main objective 7
1.4.2 Specific Objectives 7
1.5 Research question 7
1.5.1 Specific research questions 7
1.6 Significance of the study 8
1.7 Limitations of the Study ..... **.Error! Bookmark not defined.**
1.8 Delimitation of the Study 8
1.9 Scope of the study 9
1.10 Organization of the Study 9

CHAPTER TWO 11
LITERATURE REVIEW 11
2.1 Introduction 11
2.2 Definition of the key terms 11
2.2.1 Barriers 11
2.2.2 Healthcare services delivery 11
2.2.3 Perceived quality 11

2.3 Theoretical literature review 12
2.3.1 Life Course Theory 12
2.3.2 System Theory 13
2.3.3 Relationship between system and life course theory 14
2.4 Empirical Literature review of the study 16
2.4.1 Barrier of accessing healthcare services among elders 16
2.4.2 Enables of healthcare services delivery among elders 17
2.4.3 Quality of healthcare services delivered to elders 18
2.5 Research gap 20
2.6 Conceptual Framework 20
2.6.1 Application of conceptual framework to the study. 21

CHAPTER THREE 23
METHODOLOGY 23
3.1 Introduction 23
3.2 Research Design 23
3.3 Research Approach 23
3.4 Area of the Study 24
3.5 Unit of Analysis 25
3.6 Target Population 26
3.7 Sample size and sampling procedure 27
3.7.1 Sample size 27
3.7.2 Sampling Techniques for quantitative technique 29
3.8 Sample selection in qulitative technique 30
3.9 Data collection techniques 31
3.10 Data collection tools 31
3.11 Trustworthiness 34
3.12 Data analysis 35
3.12.1 Qualitative data analysis 35
3.12.2 Quantitative Data Analysis 36
3.12.3 Multiple Regression Analysis 37
3.13 Reliability and Validity 39

3.14 Ethical Considerations 39

CHAPTER FOUR 40

RESULTS 40

4.1 Introduction 40

4.2 Demographic characteristics of the respondents 40

4.2.1 Age of the respondents 41

4.2.2 Education level of the respondents 41

4.2.3 Professional designation of the respondents 41

4.2.4 Working experience of the respondents 41

4.2.5 Working department of the respondents 42

4.2.6 Training on elderly healthcare 42

4.2.7 Average number of elderly patients attended per day 42

4.3 Descriptive statistics 43

4.3.1 Proportion of healthcare services delivered to elders 44

4.3.2 Enables of healthcare services delivery to elders 44

4.3.3 Barrier of delivered healthcare services among elders 46

4.4 Inferential Statistics 48

4.4.1 Factor Analysis 49

4.4.2 Principal Component Analysis 49

4.4.3 Reliability test 50

4.4.4 Diagnostic tests of variables 52

4.4.4.1 Normality test 52

4.4.4.2 Multicollinearity 53

4.4.4.3 Heteroscedasticity 54

4.5 Thematic analyisis of quality of healthcare services received by elders at the upgraded health centers (objective 1). 56

4.5.1 Quality of Healthcare Services 56

4.5.2 Availability of Essential Medicines 57

4.5.3 Timeliness of Care 58

4.5.4 Competence of healthtcare provider 59

4.6 Regression analysis of barrier and enables of healthcare services delivery to elders 60
4.6.1 Enables of healthcare services delivery among elders 60
4.6.2 Factors for healthcare services delivery to elders 61

CHAPTER FIVE 63
DISCUSSION OF THE FINDINGS 63
5.1 Introduction 63
5.2 Status of health care services delivery to elders 63
5.3 Factors for effective health care services delivery to elders 64
5.4 Resources, infrastracture, technology and institutions on quality of healthcare services delivery to elders 66

CHAPTER SIX 68
SUMMARY, CONCLUSIONS AND RECOMMENDATIONS 68
6.1 Chapter Overview 68
6.2 Summary of Findings 68
6.3 Conclusions 69
6.4 Recommendations of the Study 69
6.5 Policy Implication 70
6.6 Limitation and area for further research 71
6.6.1 Limitations: 71
6.6.2 Areas for further research 71

REFERENCES 73
APPENDICES 80

LIST OF TABLES

Table 3.1: Proportional Allocation of Healthcare Providers across Selected Health Centers..... 30
Table 4.1: socio-demographic characteristic of the respondent 43
Table 4.2: Enables of healthcare services delivery among elders..... 46
Table 4.3: Barrier of delivery of healthcare services to elders 48
Table 4.4: KMO and Bartlett's Test 49
Table 4.5: Rotated component matrix..... 50
Table 4.6: Item-total statistics..... 51
Table 4.7: Tests of Normality 52
Table 4.8: Multicollinearity 54
Table 4.9: Heteroscedasticity..... 55
Table 4.10: Thematic analyisis of quality of healthcare services 56
Table 4.11: Enables of healthcare services delivery to elders 61
Table 4.12: factors for healthcare services delivery to elders..... 62

LIST OF FIGURES

Figure 2.1: The Conceptual Framework 21
Figure 4.1: Proportion of healthcare services delivered to elders at upgraded health center in Songea Municipal. 44
Figure 4.2: Normal distribution curve for deliverly of healthcare services 53
Figure 4.3: Graphical presentation of Heteroscedasticity test 55

LIST OF APPENDICES

Appendix 1: Questionnaire for Healthcare Providers at Upgraded Health Centers in Songea Municipal..... 80
Appendix 2: Interviewing guide on quality of healthcare services delivered to elders at the upgraded health centers..... 87
Appendix 3: Research Letter Permits..... 89

CHAPTER ONE

INTRODUCTION AND PROBLEM SETTING

1.1 Introduction

This chapter presents the background of the problem, statement of the problem, research objectives, research hypothesis, and significance of the study. It also presents limitations, delimitation of the study, the scope of the study, and the organization of the study

1.2 Background of the problem

Healthcare systems worldwide are increasingly focusing on the needs of aging populations. Delivering of healthcare for the elderly has becoming a key focus of public health systems since one billion people globally were aged 60 and above, making up 1.4 billion of the population by 2030, and this is expected to double to 2.1 billion by 2050, with the fastest growth in developing regions (World Health Organization, 2025). Healthcare services deliverly to elders is a collaborative effort involving medical, psychological, and social support. It acknowledges the diverse needs of older adults, many of whom live with chronic conditions. Then, World Health Organization's Decade of Healthy Ageing (2021–2030) highlights the importance of promoting equity, integrated healthcare, and environments that support the well-being of older adults (World Health Organization, 2020).

Across countries, healthcare systems focus on providing specialized services such as geriatric care, rehabilitation, and palliative care, while striving to address disparities in access to care, especially in low- and middle-income regions (Bitton et al., 2019; Kruk et al., 2010; Mounier-Jack et al., 2017). Asia has the largest elderly population, with 630 million in 2023, projected to exceed 1.3 billion by 2050, while Europe has the highest proportion (25%), and expected to rise to 30% (World Social Report, 2023). These, high-income countries have made significant progress by integrating geriatric care into primary healthcare, supported by policies on universal health coverage, home care, and nursing facilities (Sharma et al., 2023). In regions like Asia and Latin America, efforts to expand social

security and strengthen community-based care are central to addressing the needs of a growing elderly population (World Health Organization, 2023).

Specialized elder care prioritizes personalized treatment plans designed to enhance quality of life, manage symptoms, and support independence. This approach tackles challenges like chronic diseases, mobility difficulties, and cognitive decline through a multidisciplinary team that includes geriatricians, nurses, and therapists (Sendall et al., 2020). Beyond medical care, it fosters emotional well-being, safety, and mobility while providing essential support to caregivers, helping them manage the demands of their role (Bright et al., 2017). Adoption of holistic and person-centered perspective, specialized care ensures that elderly individuals and their families receive dignified, compassionate, and effective support.

In Africa, the elderly population was 74 million in 2023 and is expected to grow to 226 million by 2050 (Monde, 2025). Elder healthcare policies in sub-Saharan Africa are still developing, with a historical emphasis on maternal and child health. Nonetheless, some progress is being made. For example, South Africa has started integrating geriatric care into its primary healthcare system (Moore & Kelly, 2024). Despite these advancements, challenges such as limited resources and a heavy reliance on informal caregivers continue to pose significant challengess to comprehensive elder care in the region.

In Tanzania, 2.7 million people (4.5%) were aged 60 and above in 2023, and this proportion is expected to double by 2030 (National Bureau of Statistics, 2022). The Council of Elders has historically been an integral part of Tanzania's social, political, and healthcare systems. Traditionally, elders were respected leaders responsible for dispute resolution, cultural preservation, and advising local leadership. Over time, their role has evolved to include advocacy for elderly rights, healthcare access, social security, and policy formulation. At the national level, the council engages with government institutions to influence policies affecting aging populations, advocating for better healthcare services, pension schemes, and protection against age-related discrimination.

Tanzania has recognized the growing healthcare needs of its elderly population through various policy frameworks, including the National Health Policy of 2007, the National Ageing Policy of 2003, and the Health Sector Strategic Plan (Edward & Maluka, 2021; Ministry of Labour Youth Development and Sports, 2003). These policies emphasize the importance of ensuring equitable access to essential health services for older adults. The introduction of Universal Health Coverage (UHC) further reinforces this commitment by prioritizing healthcare access for vulnerable groups, including the elderly. Initiatives such as the Community Health Fund (CHF) and the National Health Insurance Fund (NHIF) have played a crucial role in improving healthcare accessibility (Binyaruka et al., 2023).

Moreover, the Council of Elders, across world regions, mediated community welfare, dispute resolution, and collective decisions about healing and care. Similarly, organized structures like “pensioner councils” have emerged as platforms enabling older adults to participate directly in regional health policy formulation and oversight, thereby reinforcing both the democratic and practical significance of elders’ voices in system governance (Mankell & Karlsson, 2024). In high-income contexts, elder leadership has been reshaped through councils and advisory bodies connected to public programs, such as the Older Americans Act networks, with a focus on governance, protection of elder rights, and cross-sectoral coordination in health and social care (U.S. Administration for Community Living, 2022). Therefore, elders are recognized as the knowledge-holders who transmit health-promoting practices, strengthen social participation, and bridge biomedical and community approaches (Viscogliosi et al., 2020).

In Africa, studies show traditional leaders remain among the most frequently consulted authorities for solving problems, shaping norms, and coordinating local service delivery functions that implicitly include public and community health (Afrobarometer, 2014). As modern health systems expanded, these councils were variously formalized, sidelined, or re-integrated through community participation frameworks. Community structures in Ghana included chiefs and elder councils are mobilized for planning, outreach, and accountability in primary care programs such as integrated community case management and maternal newborn child health (Annobil et al., 2021; Walsh et al., 2018).

In Tanzania, the longstanding reliance on traditional authority and healers continues alongside the decentralized health system. Many older adults still turn first to community networks, where respected elders and healers play a central role in identifying illness, guiding treatment pathways, and shaping acceptance of public health interventions; notably, traditional healers were actively engaged during recent outbreak responses to harmonize community practices with biomedical strategies (Isangula et al., 2022; Africa CDC, 2025). Furthermore, study by Tungu et al, (2024) emphasized the need for priority-setting for geriatric care in rural Tanzania as, decentralization creates opportunities for community involvement, adequate resources, and effective feedback mechanisms to ensure elders' contributions translate into equitable service delivery (Tungu et al., 2024).

Globally, health care service delivery has shifted significantly over the past decades from hospital-centered and curative models to more community-based, preventive, and people-centered approaches. Earlier systems primarily focused on treating diseases within hospitals, but the Alma-Ata Declaration of 1978 marked a turning point, emphasizing primary health care (PHC) as the foundation for universal health. Since then, global health policies have prioritized universal health coverage (UHC), integrated care, and equity in access, with innovations such as task-shifting, digital health, and community health worker programs strengthening service reach (World Health Organization, 2018).

Recent trends also reflect the need for multi-sectoral collaboration, patient participation, and the integration of non-communicable disease (NCD) management with communicable disease control, especially in low- and middle-income countries (Kruk et al., 2018).

In sub-Saharan Africa, the trend has been shaped by decentralization reforms, which transfer decision-making power from central ministries to local governments, aiming to improve accountability and responsiveness to community needs. While this has improved community participation and strengthened PHC, challenges such as inadequate financing, workforce shortages, and weak infrastructure persist (Tandon et al., 2021). Furthermore, there is a growing shift toward blending traditional and biomedical health systems, with traditional leaders and healers playing roles in health promotion, maternal and child health, and outbreak response.

In Tanzania, health care delivery has evolved in line with these global shifts. The introduction of decentralization by devolution (D by D) in the 1990s placed health service planning and management in the hands of local government authorities. This has allowed for greater community engagement through Health Facility Governing Committees and Council Health Services. The government has also expanded exemption policies for vulnerable groups, including the elderly, maternal, and child populations, while scaling up national health insurance schemes to advance UHC (Tungu et al., 2024). Current trends focus on strengthening primary health care facilities, integrating digital health tools, and addressing the growing burden of NCDs alongside persistent infectious diseases. However, gaps remain in equity, financing, and quality of care, particularly in rural areas (Isangula et al., 2022).

Suboptimal healthcare delivery to the aging population poses significant challenges for healthcare systems due to higher morbidity and mortality rates. Globally, the proportion of people aged 65 and older rose from 6.1% to 8.8%, contributing to 9 million additional deaths between 1990 and 2017 (Cheng et al., 2020). In the U.S., deaths among those aged 65 and older totalled 2.4 million, with mortality rates increasing sharply with age (World Social Report, 2023).

In Tanzania, older adults face higher rates of hypertension and other health issues, with the country experiencing its highest elderly population growth since 1964, further straining healthcare systems (Mosha et al., 2017). Enhancing healthcare delivery systems to meet the specific needs of the elderly can lead to significant reductions in morbidity and mortality, thereby improving the quality of life for aging populations.

Optimal delivery of healthcare services can significantly reduce morbidity and mortality among the aging population through timely and appropriate medical interventions. Adequate access to healthcare has been shown to increase life expectancy by approximately 2.0-2.5 years for individuals aged 65 and older worldwide (Fulmer et al., 2021). In developed countries, comprehensive healthcare services have led to improved care, reduced harm, and fewer low-quality services across the entire care spectrum for older adults (Fulmer et al., 2021; Hao et al., 2020).

1.3 Statement of the problem

Heath care service delivery to elders is regulated by health care policy, aging policy. In policy the government is required to ensure that elders have access to health care service delivery but in practice, the elders do not get the services. The government promise special window for the elders but in practices the officials employed to deliver such services keep the elders waiting without getting the required services. In general, the primary problems in delivering healthcare services to older adults include inadequate access, affordability, and quality of care, exacerbated by a shortage of geriatric specialists and a lack of elderly-friendly services (Dableh et al., 2024; Kwaitana et al., 2024). Additionally, financial constraints on both the healthcare providers and the elderly, coupled with a growing demand for personalized care and the increasing reliance on technology, further complicate the issue (Dableh et al., 2024; Kwaitana et al., 2024).

Despite recent investments aimed at strengthening Tanzania's primary healthcare system, the elderly population continues to face limited access to quality healthcare services (MoHCDGEC, 2021). While previous studies have examined general barriers to healthcare among older populations (Amani et al., 2021; Frumence et al., 2017, 2017), there remains a significant gap in empirical evidence specifically addressing

the enablers and **challenges** of healthcare service delivery within the upgraded health facilities. The unique role and performance of these centers in meeting the healthcare needs of elders remain underexplored. This study addresses that gap by identifying the key **enablers and challenges** influencing healthcare service delivery to elders at upgraded health centers in Songea Municipality. This study provides evidence-based insights that can inform national health policies, guide future resource allocation, and enhance service quality to ensure older adults are not left behind in the pursuit of Universal Health Coverage (URT, 2020; WHO, 2022).

1.4 Objective of the Study

1.4.1 The main objective

The study aimed to analyse **enablers and challenges** of healthcare services delivery to elders at the upgraded Health center in Songea Municipal Council, Tanzania.

1.4.2 Specific Objectives

The specific objectives of the study include:

i. To examine the status of health care service delivery to the elderlys in Songea Municipal Council.
ii. To explore the factors contributing to effective health care service delivery to elderly at the upgraded health centers in Songea Municipal Council
iii. To assess how resources, infrastructure, technology and institutions factors affect the quality of health care service delivery to ther elderlys at upgraded health centers in Songea Municipal Council.

1.5 Research question

1.5.1 Specific research questions

i. What is the quality of healthcare services delivery to the elderly at the upgraded health centers in Songea Municipal Council?
ii. What factors influence healthcare services delivery to the elderly at upgraded health centers in Songea Municipal council?
iii. How do institutional factors influence healthcare services delivery to the elderly at upgraded health centers in Songea Municipal Council?

1.6 Significance of the study

This study is vital in understanding and addressing the healthcare needs of elderly individuals at the upgraded health centers at Songea Municipal. By examining the perceived quality of healthcare services for the elderly, the study will shed light on the effectiveness of existing service delivery and identify areas that need improvement. It will also explore the **enablers and challenges** in healthcare delivery, helping to uncover systemic and operational **challenges** that limit the provision of quality care. Additionally, the study will analyze factors influencing healthcare service delivery, such as resource availability, staff training, and policy implementation, to better understand what affects service outcomes.

The findings will support the development of evidence-based strategies to enhance healthcare services for the elderly at the upgraded health centers at Songea Municipal council. These may include improving healthcare infrastructure, equipping healthcare providers with geriatric care training, and addressing policy-related challenges to service provision. The study's results will also provide valuable insights for policymakers and healthcare administrators at both regional and national levels, ensuring that the unique needs of the aging population are prioritized in future healthcare planning. Ultimately, this research aims to improve health outcomes and quality of life for elderly individuals, contributing to broader goals of equitable healthcare access and universal health coverage.

1.7 Delimitation of the Study

Despite these limitations, the study is delimited to ensure a focused and manageable scope. It specifically targets elders as the population of interest, enabling an in-depth exploration of issues affecting this demographic. When concentrating upgraded health centers at Songea Municipal, the study provides detailed insights into healthcare delivery at a major healthcare institution in the region. The research addresses three key areas: perceived quality of services. In service delivery, and influencing factors, which allows for a comprehensive analysis of the subject matter. The regional context of Songea Municipal was intentionally chosen to understand healthcare delivery in a specific setting, which could serve as a baseline for comparisons with other regions in Tanzania. Additionally, the study relies on primary data collected directly from elders

and healthcare providers, ensuring that the findings reflect first-hand accounts and experiences. This structured approach aims to provide actionable insights while acknowledging areas for future research.

1.8 Scope of the study

This study was conducted at the upgraded health centers in Songea Municipal, focusing on elderly patients. The unit of analysis included elderly patients receiving healthcare services at the hospital (Creswel 2023). The research explored the delivery of healthcare services to this population, specifically examining the perceived quality of care, the **challenges** faced in service delivery, and the factors influencing healthcare provision. By concentrating on this specific patient group and healthcare setting, the study aimed to provide a comprehensive understanding of how healthcare services met the needs of elderly patients at the upgraded health centers in Songea Municipal council and identified strategies for improving service delivery and outcomes for this vulnerable population.

1.9 Organization of the Study

This dissertation consists of six chapters. Chapter One introduces the study and includes the background to the problem, statement of the problem, research objectives, and research questions. It also outlines the significance of the study, limitations, delimitations, conceptual framework, definitions of key terms, and the overall organization of the study. Chapter Two presents a review of relevant literature, including theoretical and empirical literature, as well as a synthesis of the reviewed studies to identify knowledge gaps and contextual relevance. Chapter Three describes the research methodology, covering the research design, area of the study, study population, sample size, sampling techniques, data collection methods, measurement of variables, and data analysis procedures. Chapter Four presents the research findings, including data analysis, interpretation of results, and key findings in relation to the research objectives and questions. Chapter Five discusses the findings in light of the reviewed literature, examines their implications, and connects them to the conceptual framework and relevant theories. Finally, Chapter Six concludes the dissertation by

summarizing the main findings, drawing conclusions, providing recommendations for policy and practice, and suggesting areas for further research.

CHAPTER TWO

LITERATURE REVIEW

2.1 Introduction

This chapter presents the definition of the key terms, theoretical review, empirical literature review research gap, and conceptual framework of the study.

2.2 Definition of the key terms

2.2.1 Challenge

Challenges refer to the constraints or difficulties that affect the efficiency and quality of healthcare service delivery, such as workforce shortages, inadequate funding, and weak institutional support (Mosha et al., 2022). In the context of this study, challenges denote the structural, administrative, and contextual factors that hinder the effective provision of healthcare services to older adults in Tanzania, including limited medical resources, insufficient infrastructure in upgraded health centers, and gaps in policy implementation and service coordination.

2.2.2 Healthcare services delivery

This refers to the process of providing health services to individuals or communities, including planning, organizing, and delivering care to promote health and treat illnesses effectively (Sharkiya, 2023a). In the context of study emphasizes the need for healthcare systems to adapt to the specific needs of older adults by integrating specialized services, addressing resource constraints, and ensuring accessibility and equity in care delivery.

2.2.3 Elders

Elders refer to individuals typically aged 60 years and above who are recognized for their accumulated life experience, wisdom, and social contribution within their communities (Sharkiya, 2023a). In the context of this study, elders are defined as older adults in Tanzania who rely on healthcare services and whose perceptions, needs, and experiences are central to evaluating the quality and responsiveness of care provided to the aging population.

2.3 Theoretical literature review

2.3.1 Life Course Theory

The Life Course Theory originated in the field of social sciences and public health as a framework for understanding the long-term effects of social, economic, and environmental factors on an individual's health and well-being over their lifetime (Heinz et al., 2021). Initially developed by sociologists and demographers, the theory gained prominence through the work of scholars like Glen Elder, who emphasized the importance of life stages and the interconnectedness of events and experiences throughout an individual's life (Heinz et al., 2021; Kitson et al., 2022). The theory posited that health outcomes were not only shaped by genetic or biological factors but were also deeply influenced by the circumstances, behaviors, and choices people encountered across different life stages. Its key components included the concepts of trajectory, which referred to the long-term patterns of health and behavior over time; transition, which referred to the specific changes that occurred as individuals moved from one life stage to another (such as aging); and life event, which included significant events (e.g., illness, employment, or marriage) that could affect a person's life course.

Moreover, the theory highlighted the importance of timing and social context, considering how historical, cultural, and societal factors influenced individual experiences and health outcomes at different points in life (Heinz et al., 2021; Walker, 2022). By considering these components, the Life Course Theory provided a comprehensive understanding of how early life exposures and cumulative life events impacted long-term health trajectories, particularly relevant in studies involving aging populations.

The Life Course Theory was used in this study to understand how the challenges they faced by elderly patients in accessing healthcare services were influenced by their life experiences and long-term health histories (Prakitsuwan & Moschis, 2021). This theory suggested that health outcomes and healthcare needs were shaped by a range of factors throughout a person's life, including socio-economic status, early life exposures, and access to healthcare at different stages.

The study applied this framework to examine how past health issues, significant life events, and cultural factors affected the difficulties elderly patients faced when seeking healthcare (Ruirui et al., 2023). It also explored how these factors played out at Songea Regional Hospital, considering how the life experiences of the elderly might have impacted their ability to use healthcare services effectively.

Moreover, the Life Course Theory provided insights into the broader factors that influenced healthcare delivery to elderly patients. It highlighted that health outcomes were not solely determined by present circumstances but were shaped by long-term social, economic, and environmental influences (Cooney & Curl, 2019). The application of this theory in this study investigated how previous health experiences and social factors intersected to impact the quality and accessibility of care for elderly individuals. Ultimately, the study focused on identifying both the **ongoing challenges** that the elderly faced in the healthcare system, offering a comprehensive understanding of the factors that shaped their healthcare experience.

2.3.2 System Theory

The System Theory offers a valuable framework for analyzing health care service delivery to elders, as it emphasizes the interconnectedness of all components within a health system. Health care organizations are not isolated entities but operate as systems where inputs such as staff, infrastructure, and policies interact with processes like service delivery mechanisms and patient–provider interactions to produce outputs such as patient outcomes and satisfaction (Bertalanffy, 1968; Rajab, 2024). For elderly care, this means that quality services depend not only on medical treatment but also on how resources, community structures, and policies work together to create an enabling environment.

The principle of interdependence is particularly important in elder health care. Studies in sub-Saharan Africa highlight that shortages of geriatric specialists, inadequate equipment, or weak referral systems reduce the ability of facilities to provide effective care for older patients (Isangula et al., 2022).

Similarly, holism reminds us that health care for elders should not be studied in isolation but in connection with social protection schemes, community support, and family caregiving, as shown in research on aging populations in low- and middle-income countries (Aboderin & Beard, 2015).

Feedback mechanisms also play a central role. In Tanzania, community health governance structures, such as Council Health Services (CHS), provide forums where elders and their representatives can express concerns about access, affordability, and respectful care. Recent studies indicate that such feedback is essential for adapting services to meet the needs of older persons, although challenges remain in ensuring consistent representation and follow-up (Tungu et al., 2025). The System Theory concept of equifinality further suggests that there are multiple ways to improve elderly care outcomes. For instance, strengthening primary health care facilities, expanding health insurance schemes, or integrating traditional healers into outbreak responses have all proven effective in different Tanzanian contexts (Africa CDC, 2025; Tungu et al., 2024).

Research also shows that systemic **challenges** such as bureaucratic inefficiencies, underfunded exemption policies, and limited geriatric programs continue to hinder equitable service delivery to elders (Tungu et al., 2024; HelpAge International, 2014). By applying System Theory, these challenges can be understood not as isolated failures but as breakdowns within an interconnected system. Improving service delivery, therefore, requires coordinated strategies that align resources, policies, and service providers with the unique health needs of the aging population. This systemic approach ensures that health care for elders is not only efficient but also dignified, equitable, and sustainable

2.3.3 Relationship between system and life course theory

Systems theory provides a framework for viewing healthcare delivery as a complex and dynamic system where interrelated components such as human resources, infrastructure, and institutional mechanisms function together to influence performance. Any weakness in one element may disrupt the overall system and hinder effective service delivery to elders at Songea Municipal Council.

Health policy and systems research emphasizes that health systems are complex adaptive systems whose behaviors are non-linear and context-specific (Sheikh et al., 2011).

Life course theory enriches this perspective by recognizing that elders' current health status and service needs are shaped by cumulative experiences over their lifespan. Earlier-life exposures such as nutrition, employment, and access to preventive services significantly affect later-life vulnerabilities. Fine and Kotelchuck (2010) stress that the life course approach promotes a "whole-person, whole-family, whole-community" system of care that acknowledges longitudinal determinants of health. Thus, integrating both theories allows for a nuanced understanding of service delivery, considering both systemic operations and the unique health trajectories of the elderly.

When exploring factors for effective elder healthcare delivery, systems theory highlights the importance of coordination, communication, and feedback mechanisms across institutional levels, including health workers, administrators, and policymakers. The health systems science framework affirms that systems thinking is essential for addressing care delivery, teamwork, informatics, and policy integration (Skochelak et al., 2020). Life course theory complements this by emphasizing that elders' healthcare behaviors, expectations, and trust in institutions are shaped by lifelong social and health experiences. For example, the theory of "linked lives" underscores that health outcomes are interdependent with social roles, community ties, and timing of life events (Elder, Johnson, & Crosnoe, 2003). In practice, this means that elders' perceptions of upgraded health centers will depend not only on present structural improvements but also on their cumulative experiences of healthcare accessibility and reliability throughout their lives.

Systems theory also frames resources, infrastructure, technology, and institutional governance as essential system inputs that determine the efficiency, reliability, and adaptability of healthcare delivery. Strong institutions, adequate infrastructure, and adaptive technologies enhance sustainability and quality outcomes (de Savigny &

Adam, 2009). Life course theory, however, draws attention to whether these systemic improvements adequately meet elders' lifelong and accumulated needs.

The Life course Health Development model illustrates that health outcomes in old age are shaped by long-term exposures and transitions, including chronic disease management and functional limitations (Halfon & Forrest, 2018). Thus, combining systems theory with life course theory ensures that evaluation of healthcare delivery not only considers systemic functionality but also aligns with the lived realities and developmental trajectories of elders in Songea Municipal Council.

2.4 Empirical Literature review of the study

Empirical literature review involves the review of related literature from previous studies. In reviewing the literature, a researcher acquires knowledge and experiences that were established by other researchers when conducting their studies. The following are some of the early studies related to this study.

2.4.1 challenges of accessing healthcare services among elders

Globally, elders face numerous challengess in accessing healthcare services, often influenced by systemic, social, and economic factors. Studies indicate that financial constraints are a significant obstacle, especially for elders without health insurance or a stable income. For instance, a report by the World Health Organization (WHO) highlights that out-of-pocket expenditures remain a primary challenges for older adults in low- and middle-income countries (World Social Report, 2023). Additionally, limited availability of geriatric specialists and age-friendly healthcare infrastructure poses challengess to meeting the unique needs of the elderly population.

A scoping review of various studies shows cultural attitudes and stigma around aging further restrict healthcare access, particularly in countries where seeking medical care is not normalized for age-related ailments (Mohd Rosnu et al., 2022). Geographic challengess, such as living in remote or rural areas with poor transportation, also limit access to essential services for older adults worldwide (Mai et al., 2022).

In Africa, challengess to healthcare access for elders are exacerbated by underfunded healthcare systems and competing health priorities like maternal and child health.

According to a study by Zegeye et al., (2021), structural limitations, such as inadequate geriatric care facilities and a shortage of healthcare professionals trained in elder care, are common across the region. Financial insecurity among elders, compounded by limited social protection systems, further reduces their ability to afford medical services (Temple et al., 2021). Similarly, cultural beliefs also play a significant role in healthcare access. In many African societies, aging is associated with traditional or spiritual explanations for illness, discouraging elders from seeking formal medical care (Agyemang-Duah et al., 2021; Zegeye et al., 2021). Informal caregiving networks, although valuable, often lack the capacity to address complex health issues faced by elders.

In Tanzania, challengess to healthcare for elders' mirror many of the regional challenges but are further compounded by specific local issues. A study done by Mwatawala & Kapene, (2024) at the tertiary hospital level, identified critical challenges, including insufficient healthcare infrastructure, a lack of trained geriatric specialists, and financial challengess, despite the existence of initiatives like the Community Health Fund (CHF). There is limited research in Tanzania specifically addressing how local health policies, cultural practices, and socioeconomic conditions interact to influence healthcare delivery among elders' patients at the upgraded health centers in Tanzania.

2.4.2 Enablers of healthcare services delivery among elders

Globally, healthcare services delivery for elders is supported by enables such as policy frameworks, technological advancements, and the integration of geriatric care into primary healthcare systems. For example, the World Health Organization's Decade of Healthy Ageing (2021–2030) emphasizes equitable healthcare, age-friendly environments, and integrated care systems (World Health Organization, 2023). Similarly, countries like Japan and Sweden have implemented universal health coverage (UHC) policies that prioritize elder care, supported by well-established home-based and community-based care services (Cheng et al., 2020; Sharkiya, 2023a; World Health Organization, 2020).

Technology, such as telemedicine, plays a pivotal role in enhancing access to care for elders, particularly in remote areas, however vary regionally. In Asia, expanded social security systems and community-based care have been effective in addressing the needs of aging populations (Mohd Rosnu et al., 2022).

For instance, China has developed extensive elder care programs supported by government subsidies and private sector partnerships (Hao et al., 2020). In contrast, sub-Saharan Africa faces systemic challenges, but emerging policies, such as South Africa's integration of geriatric care into primary healthcare, show promise. Studies highlights the importance of partnerships between public and private sectors, along with capacity building, to improve service delivery in resource-constrained settings (Moore & Kelly, 2024).

In Tanzania, elder healthcare delivery is supported by initiatives such as the National Ageing Policy (2003) and programs under UHC, including the Community Health Fund (CHF) and National Health Insurance Fund (NHIF). These programs aim to enhance access to healthcare for vulnerable populations, including elders. However, gaps remain, such as inadequate infrastructure, a lack of healthcare professionals trained in geriatric care, and financial and cultural challengess that hinder service utilization. Studies in Tanzania have pointed to the limited availability of age-friendly healthcare facilities and the over-reliance on informal caregivers as critical challengess (Binyaruka et al., 2023; Mwatawala & Kapene, 2024; Tungu et al., 2024). This suggested that hospitals face unique challenges due to resource constraints and limited policy implementation. There is insufficient empirical evidence on how community-based approaches, public-private partnerships, and capacity-building initiatives could specifically address these gaps on delivering of healthcare services at the upgraded health centers.

2.4.3 Quality of healthcare services delivered to elders

The perceived quality of healthcare services for elders is an important factor influencing their satisfaction and trust in the healthcare system. A review of studies at a global level emphasizes the importance of effective elder care in shaping perceptions of quality. For example a study by Sharkiya, (2023b) found that elderly patients in

high-income countries rated healthcare quality higher when providers demonstrated competence in managing age-specific health needs, such as chronic disease management and functional decline prevention. Responsiveness, including timeliness and availability of care, also emerged as a critical factor globally.

Guo & Lyu, (2023) observed that elders in well-resourced settings valued prompt attention and easy access to care as key indicators of high-quality services (Guo & Lyu, 2023). In Africa particularly in sub-Saharan Africa, studies reveal significant disparities in healthcare access and quality for elders. Mwatawala & Kapene, (2024), identified limited geriatric care facilities, financial challengess, and workforce shortages as major obstacles in Tanzania. Similarly, in other parts of Africa, inequity in service delivery remains a pervasive issue, with older adults often receiving inadequate attention compared to other demographics. Empathy and communication were found to be critical, as elders in low-resource settings frequently reported a lack of respect and compassion from healthcare providers (Akodu et al., 2021).

At the local level, in Tanzania, specific studies highlight systemic and operational challengess that undermine the perceived quality of elder healthcare services. Limited access to specialized geriatric care, inadequate infrastructure, and a lack of trained healthcare professionals are recurrent themes. A study done by Mosha et al., (2017), showed that financial challengess, combined with cultural expectations of informal care, further reduce satisfaction with healthcare services among Tanzanian elders. Safety and continuity of care, including follow-up services and medication management, were also found to be lacking, leading to diminished trust in the healthcare system (Mosha et al., 2017). Despite these findings, a clear gap exists in addressing the holistic needs of elders in Tanzania, particularly in integrating cultural sensitivity and enhancing accessibility and equity in care delivery. This study aims to address this gap by exploring the specific dimensions of perceived quality that influence satisfaction and trust among elders, providing evidence-based recommendations to enhance healthcare delivery for this growing demographic

2.5 Research gap

A review of existing literature reveals that while numerous studies have explored healthcare service delivery to older adults, limited attention has been given to upgraded health centers and municipal contexts such as Songea. Prior research has addressed issues of accessibility, satisfaction, and service quality (Mshana et al., 2020; Khamis et al., 2022), yet few studies have examined the current status of healthcare service delivery specifically for the elderly in these upgraded facilities. Moreover, there remains a lack of understanding of how elders perceive and evaluate the quality of care provided, as most studies fail to capture their unique expectations and lived experiences in urban municipal settings.

Similarly, the factors influencing effective healthcare delivery to the elderly such as resource allocation, infrastructure, technology, and institutional capacity are underexplored within the Tanzanian context. Although studies recognizes these as key determinants of quality healthcare (Kruk et al., 2018; Mtei & Makawia, 2022), few studies have examined how they shape service outcomes in resource-constrained municipal health centers. Therefore, this study aims to fill these gaps by examining the status of healthcare service delivery, identifying factors contributing to its effectiveness, and assessing how resources, infrastructure, technology, and institutional factors affect the quality of healthcare services for the elderly in Songea Municipal Council.

2.6 Conceptual Framework

This study adopts the System-Life Course Framework, which integrates System Theory and Life Course Theory to analyze the perceived quality of healthcare services delivered to elderly patients at Songea Municipal upgraded health centers. The framework illustrates how healthcare system components and individual life-course experiences interact to shape elderly patients' perceptions of service quality. The System Theory perspective examines how healthcare institutions function as interconnected systems, where inputs (resources, staff, policies), processes (service delivery mechanisms), and outputs (health outcomes, patient satisfaction) influence service delivery.

Meanwhile, Life Course Theory highlights the impact of past healthcare experiences, socioeconomic backgrounds, and cultural expectations on how elderly patients perceive healthcare services. The integration of these theories provides a structured approach to assessing systemic and individual factors that shape healthcare experiences, ultimately guiding improvements in service delivery for elderly patients.

The figure below shows conceptual framework of challenges and enables of healthcare services delivery to elders at the upgraded health centers in Songea Municipal council.

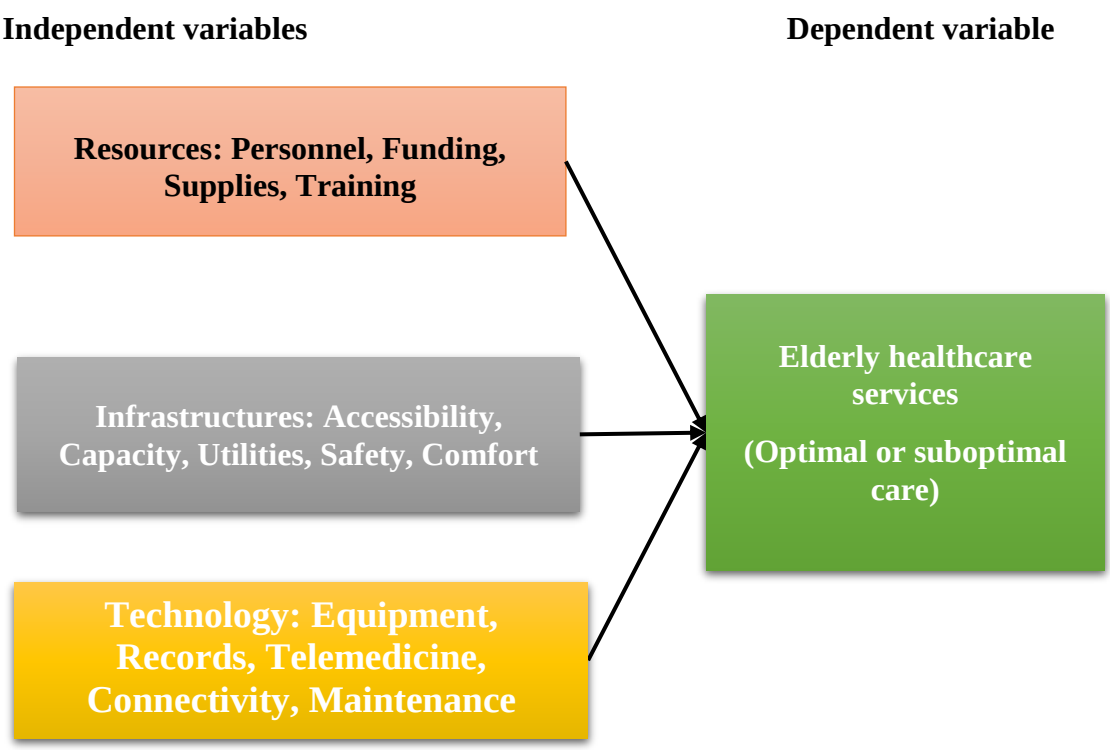


Figure 2.1: A famework of concepts

Source: Researcher Literature View (2025)

2.6.1 Application of conceptual framework to the study.

In this study, the conceptual framework illustrates how healthcare system resources, infrastructure, and technologies interact to shape the overall quality of service delivery to elders. The framework recognizes that service delivery does not operate in isolation but is influenced by multiple systemic factors that either facilitate or hinder access to quality care.

By examining the interaction between these components, the study emphasizes the dynamic nature of healthcare systems, where the availability of skilled personnel, adequacy of facilities, and integration of technologies collectively determine the extent to which elders receive timely, safe, and effective services.

This approach highlights the interconnectedness of system elements and their cumulative impact on patient experiences and outcomes. Within this framework, healthcare delivery is treated as the dependent variable, while the independent variables are systemic and experiential factors categorized as challengess and enablers. Resources, infrastructure, and technologies are central independent variables, as they influence changes in service provision that directly affect the perceived quality of care for elderly patients. For instance, adequate staffing, accessible facilities, and functioning health technologies can serve as strong enablers, whereas shortages of drugs, poor infrastructure, or outdated equipment act as challengess. By analyzing these relationships, the study seeks to generate insights into how improvements in systemic capacity and technological integration can enhance the effectiveness of healthcare delivery for elders at upgraded health centers in Songea Municipal Council (Borzou et al., 2020; Santha, 2016; Sousa et al., 2004).

CHAPTER THREE

METHODOLOGY

3.1 Introduction

The chapter covers the research design, research approach, area of the study, target population, sample size, data collection methods, data analysis methods, and ethical considerations.

3.2 Research Design

The study adopted explanatory sequential research designs to analyze the enables and challengess of healthcare service delivery to elders at the upgraded health centers in Songea Municipal, Tanzania. This approach provided a comprehensive overview of the state of delivery of healthcare services in upgraded health centers. The research design, as described by Creswell (2014), was complement of quantitative with qualitative data to uncover the underlying challenges and enables within the healthcare system. This design is essential for identifying the complex interactions between healthcare providers, institutional policies, resource availability, and elderly patients' needs. The study explored the deeper systemic issues that influence the quality of healthcare services through utilization of qualitative and quantitative research methods such as structured interviews, and surveys. Through the integration of these research designs, the study was not only describing the current healthcare service framework for elders but also analyze the challengess and enables affecting its effectiveness.

3.3 Research Approach

This study adopted a mixed-method research approach, integrating both quantitative and qualitative methodologies to comprehensively analyze the challenges and enablers of healthcare service delivery among elders at the upgraded health centers in Songea Municipal, Tanzania (Kimathi Witt, 2019).

The combination of these approaches allowed for a holistic exploration of healthcare service delivery by capturing both numerical data and in-depth perceptions of elderly patients and healthcare providers.

According to Cruz & Sarmiento, (2022), the quantitative approach focused on gathering statistical data related to the perceived quality, challengess, and enablers of healthcare services for elders. Structured surveys with close-ended questions were administered to elderly patients and healthcare providers, enabling the collection of measurable data on healthcare access, service efficiency, and patient satisfaction. This approach facilitated the identification of patterns, trends, and relationships among key variables, providing an objective assessment of healthcare service delivery. The use of descriptive and inferential statistical analyses helped quantify the extent to which systemic factors impacted healthcare provision for elders.

On the other hand, the qualitative approach focused on exploring the lived experiences, perceptions, and contextual challenges influencing healthcare services for the elderly. Erickson, (2017) argued that this methodology was grounded in theoretical perspectives such as phenomenology and social interactionism, allowing for an in-depth exploration of individual and institutional experiences. Key informant interviews were employed to gather rich, narrative data from elderly patients. This approach was instrumental in examining the detailed insights into the quality of healthcare services delivered to elders through a qualitative approach.

Mauthner, (2020), noted that the rationale for adopting a mixed-methods approach was to leverage the strengths of both quantitative and qualitative methodologies in addressing the study objectives. By combining statistical evidence with contextual understanding, the study provided a comprehensive analysis of the perceived quality of healthcare services, challengess, and enablers among elders in Songea Municipal. The findings contributed to evidence-based recommendations aimed at improving healthcare delivery for elderly populations.

3.4 Area of the Study

Songea Municipal was selected as the focal area for this study due to its administrative significance and the ongoing efforts to improve healthcare services through the upgrading of health centers. These upgraded health facilities played a crucial role in

expanding healthcare access for the elderly population, a demographic that often-faced unique health challenges requiring specialized care.

As Songea Municipal experienced demographic shifts, with a growing number of elderly residents, the demand for quality geriatric healthcare services continued to rise, making it essential to assess the effectiveness of these upgraded centers in meeting their needs.

The study focused on analyzing the enables and challengess of healthcare service delivery for the elderly at these upgraded health centers in Songea Municipal, Tanzania. These facilities had been enhanced to improve service provision, yet concerns persisted regarding the quality, accessibility, and efficiency of care available to elderly patients. Understanding these dynamics was critical for informing future healthcare interventions and policy improvements.

Additionally, the study explored the perceived quality of healthcare services, identifying both challengess and enablers that affected service delivery for elderly patients. Challengess included infrastructure limitations, shortages of geriatric-trained healthcare providers, bureaucratic inefficiencies, and financial constraints. Conversely, enablers such as supportive policies, community health initiatives, and social support systems were examined to determine how they contributed to improving healthcare accessibility and quality. By focusing on Songea Municipal's upgraded health centers, this study provided valuable insights into the effectiveness of healthcare service improvements and offered evidence-based recommendations for strengthening elderly healthcare services in similar settings.

3.5 Unit of Analysis and inquiry

In this study, the unit of analysis is the healthcare center, which serves as the institutional context within which healthcare services are organized, managed, and delivered to elderly individuals. The focus on healthcare centers allows the study to examine how structural, operational, and policy-related aspects influence the quality and accessibility of care provided to older adults. This includes assessing the adequacy of facilities, staff capacity, service organization, and the implementation of health policies aimed at improving geriatric

healthcare. By analyzing the healthcare center as the unit of analysis, the study captures institutional-level dynamics that shape the overall service environment and determine how effectively elderly care is provided within upgraded facilities in Songea Municipal.

Conversely, the unit of inquiry is the elderly individual, who represents the primary source of information and perspective in this research. Through their lived experiences, perceptions, and interactions with healthcare providers, the elderly offer valuable insights into the actual functioning and effectiveness of healthcare services. This focus enables the study to explore how older adults perceive the quality of care, identify challengess to accessing services, and highlight enabling factors that facilitate better healthcare outcomes. By using elderly individuals as the unit of inquiry, the research centers their voices and experiences as crucial evidence for understanding the impact of healthcare service delivery at the facility level.

3.6 Target Population

According to Coghlan (2019), a population referred to the group that the study results aimed to represent. This study focused on analyzing the enables and challengess of healthcare service delivery among elders at the upgraded health centers in Songea Municipal, Tanzania. The study population included key stakeholders involved in the delivery and management of healthcare services for the elderly at these upgraded health centers.

The target study population consisted of elderly patients receiving healthcare services, healthcare providers, and hospital administrators who oversaw service delivery. The elderly patients were the primary beneficiaries of healthcare services and provided insights into perceived quality of care, enablers, and challengess. Healthcare providers, including doctors, nurses, and medical attendants, offered perspectives on the quality, challengess, and enablers of delivering geriatric care. Health centers' administrators and policymakers, such as health center managers and municipal health officials, contributed knowledge on resource allocation, policy implementation, and system coordination affecting elderly healthcare services. By targeting this diverse group, the

study ensured a comprehensive assessment of healthcare service delivery for elders, capturing both patient perspectives and institutional challenges. This approach helped identify key factors influencing healthcare quality and informed strategies for improving service delivery at upgraded health centers in Songea Municipal.

3.7 Sample size and sampling procedure

3.7.1 Sample size

Yamane (1967) has recommended the proportional formula for sample size from a known population(Adam, 2020).

The formula is;

$$\text{n} = \frac{z^2 p(1-p)}{e^2}$$

Where **n**= expected minimum sample size

z= standard, corresponding to 95% confidence, 1.96

e= maximum likely error, taken as 5%

p= prevalence of elderly patients utilizing healthcare services at the upgraded health centers in Songea Municipal is assumed to be 83.2% (0.832) (since no prior study provides an exact prevalence) (Agofure, 2019)., the sample size calculation was:-

$$\text{n} = \frac{1.96^2 * 0.832 * (1-0.832)}{0.05^2}$$

The minimum sample size is 214 of healthcare provider at the upgraded healthcare services in Songea Municipal were included in the study. Then, the minimum sample size was adjusted for 10% of the non-response rate.

$$\text{Sample size} = \frac{n}{1-0.1}$$

= 214/ (1- 0.1)

= 228

Therefore, 228 of healthcare provider at the upgraded healthcare services in Songea Municipal to study's sample size after adjusting a non-responsive.

3.7.2 Sampling Techniques for quantitative technique

A multi-stage sampling technique was employed to select study participants. The procedure followed four stages:

Stage 1: Region and Municipal Selection: The Songea Municipal was purposively selected as the study area due to its upgraded health centers and the high population of elderly patients. Among the districts in the region, Songea Municipal was chosen because it hosts the four selected health centers (Ruvuma, Msamala, Lilambo, and Subira), which provide specialized geriatric care services.

Stage 2: Health Center Selection: The four health centers (Ruvuma, Msamala, Lilambo, and Subira) were purposively selected based on their recent upgrades, patient load, and availability of healthcare providers specializing in elderly care.

Stage 3: Selection of Healthcare Providers at upgraded health center: A stratified random sampling technique was employed to select healthcare providers from the four upgraded health centers (Ruvuma, Msamala, Lilambo, and Subira). The sampling process began with the compilation of comprehensive numbered lists of all eligible healthcare providers from each health center's administrative records. Providers were stratified into three categories: doctors (including medical officers and specialists), nurses (registered nurses and clinical officers), and medical attendants (support staff involved in elderly care).

For randomization, Microsoft Excel was utilized by creating a column listing unique identification numbers for providers in each stratum, with a parallel column applying the RAND function to generate random numbers. These values were fixed by pasting as values to prevent recalculation, and the entire list was then sorted by these random numbers to ensure unbiased selection. The total sample size of 228 participants was allocated proportionally based on both health center size (number of providers per facility) and stratum representation (professional categories), as illustrated in the sampling distribution table below.

Table 3.1: Proportional Allocation of Healthcare Providers across Selected Health Centers

Health Center	Total Providers	Proportion	Sample Size (n=228)
Ruvuma Health Center	850	228 × 0.35	80
Msamala Health Center	720	228 × 0.30	68
Lilambo Health Center	630	228 × 0.25	57
Subira Health Center	400	228 × 0.10	23
Total	2,600		228

Source: Field data, 2025

Stage 4: Final Participant Recruitment: The sample size was distributed proportionally across the four health centers based on their staffing capacity. Healthcare providers who met the inclusion criteria (e.g., having at least one year of experience in geriatric care) were consecutively recruited until the required sample size was achieved within the data collection period

3.8 Sample selection in qualitative technique

This qualitative study employed purposive sampling technique to select elderly patients receiving healthcare services at upgraded health centers in Songea Municipal, with sample size of 22 el determined by the principle of data saturation (Fusch & Ness, 2015). Following Erickson's (2017) conceptualization, data collection continued until no new themes emerged from interviews, which occurred after interviewing 20 participants. The selection criteria focused on patients aged 60 years and above who regularly utilized services at the upgraded facilities (Ruvuma, Msamala, Lilambo, or Subira Health Centers), ensuring participants had direct experience with the healthcare system under investigation.

To capture diverse perspectives, the study included both male and female patients from varying socioeconomic backgrounds and with different health conditions, including those with chronic illnesses and mobility limitations. The recruitment process also considered length of service use, incorporating both new and long-term patients to obtain comprehensive insights into service quality and accessibility. Data collection terminated once subsequent interviews failed to yield new information about the challengess and enablers of healthcare service delivery, ensuring the findings

adequately represented the experiences of elderly patients in Songea Municipal's upgraded health centers. This approach guaranteed that the research captured the depth and variety of patient experiences while maintaining methodological rigor through the saturation principle. The methodology enabled a thorough understanding of elderly patients' perspectives on healthcare services in the Municipal.

3.9 Data collection techniques

Data for this study were collected using a combination of structured questionnaires and semi-structured interviews to ensure a comprehensive understanding of the enables and challengess in healthcare service delivery among elders at upgraded health centers in Songea Municipal. **The structured questionnaires were used to gather quantitative data on challengess and enables affecting healthcare delivery**. This approach allowed for statistical analysis of the key factors influencing elderly patients' experiences and satisfaction with healthcare services.

Meanwhile, semi-structured interviews were conducted to provide qualitative insights by capturing the experiences, perceptions, and opinions of the quality of healthcare provided to elderly patients. These interviews helped contextualize the qualitative findings by exploring personal narratives and system-related factors affecting healthcare delivery.

This mixed-methods approach ensured that the study not only quantified the extent of enables and challengess in elderly healthcare services but also provided a deeper understanding of the lived experiences of elderly patients and healthcare providers. By integrating both quantitative and qualitative data, the study offered a well-rounded analysis of healthcare service delivery among elders at upgraded health centers in Songea Municipal.

3.10 Data collection tools

The study employed multiple data collection tools to ensure a comprehensive analysis of the enables and challengess of healthcare service delivery among elders at upgraded health centers in Songea Municipal.

The primary instruments for data collection included semi-structured interview guides, an observation checklist, and a documentary review checklist. Semi-structured interview guides were used to collect data from healthcare providers, administrators, and elderly patients receiving care at the upgraded health centers. The interview guide was structured around key themes derived from the study objectives, including perceived quality of healthcare services, challengess to service delivery, and enables that facilitated improved healthcare access and outcomes for elders. This approach allowed for in-depth exploration while maintaining flexibility to capture additional insights from participants. By integrating these tools, the study provided a holistic understanding of the factors influencing healthcare service delivery to elders at upgraded health centers in Songea Municipal. The triangulation of methods enhanced the reliability and validity of the findings, ensuring a comprehensive assessment of both institutional and patient-centered perspectives

3.10 Measurement of Variables.

Variables enablers and challenges of healthcare services delivery to elders at the upgraded Health center in Songea Municipal Council, Tanzania devided into two groups.

3.10.1 Dependent Variable

Elderly healthcare services: This dependent variable focused on assessing the status of healthcare service delivery to older adults at upgraded health centers. Measurement was based on two key dimensions, optimal and sub-optimal service delivery capturing variations in the quality, accessibility, responsiveness, and adequacy of healthcare services provided to the elderly. These dimensions reflect both the functional and experiential aspects of service delivery in meeting the specific health needs of older adults.

3.10.2 Independent Variables

This comprised of the factors contributing to effective health care service delivery to elderly at the upgraded health centers in Songea Municipal Council as decribed below:

a) **Enablers: The study examined factors that facilitate effective healthcare service delivery to older adults, focusing on elements such as the availability of adequate resources and infrastructure, institutional and policy support, healthcare worker competence, and the integration of technology in service provision.**

b) **Challenges: The study also explored factors that hinder efficient healthcare service delivery to older adults, emphasizing issues such as limited funding, shortages of skilled health personnel, inadequate infrastructure, weak institutional coordination, and socio-cultural constraints that reduce access and quality of care.**

Table 0.1 Measurement of Variables

Variables	Indicators	Measurement
Enablers	**a) Availability of medical resources** **b) Adequate infrastructure and equipment** **c) Competent healthcare personnel** **d) Institutional and policy support** **e) Use of technology in service delivery**	**5-point Likert scale where 1 = Strongly Disagree and 5 = Strongly Agree** **1 – Strongly Disagree** **2 – Disagree** **3 – Neutral** **4 – Agree** **5 – Strongly Agree**
Challenges	**a) Limited financial and human resources** **b) Inadequate infrastructure and facilities** **c) Poor coordination and policy implementation** **d) Cultural and socioeconomic barriers** **e) Shortage of geriatric specialists**	**5-point Likert scale where 1 = Strongly Disagree and 5 = Strongly Agree** **1 – Strongly Disagree** **2 – Disagree** **3 – Neutral** **4 – Agree** **5 – Strongly Agree**
Elderly Healthcare Services	**a) optimal services** **b) suboptimal services**	**5-point Likert scale where 1 = Strongly Disagree and 5 = Strongly Agree** **1 – Strongly Disagree** **2 – Disagree** **3 – Neutral** **4 – Agree** **5 – Strongly Agree**

Source: Researcher's construction (2025)

3.11 Trustworthiness

Trustworthiness was ensured throughout the process of collecting qualitative data for the study on enables and challengess of healthcare service delivery among elders at the upgraded health centers in Songea Municipal, Tanzania. The criteria used to assess trustworthiness included credibility, dependability, and transferability (Graneheim & Lundman, 2004). To enhance the quality and reliability of the study, the following strategies were employed:

Credibility was enhanced through the development of an interview guide that explored the experiences and perceptions of elderly patients, healthcare providers, and hospital administrators regarding healthcare service delivery. Triangulation was achieved by collecting data from multiple sources, including interviews, focus group discussions, and document reviews, which ensured a comprehensive understanding of the challengess and enablers influencing healthcare services. Member checking was conducted by sharing preliminary findings with participants to validate interpretations. Additionally, representative quotations from transcribed interviews were used to illustrate themes and ensure alignment with participants' experiences.

Dependability was strengthened by maintaining a research journal that documented all study activities, including participant selection, data collection procedures, and analysis steps. The study adopted an emergent design, allowing insights from earlier interviews to inform subsequent data collection. The interview guide was continuously reviewed and refined to incorporate new themes and issues identified during the research process. Peer debriefing sessions with other researchers were also conducted to ensure consistency and reliability in data interpretation.

Transferability, which refers to the extent to which study findings can be applied to other settings or populations (Graneheim & Lundman, 2004), was supported by providing a detailed description of the research setting, participant characteristics, and data collection methods. Thick descriptions of findings, supported by direct participant quotations, were included to help readers assess the applicability of the results in similar healthcare settings. Furthermore, comparisons with existing literature on healthcare service delivery for the elderly were made to establish broader relevance. By implementing these trustworthiness strategies, the study ensured credible,

dependable, and transferable findings that contributed valuable insights into improving healthcare service delivery for elderly patients at upgraded health centers in Songea Municipal. The methodological rigor enhanced the study's validity and provided a solid foundation for future research in similar contexts.

3.12 Data analysis

3.12.1 Qualitative data analysis

The study employed thematic analysis to analyze qualitative data on the enables and challengess of healthcare service delivery among elders at the upgraded health centers in Songea Municipal, Tanzania. Thematic analysis proved to be a flexible and structured approach that enabled the identification, analysis, and interpretation of patterns or themes within qualitative data. This approach allowed the researcher to capture key insights related to the perceived quality of healthcare services, challengess, and enables influencing healthcare delivery to elderly patients. Braun and Clarke's (2006) framework for thematic analysis guided the process.

The analysis began with familiarization with the data, where the researcher read and re-read interview transcripts, reviewed field notes, and listened to recorded audio to gain an in-depth understanding of the participants' perspectives. Initial observations and reflections were noted to identify recurring ideas or patterns. Following this, the researcher generated initial codes by systematically categorizing significant features of the data that aligned with the study's research objectives. Coding was conducted across the entire dataset to ensure consistency and rigor.

Once the initial coding was complete, the researcher searched for themes by grouping similar codes into broader themes that captured essential aspects of the data. These themes were reviewed at two levels: first, by assessing how well the coded data supported the emerging themes, and second, by evaluating how these themes related to the entire dataset. The themes were then refined, defined, and named to ensure they clearly represented the patterns identified in the data. This process enhanced coherence and provided meaningful insights into the study's research questions.

After refining the themes, the researcher produced a detailed report, incorporating vivid excerpts from participant responses to support the findings. The analysis was

linked to the research questions and contextualized within relevant literature on elderly healthcare service delivery. To ensure data accuracy and trustworthiness, all audio recordings were transcribed into Swahili and later translated into English. A second reviewer, proficient in both languages and experienced in qualitative research, cross-checked the transcripts against the recordings and field notes to verify consistency and completeness before coding began.

The researcher used Microsoft Excel and qualitative data analysis software (NVivo) to organize themes, codes, and categories systematically. Additionally, a summary of the themes and categories was shared with an expert for validation and feedback before finalizing the analysis. This rigorous approach ensured that the findings accurately reflected the lived experiences and perspectives of elderly patients regarding healthcare service delivery at Songea Municipal's upgraded health centers.

3.12.2 Quantitative Data Analysis

In the context of this study, various statistical techniques were applied to analyze the enables and challengess of healthcare service delivery among elders at the upgraded health centers in Songea Municipal, Tanzania. **Descriptive statistics were employed to effectively summarize collected numerical (quantitative) data from the likert scale to assess the enablers and challenges of delivery elderly healthcare services**. These included frequency distributions, which provided a visual representation of response patterns, as well as measures of central tendency such as means to summarize numerical data. Standard deviations were calculated to determine the variability of responses around the mean, offering deeper insights into data dispersion.

To achieve the study's specific objectives, multiple regression analysis was utilized to examine the **factors (enablers and challenges) contributed to efffective healtcare services delivery at the upgraded health centers**. This inferential statistical technique enabled the quantification of the impact of each independent variable, allowing for precise measurement and interpretation of their respective effects on healthcare service delivery for elders. Through this approach, the study determined the extent to which **factors contributed** to healthcare quality, identifying significant predictors and their relative influence.

Ensuring the accuracy and reliability of the collected data was a critical aspect of the research process. The researcher meticulously refined, coded, and entered the responses obtained from structured questionnaires, with particular emphasis on closed-ended questions. These procedures were systematically executed using SPSS Statistics Software Version 25, a widely recognized and trusted tool for statistical analysis. The choice of this software was based on its capability to efficiently handle data management, transformation, and analysis. In employing these rigorous statistical techniques, the study provided a comprehensive and credible evaluation of the factors influencing healthcare service delivery among elders in Songea Municipal. This structured approach enhanced the validity and reliability of the research findings, ensuring that the study's conclusions contributed meaningfully to improving elderly healthcare services in the Municipal.

3.12.3 Multiple Regression Analysis

Multiple regression analysis was employed to examine the influence of challengess and enables on the perceived quality of healthcare services delivered to elders at upgraded health centers in Songea Municipal. Given the nature of the dependent variable, multiple linear regression models were used to establish the relationship between healthcare delivery and the independent variables. This approach facilitated an assessment of how challengess such as inadequate infrastructure, shortages of trained healthcare professionals, and financial constraints impacted healthcare service quality. Similarly, it assessed how enables such as policy support, specialized geriatric care, and social support systems contributed to improved healthcare outcomes.

The regression analysis provided estimates of the extent to which these factors influenced healthcare delivery, offering insights into the key determinants of service quality for elders in Songea Municipal. Through this statistical approach, the study generated data-driven recommendations to enhance elderly healthcare services, ultimately improving accessibility, responsiveness, and patient satisfaction. The findings contributed valuable evidence for policymakers and healthcare administrators seeking to optimize service delivery for the elderly population in the Municipal.

The model used in this study is shown below in the form of a general linear regression:

$$Y_i = \beta_0 + \beta_i X_{1i} + \beta_i X_{2i} + .. + \beta_k X_k + u_i \quad \ldots\ldots\ldots\

A regression model was used in this section of the analysis to test the hypotheses. In a multiple regression model, three extracted dimensions was used as independent variables against overall strategy implementation as the dependent variable, and all study hypotheses were tested at a 95% confidence interval as explained by the following model employed multiple regressions.

$$Y_1 = \beta_0 + \beta_1 X_1 + \beta_2 X_2 + \beta_3 X_3 + \mu_i \ldots\ldots\ldots\

CHAPTER FOUR
RESULTS

4.1 Introduction

This chapter focuses on healthcare service delivery to elders at upgraded health centers in Songea Municipal. It is guided by the study's specific objectives: to explore the quality of healthcare services provided to elders, to identify the challengess affecting service delivery, and to determine the enables that support better access and provision of care. The discussion covers key aspects such as accessibility of services, responsiveness of health workers, staff competence, availability of medical resources, and the role of community and institutional support in improving health outcomes for elders.

4.2 Demographic characteristics of the respondents

The demographic characteristics of respondents are critical in shaping their perspectives and experiences regarding healthcare service delivery to the elderly. In this study, key demographic variables including age, gender, and educational attainment were systematically examined to provide a contextual understanding of how these attributes may influence perceptions and utilization of healthcare services among the elderly population.

According to Brock et al., (2024), the inclusion of demographic data enhances the interpretability of research findings by revealing potential associations between respondents' characteristics and study outcomes. Establishing the demographic profile of participants was therefore essential in analyzing the extent to which these variables intersect with the objectives of the study, particularly in relation to the quality, accessibility, and responsiveness of healthcare services offered to elders at upgraded health centers in Songea Municipal.

4.2.1 Age of the respondents

The analysis of respondents' age distribution revealed that the majority (n=154; 70.0%) were between 36–51 years. A smaller proportion (n=39; 17.7%) were in the age range of 21–35 years, while the remaining (n=27; 12.3%) were aged 52 years and above. These findings suggest that the workforce is predominantly composed of individuals in their mid to late career stages, which may contribute positively to service delivery due to accumulated experience and professional maturity.

4.2.2 Education level of the respondents

As shown in the table, the respondents possessed varying levels of education. The largest group held a bachelor's degree (n=94; 42.7%), followed by diploma holders (n=87; 39.5%). Certificate holders accounted for (n=23; 10.5%) of the respondents, while only (n=16; 7.3%) had attained a master's degree. This distribution indicates a relatively well-educated workforce, with the majority having attained post-secondary qualifications.

4.2.3 Professional designation of the respondents

The data on professional designation showed that nurses made up the largest category of respondents (n=81; 36.8%), followed by medical doctors (n=77; 35.0%). Clinical officers constituted (n=35; 15.9%) of the respondents, while laboratory technicians and pharmacists accounted for (n=17; 7.7%) and (n=10; 4.5%) respectively. This diversity in professional roles is essential for comprehensive healthcare delivery, particularly in elderly care settings.

4.2.4 Working experience of the respondents

Regarding work experience, a majority (n=139; 63.2%) reported having more than 10 years of experience. Respondents with 6–10 years of experience were (n=51; 23.2%), while those with 1–5 years were (n=26; 11.8%). Only (n=4; 1.8%) had less than 1 year of experience. The predominance of experienced personnel suggests the potential for high-quality service provision, especially in managing elderly patients who often require specialized care.

4.2.5 Working department of the respondents

The respondents were drawn from various departments. The outpatient wards had the highest representation (n=60; 27.3%), followed by inpatient wards (n=54; 24.5%) and the administrative office (n=49; 22.3%). Smaller proportions were reported from the laboratory/pharmacy (n=21; 9.5%), emergency unit (n=18; 8.2%), and maternity ward (n=18; 8.2%). The wide range of departments involved indicates the cross-functional nature of healthcare service delivery for the elderly.

4.2.6 Training on elderly healthcare

When asked about training in elderly healthcare, slightly more than half of the respondents (n=114; 51.8%) reported having received relevant training, while (n=106; 48.2%) had not. This nearly balanced distribution highlights a need for continuous professional development to enhance capacity in geriatric care across all healthcare personnel.

4.2.7 Average number of elderly patients attended per day

Findings on elderly patient attendance revealed that (n=85; 38.6%) of respondents attended to between 11–15 elderly patients daily. Equal proportions (n=59; 26.8%) reported attending to less than 5 and 6–10 patients per day, respectively. Only (n=17; 7.7%) reported attending to more than 15 elderly patients per day. These figures reflect varying workloads among respondents and can inform resource allocation and staffing policies to optimize care for elderly populations.

Table 4.1: socio-demographic characteristic of the respondent (n=220)

Characteristics	**Distribution**	Frequency (**n**)	**Percentage (%)**
Age	21-35year	39	17.7
	36-51year	154	70.0
	52 and above	27	12.3
Education level	Certificate	23	10.5
	Diploma	87	39.5
	Bachelor	94	42.7
	Master	16	7.3
Professional designation	Clinical officer	35	15.9
	Laboratory technician	17	7.7
	Medical doctor	77	35.0
	Nurse	81	36.8
	Pharmacisty	10	4.5
Working experiences	Less than 5years	4	1.8
	1-5years	26	11.8
	6-10years	51	23.2
	Above 10years	139	63.2
Working department	Administrative office	49	22.3
	Emergency unit	18	8.2
	Inpatient wards	54	24.5
	Laboratory/pharmacy	21	9.5
	Maternity ward	18	8.2
	Outpatient wards	60	27.3
Trained on elderly healthcare	Yes	114	51.8
	No	106	48.2
Elderly attendence per day	Less than 5patient	59	26.8
	6-10 patient	59	26.8
	11-15 patient	85	38.6
	More than 15patient	17	7.7

Source: Survey result, 2025

4.3 Descriptive statistics

This section provides an in-depth analysis of the survey findings to enhance understanding of how healthcare services are delivered to elderly patients at the upgraded health center. To present a comprehensive picture of respondents' views on critical aspects influencing elder care, the analysis incorporates a range of descriptive measures, including mean scores and standard deviations, derived from the distribution of responses. A structured rating scale was employed to accurately capture perceptions across key doming focused on enables and challenges of delivery healthcare services among elders at the upgraded health centers in Songea Municipal.

4.3.1 Status of healthcare services delivery to the elders

Out of the total 220 respondents, the majority, 153 (69.5%), reported that sub-optimal delivery of healthcare services, while 67 (34.5%) of the respondents indicated that optimal delivery of healthcare services was provided to elders. This suggests that while some progress has been made, there remains a considerable gap in delivering consistent and high-quality elder care at the upgraded health centers.

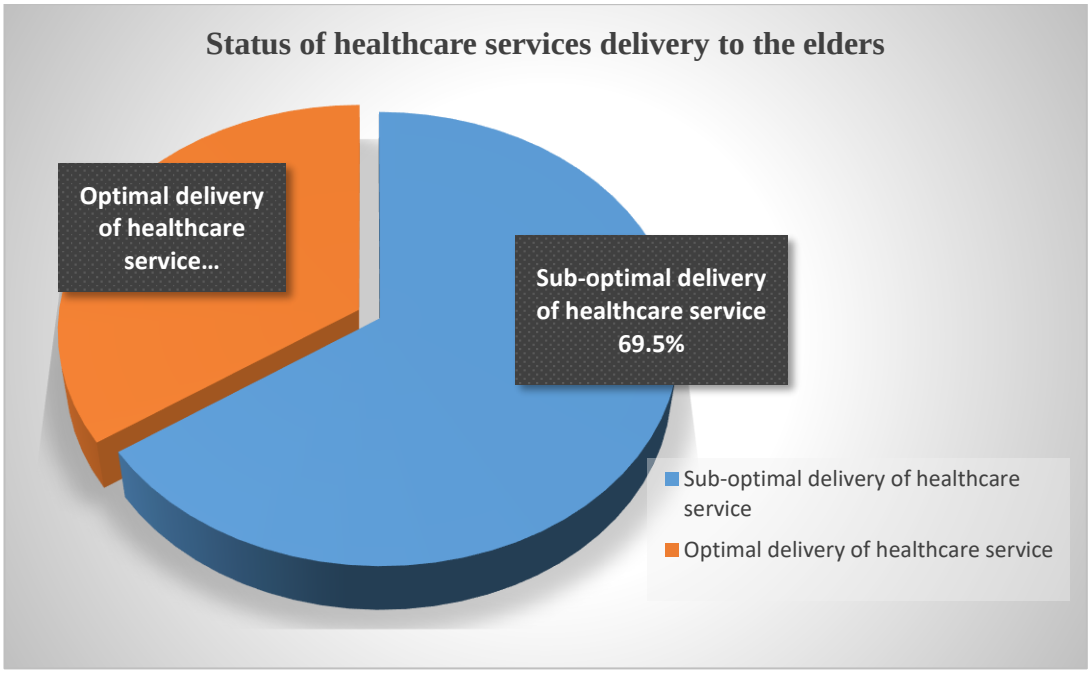


Figure 4.1: status of healthcare services delivery to the elders at upgraded health center in Songea Municipal.

Source: Survey result, 2025

4.3.2 Enables of healthcare services delivery to elders

Participants' perceptions of various enables influencing healthcare services delivery to elders were assessed, as presented in Table 2. The level of leadership support for elder care services had an average mean of 1.47 and a standard deviation of 0.796. The relatively low mean suggests that leadership support is generally perceived as inadequate in most facilities. The moderate standard deviation indicates a fairly consistent view among respondents regarding limited leadership involvement in promoting geriatric care services.

Workforce training in geriatric care recorded a mean score of 2.65 with a standard deviation of 0.670. This finding indicates that while some respondents believe the workforce is moderately trained, the overall perception leans towards insufficient preparation in handling elderly patients. The mean points to moderate agreement, while the relatively narrow standard deviation reflects consistent views among respondents.

The availability of essential resources such as funds, equipment, and space had a mean of 2.28 and a standard deviation of 0.709. These results indicate that resources are generally seen as inadequate, falling between "rarely sufficient" and "never sufficient" on the rating scale. This limitation was commonly noted across facilities, as reflected by the low variability in responses.

Moreover, during an interview on of the elderly patients also express his views about the in adequacy of age-appropriate facilities and specialized care at the upgraded health centers. Many reported discomfort and challenges during treatment due to limited resources tailored to their needs, as one of the elderly patients commented:

> *"The beds are too high and uncomfortable for someone my age. Sometimes we wait long because there aren't enough tools or staff just for older people"* (Female, 65years, Ruvuma upgraded health center).

The effectiveness of policies and regulations supporting elder healthcare services had a mean of 2.34 and a standard deviation of 0.617. This suggests that existing policies are perceived as only slightly effective, pointing to potential gaps in both the formulation and implementation of elder-specific healthcare policies. The low variability in responses implies a shared sentiment among healthcare workers.

Community involvement in planning and implementing elder care services had an average mean of 2.29, with a standard deviation of 0.658. This indicates that community engagement is viewed as limited. The rating suggests that, although some level of involvement exists, it remains minimal and inconsistent, which may hinder the sustainability of elder care programs at the community level.

The use of technology in elder care delivery scored a mean of 2.49 with a standard deviation of 0.658. This finding shows that technological integration such as the use of electronic health records or telemedicine is minimal to moderate in most facilities. Respondents generally agreed that digital tools are underutilized in improving elder healthcare outcomes.

During the interview one of the elderly patients expressed that, digital tools such as electronic health records and telemedicine, are not widely used to enhance the quality of care they receive. This have been associated with the fact that, some of the health information is often recorded manually, which sometimes leads to delays or repetition during consultations. As one elderly patient shared their experience:

> *"Whenever I visit the clinic, they ask me the same questions each time. It feels like they don't keep proper records, and I rarely see them use computers for our treatment"* (Male, Age 70 years, Msamala Upgraded Health Centre).

Finally, the use of research and evidence-based practice in elder care decision-making recorded the lowest mean score of 2.15, with a standard deviation of 0.615. This suggests a limited application of research findings in clinical decision-making, policy development, and planning for elderly services. The relatively low standard deviation highlights a consistent view among respondents that evidence-based practices are not yet fully embraced in elder care.

Table 4.2: Enables of healthcare services delivery among elders

Variable	Mean	Std. Dev
Leadership support for elder care services	1.47	.796
Workforce training in geriatric care	2.65	.670
Availability of resources for elderly care	2.28	.709
Effectiveness of policies supporting elder care.	2.34	.617
Community involvement in elder care services.	2.29	.658
Use of technology in elder care delivery	2.49	.658
Use of research in elder care decision-making	2.15	.615

Source: Survey result, 2025

4.3.3 Challenges of delivered healthcare services among elders

Participants' perceptions of various challengess to delivered healthcare services to elders were assessed using descriptive statistics, as shown in Table 3. The findings show resource constraints in elder care delivery had a mean score of 2.95 with a

standard deviation of 0.978. This relatively high mean indicates that such constraints, including shortages of drugs and equipment, are rarely reported but still present in some facilities. The standard deviation shows moderate variability among responses. During an interview, one of the elderly patients expressed the impact of resource constraints:

> *"We face consistent shortages of supplies, especially in rural facilities. This limits our ability to provide comprehensive care for older patients, even when the need is clear" (*Female, Age 75 years, Lilambo Upgraded Health Centre,*).*

Social factors influencing elder care had a mean of 2.43 and a standard deviation of 0.793, suggesting that poverty, education, and housing moderately impact the delivery of elder care services. These factors were widely acknowledged as limiting delivery of care to vulnerable elderly populations. Cultural and language challengess in elder care had a mean of 2.36 and a standard deviation of 0.629, suggesting that such challenges occur sometimes, with relatively consistent views among respondents. These issues may lead to misunderstandings and reduce the quality of elder care in multicultural communities.

Access challengess to timely elder care had a mean of 2.35 and a standard deviation of 0.764, implying that access issues often hinder timely care for elders. These findings imply that many elders experience delays or complete inaccessibility to timely medical attention. Furthermore, staff shortages impacting elder care quality recorded a mean of 2.33 and a standard deviation of 0.629. This suggests that staff shortages moderately affect elder care in many facilities, with limited variation among responses.

Communication challenges with elderly patients had a mean of 2.31 and a standard deviation of 0.665, indicating that these challenges occasionally affect interactions, though not very frequently. Similarly, staff resistance to new elder care approaches had a mean of 2.31 and a standard deviation of 0.608, showing that moderate resistance exists among staff when adopting new practices or technologies. These moderate scores indicate recurring yet not universal issues, suggesting variation based on staff training and facility management.

Infrastructure limitations affecting elder care had a mean of 2.26 and a standard deviation of 0.765, suggesting that respondents generally agreed that infrastructure challenges exist. Though not the highest concern, the issue remains relevant, especially in facilities with outdated or poorly maintained infrastructure. Finally, coordination among elder care providers had a mean of 2.24 with a standard deviation of 0.626, indicating that coordination is generally poor but not entirely absent. This suggests that interdepartmental and interagency collaboration in elder care is perceived as weak or inconsistent across some facilities.

Table 4.3: Challenges of delivery of healthcare services to elders

Statement	Mean	Std. Dev
Resource constraints in elder care delivery.	2.95	.978
Infrastructure limitations affecting elder care.	2.26	.765
Staff shortages impacting elder care quality.	2.33	.629
Communication challenges with elderly patients.	2.31	.665
Access to timely elder care	2.35	.764
Social factors influencing elder care.	2.43	.793
Coordination among elder care providers.	2.24	.626
Staff resistance to new elder care approaches.	2.31	.608
Cultural/language barriers in elder care.	2.36	.629

Source: Survey result, 2025

4.4 Inferential Statistics

Inferential statistics were employed to interpret the data collected and to draw conclusions regarding the relationships among variables in the study. Specifically, regression analysis was utilized to determine the statistical significance of the independent variables including demographic characteristics, enablers and challenges in relation to the dependent variable which is the healthcare service delivery to elders. Regression analysis is widely recognized as a reliable method for estimating relationships between variables and understanding their influence on outcomes (Hair et al., 2020; Field, 2018; Creswell & Creswell, 2018). It also enables the development of a predictive model that explains how various factors statistically impact healthcare service delivery. The findings not only clarify the analytical approach but also provide practical implications for improving elder healthcare services at upgraded health centers in Songea Municipal, Tanzania.

4.4.1 Factor Analysis

To assess the sampling adequacy and the suitability of the data for further analysis, the researcher employed factor analysis using the Principal Component Analysis (PCA) extraction method along with Varimax rotation. As shown in Table 5 below, the Kaiser-Meyer-Olkin (KMO) measure of sampling adequacy yielded a value of 0.836, indicating meritorious sampling adequacy. Additionally, Bartlett's Test of Sphericity was highly significant (Approx. Chi-Square = 4148.427, df = 595, $p < 0.001$), confirming that the correlation matrix was not an identity matrix and that relationships among variables were sufficient to justify factor analysis. These results demonstrate that the dataset was appropriate for conducting factor analysis, as supported by recommendations from Pallant (2020).

Table 4.4: KMO and Bartlett's Test

Kaiser-Meyer-Olkin Measure of Sampling Adequacy.		.836
Bartlett's Test of Sphericity	Approx. Chi-Square	4148.427
	Df	595
	Sig.	.000

Source: Survey result, 2025

4.4.2 Principal Component Analysis

According to the results in Table 5, after rotation, the researcher removed some of the questionnaire items with low loading values in comparison to others by using a 0.700 cut-off point in Principal Component Analysis (PCA).

Table 4.5: Rotated component matrix

s/n		Component					
		1	2	3	4	5	6
1	Leadership support for elder care services in the facility.						.824
2	Staff training adequacy in managing geriatric care.	.863					
3	Availability of essential resources (funds, space, equipment).					.742	
4	Effectiveness of policies and regulations supporting elder care.				.745		
5	Community involvement in planning elder care services		.754				
6	Use of technology (e.g., EHRs, telemedicine) in elder care delivery.					.760	
8	Impact of resource shortages on service delivery				.747		
9	Effect of infrastructure limitations on elder care access	.774					
10	Influence of staff shortages on the quality of elder care			.786			
11	Frequency of communication challenges with elderly patients				.820		
12	Challengess due to geographic or financial inaccessibility					.786	
13	Impact of social factors like poverty, education, housing.	.807					
14	Coordination level between units or agencies involved in elder care						.754
15	Resistance to adopting new technologies among staff	.762					
16	Challenges from cultural or language differences in care delivery.						
19	Consistency in following scheduled care plans for elderly patients		.729				.778
20	Frequency of patient follow-up to ensure continuity of care				.738		
21	Responsiveness to urgent elder care needs.		.714				
23	Staff confidence in managing elderly patients' conditions			.766			
24	Trust and confidence built through staff communication					.805	

Extraction Method: Principal Component Analysis.
Rotation Method: Varimax with Kaiser Normalization.
a. Rotation converged in 7 iterations.

Source: Survey result, 2025

4.4.3 Reliability test

A total of twenty-six (26) questionnaire items were selected to assess the reliability of the study tool. Based on the results presented in Table 6, the overall Cronbach's Alpha value was 0.894, indicating a high level of internal consistency among the items. This value exceeds the minimum acceptable threshold of 0.70, as recommended in recent

psychometric literature (Hair et al., 2020; Field, 2018). Additionally, the "Cronbach's Alpha if Item Deleted" values ranged between 0.885 and 0.904, suggesting that each item contributed meaningfully to the scale's reliability and none significantly reduced the internal consistency. These results confirm that the instrument used was reliable for measuring factors related to elder healthcare service delivery.

Table 4.6: Item-total statistics

sn		Cronbach's Alpha if Item Deleted
1	Leadership supports elder care.	.898
2	Staff are trained in geriatric care	.896
3	Resources for elder care are sufficient	.886
4	Policies support elder healthcare.	.886
5	Community is involved in elder care planning	.887
6	Technology is used to enhance elder care	.904
7	Evidence-based practices guide decisions	.887
8	Resource shortages affect service delivery	.885
9	Infrastructure limits elder care	.886
10	Staff shortages impact care quality	.885
11	Communication issues affect elder interactions	.885
12	Access challengess delay elder care	.885
13	Social factors affect elder care delivery	.886
14	Elder care coordination is effective	.885
15	Staff resist new elder care technologies	.887
16	Cultural/language issues hinder care	.887
17	Facility environment supports elder care	.893
18	Equipment is adequate for elder care	.892
19	Care is provided as scheduled	.890
20	Elderly patients receive follow-up	.894
21	Urgent elder needs are addressed	.890
22	Timely care is given during busy hours	.891
23	Staff are confident in managing elder health	.894
24	Communication builds trust with elders	.892
25	Emotional/social needs of elders are addressed	.895
26	Care is personalized for each elder	.892
	Overal Cronbach's Alpha	.894

Source: Field computations, 2025

4.4.4 Diagnostic tests of variables

To run a multiple regression analysis, a diagnostic test was performed to the data for assessing the normal distributions (normality), that there is no correlation between two or more independent variables (multicollinearity), and that the data values for the independent and dependent variables have equal variance (homoscedasticity). These regression assumptions were followed in this study, and the data were diagnostically tested for normality, multicollinearity, and homoscedasticity.

4.4.4.1 Normality test

The Kolmogorov-Smirnov and Shapiro-Wilk tests were used to assess the normality of the dependent variable, delivery of healthcare services. As presented in Table 7, the p-value for the Kolmogorov-Smirnov test was 0.062, which is greater than the 0.05 significance threshold, suggesting that the data do not significantly deviate from a normal distribution. However, the Shapiro-Wilk test yielded a p-value of 0.050, which lies on the threshold of significance. Given the sample size (n = 220), and the fact that the Kolmogorov-Smirnov test indicates normality, the data for the variable delivery of healthcare services can be considered approximately normally distributed, allowing for the use of parametric statistical tests.

Table 4.7: Tests of Normality

	Kolmogorov-Smirnov[a]			Shapiro-Wilk		
	Statistic	Df	Sig.	Statistic	df	Sig.
Deliverly of healthcare services	.059	220	.062	.986	220	.050

a. Lilliefors Significance Correction

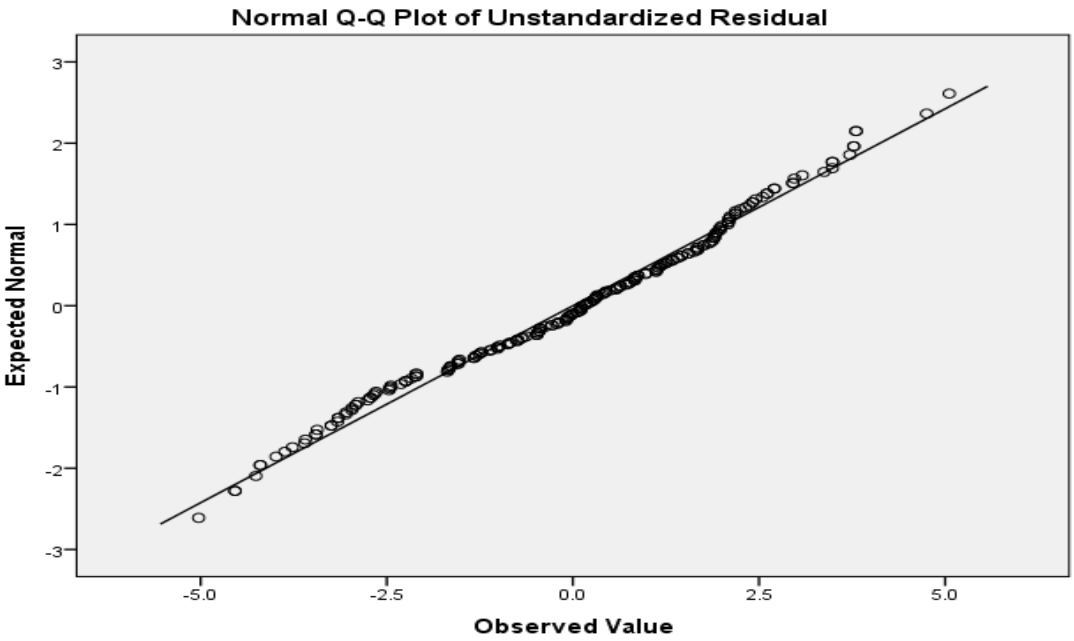


Figure 4.2: Normal distribution curve for deliverly of healthcare services

Source: Field survey, 2025

4.4.4.2 Multicollinearity

A multicollinearity test was conducted to assess whether there was a high correlation among the independent variables included in the regression model. Multicollinearity can lead to unstable regression coefficients and unreliable significance tests, making interpretation difficult (Kothari & Garg, 2014; Wilson, 2014; Creswell & Creswell, 2018). In this study, the Variance Inflation Factor (VIF) and Tolerance statistics were used to detect the presence and severity of multicollinearity among the predictors of healthcare delivery services to elders.

As presented in Table 8, the VIF values ranged from 1.115 to 3.440, all of which are below the critical threshold of 5, indicating that multicollinearity is not a significant concern in this model (Hair et al., 2020; Field, 2018). Similarly, all Tolerance values were above 0.1, with the lowest being 0.291 for the item "Communication issues affect elder interactions." This suggests that none of the predictors is highly redundant or collinear with others.

Therefore, the results imply that the independent variables are sufficiently independent from one another and can be reliably included in the regression model to estimate their effects on the delivery of healthcare services to elders at upgraded health centers in Songea Municipal.

Table 4.8: Multicollinearity

Model		Collinearity Statistics	
		Tolerance	VIF
1	(Constant)		
	Leadership supports elder care	.868	1.152
	Staff are trained in geriatric care	.838	1.193
	Resources for elder care are sufficient	.381	2.626
	Policies support elder healthcare	.355	2.813
	Community is involved in elder care planning	.453	2.206
	Technology is used to enhance elder care	.897	1.115
	Evidence-based practices guide decisions	.475	2.105
	Resource shortages affect service delivery	.358	2.792
	Infrastructure limits elder care	.337	2.966
	Staff shortages impact care quality	.337	2.966
	Communication issues affect elder interactions	.291	3.440
	Access challengess delay elder care	.310	3.222
	Social factors affect elder care delivery	.316	3.164
	Elder care coordination is effective	.398	2.513
	Staff resist new elder care technologies	.390	2.565
	Cultural/language issues hinder care	.372	2.688

a. Dependent Variable: Healthcare delivery services to elders

Source: Field survey, 2025

4.4.4.3 Heteroscedasticity

To meet the conditions of the regression, the error variance was ensured to be constant (homoscedasticity) across the values of independent variables in order to provide constant responses and better results (Greene, 2012). ANOVA Table 9 results show that there is no heteroscedasticity because the significant value is greater than 0.05, p=0.515, indicating that the problem does not exist. Furthermore, the results of a graphical procedure using a scatter plot of residuals were used to test for heteroscedasticity in the independent variables, and the findings conclude that there is no heteroscedasticity because the majority of the observations concentrate along the horizontal line, rejecting a null hypothesis.

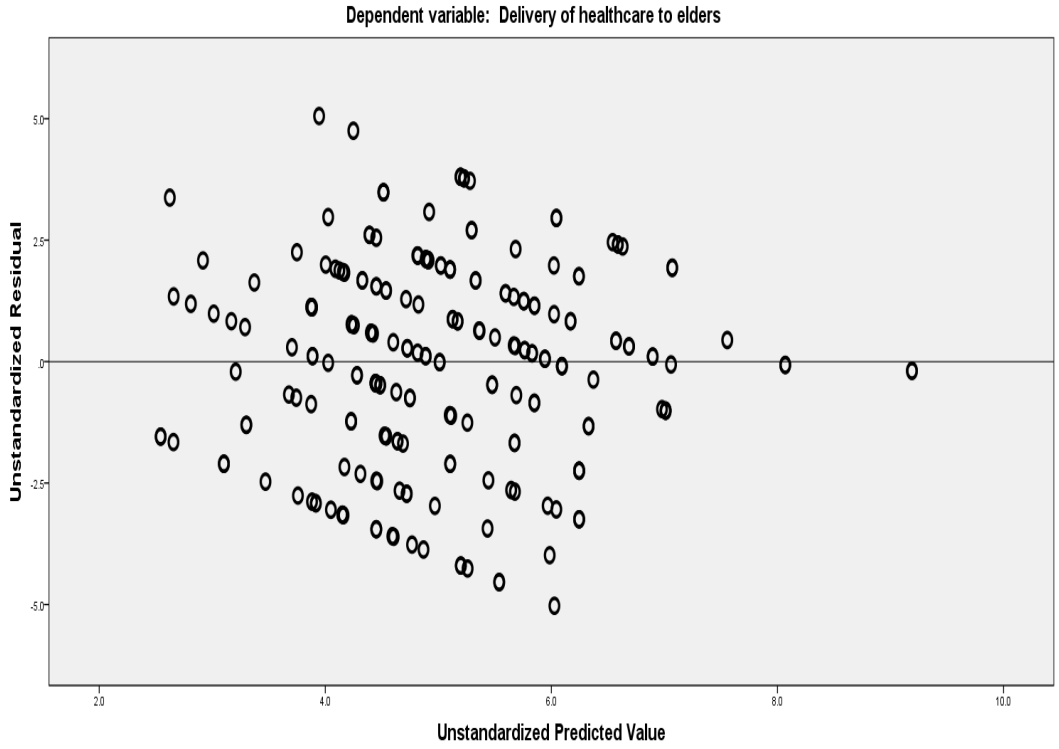


Figure 4.3: Graphical presentation of Heteroscedasticity test

Source: Field survey, 2025

Table 4.9: Heteroscedasticity

Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	279.9	16	.17.496	3.812	.217[b]
	Residual	931.774	203	4.590		
	Total	1211.79	219			

a. Dependent variable: deliverly of healthcare services

b. Predictors: (Constant), Cultural/language issues hinder care, Leadership supports elder care, Staff are trained in geriatric care, Technology is used to enhance elder care, Evidence-based practices guide decisions, Infrastructure limits elder care, Community is involved in elder care planning, Resources for elder care are sufficient, Access challengess delay elder care, Elder care coordination is effective, Staff resist new elder care technologies, Policies support elder healthcare, Staff shortages impact care quality, Resource shortages affect service delivery, Social factors affect elder care delivery, Communication issues affect elder interactions.

4.5 Thematic analyisis of quality of healthcare services received by elders at the upgraded health centers (objective 1).

In the first objectives of the study aimed to collect the qualitative narratives from elderly patients. The findings help to provide deep insights into the quality of healthcare services they received at upgraded health centers. Also, it provides the narration which may either revealed the strengths or weaknesses of healthcare delivery across facilities. This reflects the extent to which upgraded centers meet the unique health needs of aging populations as shown in table 13 below.

Table 4.10: Thematic analyisis of quality of healthcare services

Themes	Sub-themes	Code
Quality of Healthcare services received by Elders	Availability of Essential Medicines	Elders reporting frequent drug stock-outs, Dependence on external pharmacies, Lack of geriatric-specific medication
	Timeliness of Care	Long waiting times, Delays in emergency response, Scheduling inefficiencies
	Competence of Health Providers	Presence of trained staff in elder care, Proper diagnosis and treatment, incompetence due to staff shortage

Source: Field survey, 2025

4.5.1 Quality of Healthcare Services

Participants in this study shared their experiences of receiving healthcare services at upgraded health centers. From their accounts, elders considered healthcare services as a crucial component for maintaining their wellbeing, with expectations that the services provided would meet their health needs in a timely and respectful manner. From participants' descriptions, healthcare services encompassed various aspects such as medical consultation, physical examination, provision of prescribed medicines, health education, and follow-up care. It was noted from the interviews that there were variations in the quality, timeliness, and thoroughness of these services, largely influenced by the availability of healthcare providers, essential medicines, and medical equipment. Furthermore, participants shared their perspectives on how they felt during service delivery, including feelings of satisfaction when attended to promptly and frustration when faced with delays or inadequate attention.

Also, from the shared experiences, it emerged that several challenges, such as staff shortages, long waiting times, and poor coordination between service units, limited the ability of health centers to provide optimal care to elders as expected.

4.5.2 Availability of Essential Medicines

Participants in this study reported that the availability of essential medicines for elders at the upgraded health center was inconsistent. Many participants expressed concerns about frequent drug stock-outs, which disrupted treatment continuity and compelled patients to seek medicines from private pharmacies at their own cost. Elders and their caregivers emphasized that such shortages created financial burdens, especially for those with limited income. Several participants noted that, in most cases, the health center's pharmacy would lack key medications for chronic conditions common among older patients, such as hypertension and diabetes.

One participant explained:

> *"Most of the time when we come to collect our medicine, we are told it is out of stock, so we have to buy it outside, and it is very expensive for us" (*Female, Age 75 years, Lilambo Upgraded Health Centre*).*

In addition, it was reported that the facility did not stock geriatric-specific medications, resulting in older patients being prescribed alternative drugs that were less suitable or had more side effects. Participants stressed that such substitutions sometimes compromised the effectiveness of treatment or increased discomfort for the elderly.

A participant reflected on this challenge:

> *"Medicines for old people are rarely available here, they just give you what they have, but sometimes it is not the right one for your condition" (*Male, Age 55 years, Ruvuma Upgraded Health Centre*).*

The reliance on external pharmacies also meant that treatment adherence depended heavily on a patient's financial ability, which participants acknowledged as a key challenges to effective care for elders. As one elder stated:

> *"If you don't have money to buy outside, you just stay without the medicine until the next visit" (*Male, Age 88 years, Lilambo Upgraded Health Centre*).*

From the interviews, it became evident that the problem of frequent stock-outs, coupled with the absence of age-specific medication, posed a significant challenge to providing optimal care for elderly patients. Participants associated these challenges with limited funding, inadequate supply chain management, and the absence of special consideration for geriatric needs in the procurement process.

4.5.3 Timeliness of Care

Participants in this study highlighted that timely access to healthcare services was a critical component in ensuring positive patient outcomes. Almost all participants expressed concerns that delays in receiving care whether in routine appointments, emergency situations, or follow-up services negatively affected patient health and satisfaction. They emphasized that timely care not only prevents complications but also enhances trust in the healthcare system. However, it was reported that there was no consistent adherence to scheduled times for consultations and emergency response, with some patients experiencing prolonged waiting periods before receiving attention.

Several participants noted that emergency cases often faced delays in initial assessment and intervention due to staff shortages, overcrowding, and administrative bottlenecks. Others described inefficiencies in appointment scheduling systems, which resulted in patients waiting beyond their allocated time slots. One participant explained the frustration experienced during emergencies:

> *"Even when it is an emergency, sometimes you have to wait for more than 30 minutes before someone attends to you, and by that time, the condition may have worsened" (*Male, Age 80 years, Ruvuma, Upgraded Health Centre*).*

It was also observed that waiting times for routine care varied significantly depending on the day and time of visit. In some instances, patients spent several hours at the facility for services that should have taken less than an hour. A participant illustrated this by sharing:

> *"I came at 8:00 a.m. for my scheduled appointment, but I was attended to around 12:00 noon. It is exhausting, especially when you are already feeling unwell" (*Female, Age 60 years, Masamala Upgraded Health Centre*).*

Scheduling inefficiencies were also highlighted, with participants pointing out that poorly managed appointment systems often caused unnecessary return visits or overlapping bookings. As one participant noted:

> *"They give you a date to come back, but when you arrive, you find many others booked for the same time, so you still wait for hours" (*Female, Age 53 years, Lilambo Upgraded Health Centre*).*

Participants agreed that improving the timeliness of care would require better staffing, efficient scheduling systems, and quicker emergency response measures to ensure patients receive care promptly and without undue delays.

4.5.4 Competence of health care provider

Participants in this study acknowledged that the presence of trained healthcare providers played a vital role in ensuring elders received appropriate diagnosis and treatment at upgraded health centers. Many elders expressed confidence in healthcare workers who demonstrated specialized knowledge in geriatric care, noting that such competence often resulted in timely and accurate treatment. However, some elders observed that, despite the availability of trained staff, service quality was sometimes compromised by the shortage of personnel, leading to delays and reduced attention to individual needs.

One elder narrated how having competent staff made them feel assured about the care they received:

> *"When the doctor examined me, he explained clearly what was wrong and gave me the right medicine. I felt I was in safe hands because he knew exactly how to treat someone my age" (*Male, Age 65 years, Ruvuma Upgraded Health Centre*).*

Despite these positive experiences, several participants lamented that staff shortages often meant that even competent providers were overwhelmed with large numbers of patients, which in turn affected their ability to conduct thorough assessments. One elder described:

> *"Sometimes you wait for hours because the nurse is busy with many patients. They try their best, but you can see they are tired and, in a hurry," (*Female, Age 75 years, Lilambo Upgraded Health Centre*).*

From the interviews, it emerged that inadequate staffing not only affected waiting times but also reduced the depth of provider-patient interactions. While most participants valued the professional skills of the available healthcare workers, they also felt that more staff trained in elder care were necessary to ensure consistent and high-quality service delivery

4.6 Regression analysis of factors contributing to effective healthcare services delivery to elderly

4.6.1 Enables of healthcare services delivery among elders

Multivariate analysis revealed several enables influencing the delivery of optimal healthcare services to elders. Leadership support was significant associated with delivery of optimal healthcare delivery outcomes (aOR = 1.0; 95% CI: 0.28–3.54; p = 0.000). Staff training emerged as a significant enabler, with facilities reporting adequate training being 3.5 times more likely to deliver optimal care (aOR = 3.5; 95% CI: 1.67–7.46; p = 0.001). Similarly, the presence of effective policies or guideline may significantly improve elder care services, with an adjusted odds ratio of 2.7 (95% CI: 1.35–5.71; p = 0.005).

The use of available technology, though important, showed no statistically significant association (aOR = 1.3; 95% CI: 0.611–2.61; p = 0.529). Similarly, evidence-based decision-making showed a positive trend (aOR = 1.8), but the result was not statistically significant (95% CI: 0.72–3.44; p = 0.061), indicating a potential but inconclusive impact on healthcare service delivery to elders.

Table 4.11: Enables of healthcare services delivery to elders

Variables	Healthcare delivery to elders		cOR 95%CI	p-Value	aOR 95%CI	p-Value
	Sub-optimal	Optimal				
Leadership supports						
Adequate	146(70.9%)	60(29.1%)	2.4(0.82-	0.11	1.0(0.28-	**0.000**
indequate	7(50.0%)	7(50.0%)	7.24)		3.54)	
			Ref			
Staff training						
Adequate	69(58.5%)	49(41.5%)	3.3(1.77-	0.00	3.5(1.67-	**0.001**
Inadequate	84(82.4%)	18(17.6%)	6.20)		7.46)	
			Ref			
Use of available technology	100(73.5%)	36(26.5%)	1.6(0.91-	0.10	1.3(0.611-	0.529
Insufficient	53(63.1%)	31(36.9%)	2.92)		2.61)	
Sufficient			Ref			
Available policies						
Effective	108(78.9%)	37(45.1%)	2.9(1.63-	0.00	2.7(1.35-	**0.005**
ineffective	45(54.9%)	30(21.7%)	5.36)		5.71)	
			Ref			
Evidence based decision making	34(59.6%)	23(40.4%)	1.8(0.97-	0.06	1.8(9.72-	0.061
Yes	119(73.0%)	44(27.0%)	3.44)		3.44)	
No			Ref			

4.6.2 Factors for healthcare services delivery to elders

The multivariate analysis revealed that a shortage of resources was significantly associated with hindered delivery of healthcare services to elders. Facilities experiencing resource shortages were 2.7 times more likely to face service delivery challenges compared to those with adequate resources (aOR = 2.7, 95% CI = 1.24–6.06, p = 0.013). Similarly, staff shortages were found to be a significant challenges, with affected facilities being 2.1 times more likely to deliver suboptimal care compared to adequately staffed facilities (aOR = 2.1, 95% CI = 1.12–3.85, p = 0.021). However, poor care coordination across service units emerged as a strong and significant challenges to elder care, with such facilities being 2.3 times more likely to report service delivery challenges (aOR = 2.3, 95% CI = 1.26–4.35, p = 0.007).

In contrast, infrastructure limitations did not show a statistically significant association with elder care delivery (aOR = 1.2, 95% CI = 0.61–2.46, p = 0.569), nor did communication issues between staff and elderly patients (aOR = 1.5, 95% CI = 0.86–2.97, p = 0.139).

Similarly, access challengess such as geographic or financial constraints were not significantly associated with service delivery outcomes (aOR = 1.4, 95% CI = 0.68–2.87, p = 0.363).

Moreover, staff resistance to change, including reluctance to adopt new care practices, was not statistically significant (aOR = 1.4, 95% CI = 0.81–2.75, p = 0.202). Lastly, cultural practices were not significantly associated with challengess to elder care delivery (aOR = 1.4, 95% CI = 0.71–2.97, p = 0.313), although they may still pose contextual challenges in some settings

Table 4.12: factors for healthcare services delivery to elders

Variables	Healthcare delivery to elders		cOR 95%CI	p-Value	aOR 95%CI	p-Value
	Sub-optimal	Optimal				
Shortage of resources	88(62.4%)	53(37.6%)	3.3(1.62-6.61)	0.001	2.7(1.24-6.06)	0.013
Yes	61(84.7%)	11(15.3%)	Ref			
No						
Infrastructure limit	50(65.8%)	26(34.2%)	1.3(0.72-2.37)	0.380	1.2(0.61-2.46)	0.569
Yes	103(71.5%)	41(28.5%)	Ref			
No						
Staff shortage						
Yes	49(58.3%)	35(41.7%)	2.3(1.29-4.18)	0.005	2.1(1.12-3.85)	0.021
No	104(76.5%)	32(23.5%)	Ref			
Communication issue	51(61.4%)	32(38.6%)	1.8(1.02-3.28)	0.043	1.5(0.86-2.97)	0.139
Yes	102(74.5%)	35(25.5%)	Ref			
No						
Access challengess	45(61.6%)	28(38.4%)	1.7(0.94-3.13)	0.074	1.4(0.68-2.87)	0.363
Yes	108(73.5%)	39(26.5%)	Ref			
No						
Staff resistance change	56(63.6%)	32(36.4%)	2.3(1.22-4.14)	0.009	1.4(0.81-2.75)	0.202
Yes	97(73.5%)	35(26.5%)	Ref			
No						
Poor care coordination	116(74.8%)	28(43.1%)	1.8(0.98-3.22)	0.058	2.3(1.26-4.35)	0.007
Yes	37(56.9%)	39(25.2%)	Ref			
No						
Cultural practice	46(61.3%)	29(38.7%)	1.8(0.99-3.19)	0.053	1.4(0.71-2.97)	0.313
Yes	107(73.8%)	38(26.2%)	Ref			
No						

Source: Field survey, 2025

CHAPTER FIVE

DISCUSSION OF THE FINDINGS

5.1 Introduction

This chapter presents the findings based on the specific objectives of the study. The study specifically explores the systemic and operational challengess that hinder effective elder care, including resource limitations, staffing shortages, infrastructure inadequacies, and coordination issues. It also examines enabling factors such as leadership support, staff training, and use of available technologies, evidence-based decision-making, and the implementation of effective policies. Together, these elements offer a comprehensive understanding of the conditions that either support or impede the provision of optimal healthcare services to the elderly in this context.

5.2 Status of health care services delivery to elders

The findings of this study revealed that the majority (69.5%) of healthcare providers reported that sub-optimal healthcare services were being delivered to elders at the upgraded health center in Songea Municipal, Tanzania. This indicates a considerable gap in the quality of elder care and suggests that several systemic and operational challengess hinder effective service delivery to this vulnerable population group. The high proportion of reported sub-optimal care highlights the pressing need to address critical enables and challengess, such as resource availability, staffing adequacy, infrastructure support, and organizational coordination, in order to improve healthcare outcomes for the elderly.

This result underscores the importance of strengthening healthcare systems with a focus on elder care, particularly in rapidly aging communities where demand for geriatric services continues to rise. The reported challenges imply that, unless these issues are addressed, elderly patients may continue to face delays, inadequate attention, and compromised health outcomes. Investing in targeted interventions such as workforce training in geriatric care, ensuring steady supply chains for medical equipment and drugs, and improving interdepartmental coordination could collectively enhance the delivery of quality services to older adults.

Similar findings have been reported in studies from other sub-Saharan African settings. For instance, a study conducted by Mudege et al. (2021) in Malawi reported that insufficient staffing and lack of training in geriatric healthcare significantly limited the quality of elder services in public facilities. Likewise, research by Musyoka et al. (2019) in Kenya highlighted the impact of poor infrastructure and coordination gaps on service efficiency for elderly populations. These studies support the current findings and emphasize the importance of integrated, well-supported health systems to ensure equitable and quality healthcare delivery for aging populations.

5.3 Factors for contribute to effective health care services delivery to elderly

The findings of this study revealed that leadership support was significantly associated with the delivery of optimal healthcare services for elders attending the upgraded health center in Songea Municipal, with an effect size of up to 1.0. This indicates that when healthcare providers receive strong leadership support, the quality of care for elderly patients is substantially enhanced. These findings are consistent with those reported by Mwangosi and Mwangu (2016), who found that leadership involvement and commitment played a critical role in improving healthcare service delivery in primary health facilities in Tanzania. Similarly, a study conducted in Kenya by Mutale et al. (2013) highlighted that effective leadership and supportive supervision significantly improved health workers' performance and patient outcomes in rural health settings. However, the findings contrast with a study done in Ethiopia by Assefa et al. (2020), where leadership support was not found to be a significant predictor of healthcare quality in elderly care units. This inconsistency could be attributed to variations in administrative structures, leadership capacity, or even contextual challenges such as resource availability and policy implementation across regions. These comparisons suggest that while leadership support is generally crucial, its impact may vary depending on the local health system context, culture of accountability, and the degree of decentralization in healthcare management.

The findings of this study revealed that trained healthcare providers were 3.5 times more likely to deliver optimal care to elderly patients compared to those who had not received any formal training. This result aligns with a study conducted by Mbirimtengerenji et al. (2020) in Malawi, which reported that healthcare workers with

geriatric-specific training demonstrated significantly better care practices and patient outcomes among the elderly population. Similarly, a study by Mohammed et al. (2021) in Egypt found that training interventions improved both the knowledge and attitudes of nurses towards elderly care, contributing to more effective service delivery.

However, this finding differs from the results of a study conducted in rural India by Patel and Singh (2018), which found no significant association between training and the quality of elder care. This inconsistency may be attributed to differences in training content, the healthcare infrastructure, or contextual challenges such as staffing levels and workload. The discrepancy suggests that while training is generally beneficial, its impact might be influenced by broader systemic factors, including the availability of supportive supervision, institutional policies, or resource allocation within healthcare facilities.

The finding of this study revealed that upgraded health centers with effective policies were 2.7 times more likely to improve the delivery of elder healthcare services. This outcome aligns with a study conducted by Mwanyangala et al. (2010) in rural Tanzania, which found that healthcare facilities with better infrastructure and clear service delivery protocols significantly enhanced access and quality of care for older adults. Similarly, research in Uganda by Kyobutungi et al. (2017) supported the association between policy-driven facility improvements and better geriatric care outcomes.

However, the findings of this study are inconsistent with a study done in Ethiopia by Tadele et al. (2021), which found that physical facility upgrades alone did not lead to significant improvements in elder healthcare services unless accompanied by continuous staff training and community-based outreach. This discrepancy could be attributed to differences in healthcare system structure, the level of policy enforcement, or resource availability.

It suggests that while facility upgrades and policies are critical, their effectiveness may depend on how comprehensively they are implemented and supported at the operational level.

5.4 Resources, infrastructure, technology and institutions on quality of healthcare services delivery to elders

The findings revealed that upgraded health centers with resource shortages were 2.7 times more likely to face service delivery challenges compared to those with adequate resources. These findings are consistent with a study conducted by Mubyazi et al. (2014) in Tanzania, which highlighted that insufficient medical supplies and staff were key challengess to effective healthcare delivery in upgraded health facilities. Similarly, a study by Kiwanuka et al. (2008) in Uganda reported that lack of essential resources significantly hindered the performance of healthcare workers and compromised service delivery outcomes.

However, our results contrast with findings from a study in Rwanda by Musafili et al. (2017), which showed that even in the presence of limited resources, strong leadership and community engagement contributed to better service delivery outcomes. This discrepancy may indicate that resource availability alone may not fully explain service delivery challenges, and other factors such as facility management practices, staff motivation, or community involvement might also play critical roles in determining the quality of healthcare services in upgraded health centers.

Staff shortages were found to be a significant challenges to the provision of optimal care, with facilities experiencing such shortages being 2.1 times more likely to deliver suboptimal care to elderly patients. This finding aligns with a study conducted by Mangesho et al. (2020) in rural Tanzania, which reported that inadequate staffing significantly compromised the quality of healthcare services delivered to elderly populations. Similarly, a study conducted in Kenya by Wambua et al. (2018) also identified human resource constraints as a major limitation in the effective delivery of geriatric care, particularly in public health facilities.

However, the findings of this study contrast with those reported in a study conducted in Sweden by Andersson et al. (2017), where staff shortages were not found to significantly affect the quality of elderly care. The discrepancy may be attributed to differences in healthcare systems, resource allocation, and staffing norms. In high-income countries like Sweden, mechanisms such as structured task delegation, digital health support, and advanced elderly care protocols may mitigate the impact of staff shortages. In contrast, in low- and middle-income countries like Tanzania, limited healthcare budgets, insufficient training opportunities, and high patient-to-staff ratios may exacerbate the impact of staff shortages on service quality. These contextual differences highlight the need for localized strategies to address healthcare workforce challenges in elderly care provision

The study revealed that poor care coordination across service units was a strong and significant challenges to elder care, with facilities experiencing such challenges being 2.3 times more likely to report difficulties in service delivery. This finding aligns with a study conducted by Toles et al. (2012), which found that fragmentation in healthcare systems and lack of communication between care providers significantly hindered the delivery of effective services to older adults in long-term care settings. Similarly, a study in India by Sharma et al. (2018) identified inadequate referral systems and poor interdepartmental collaboration as key contributors to delays and gaps in elder care services. However, the current finding contrasts with research conducted in Sweden (Karlsson et al., 2020), where integrated care models and coordinated service pathways were reported to improve service delivery outcomes for elderly patients. This inconsistency may reflect differences in health system infrastructure, policy implementation, or resource allocation between countries. It also suggests that the presence or absence of structured care coordination mechanisms could significantly influence the quality of elder care across diverse healthcare settings.

CHAPTER SIX

SUMMARY, CONCLUSIONS AND RECOMMENDATIONS

6.1 Chapter Overview

This chapter provides a summary of the study's findings, conclusions, and recommendations based on the study's specific research objectives, policy implications, and areas for future research.

6.2 Summary of Findings

The study gathered comprehensive insights from healthcare providers at an upgraded health center in Songea Municipal, Tanzania, to evaluate the quality of healthcare services provided to elderly patients. The findings revealed that a majority of healthcare providers perceived the care delivered to elders as sub-optimal, pointing to notable challenges in meeting the healthcare needs of this vulnerable population.

Several key enablers were identified as supporting the delivery of optimal elder care. Leadership support played a vital role in strengthening service delivery, with facilities that had active and supportive management structures demonstrating improved outcomes. Trained healthcare providers were also more likely to deliver better care to elderly patients, emphasizing the importance of capacity building and continuous professional development. Furthermore, the presence of clear and effective healthcare policies at upgraded centers contributed to improved service organization and delivery, facilitating more responsive and coordinated care for older adults.

On the other hand, the study highlighted critical challengess to effective elder care. Facilities facing shortages in essential resources, such as medical supplies and infrastructure, experienced more difficulties in providing quality services. Staff shortages were also reported as a significant limitation, affecting both the continuity and quality of care. Additionally, poor coordination between different service units within the facility was identified as a strong obstacle, leading to fragmented and inefficient care delivery.

6.3 Conclusions

In conclusion, the study highlights that healthcare services delivered to elders at the upgraded health center in Songea Municipal are generally sub-optimal. Key enables for improving service delivery include strong leadership support, the presence of trained healthcare providers, and effective health policies. On the other hand, challengess such as resource and staff shortages, along with poor coordination across service units, significantly hinder the quality of elder care. These findings emphasize the need for targeted strategies that strengthen leadership, build healthcare workforce capacity, ensure resource availability, and improve coordination within health facilities. Addressing these factors is essential to enhance the quality of care for the elderly and promote their overall well-being.

6.4 Recommendations of the Study

Based on the study findings, the following recommendations are proposed to improve the delivery of healthcare services to elders at upgraded health centers.

First, there is a need to strengthen leadership support within health facilities. This includes empowering facility leaders with training and resources to ensure effective oversight, accountability, and responsiveness to the specific needs of elderly patients.

Second, the study recommends continuous professional development and training for healthcare providers to equip them with geriatric care knowledge and skills. This will help enhance the quality of care and ensure that healthcare workers are competent and confident in addressing the complex needs of the aging population.

Third, effective policies and standard operating procedures tailored to elder care should be developed, disseminated, and implemented consistently across health centers. These policies should guide service delivery and help streamline care processes for elderly patients. Fourth, there is a critical need to address resource and staffing shortages by allocating adequate financial and human resources to elder care services. This may involve recruiting more healthcare personnel, improving working conditions, and ensuring the regular supply of essential medical equipment and supplies.

Fifth, the study recommends enhancing care coordination between different service units within health centers. This can be achieved by establishing clear referral pathways, promoting interdepartmental collaboration, and integrating electronic health records to support information sharing.

Finally, collaboration between government bodies, healthcare institutions, and community stakeholders should be encouraged to support sustainable interventions and foster shared responsibility in improving elder care. These integrated efforts are essential for achieving a more responsive, efficient, and elder-friendly healthcare system in Tanzania.

6.5 Policy Implication

The findings of this study have important policy implications for strengthening the delivery of healthcare services to the elderly in Tanzania.

First, policymakers should prioritize the development and implementation of leadership and governance frameworks that support effective service delivery at health facilities. Strengthening leadership at the facility level can foster accountability, ensure proper allocation of resources, and promote a culture of continuous improvement in elder care services.

Second, health policies should emphasize the need for regular and comprehensive training programs tailored to geriatric care. Investing in the capacity-building of healthcare providers will enhance their ability to deliver quality and age-appropriate services. The Ministry of Health and other stakeholders should consider establishing partnerships with academic institutions and development partners to design and implement standardized training modules on elder care.

Third, there is a need for policies that ensure adequate staffing and equitable distribution of healthcare personnel across facilities, especially in upgraded health centers. Addressing staff shortages is essential for reducing burnout and ensuring consistent and quality service delivery to elderly patients.

Lastly, healthcare systems should adopt integrated service delivery models that promote collaboration and coordination across different departments and levels of care. Developing a referral system and shared care plans for elderly patients can improve care continuity and outcomes. These policy measures are vital for building a resilient and inclusive health system capable of responding effectively to the growing needs of the elderly population in Tanzania.

6.6 Limitation and area for further research

6.6.1 Limitations:

This study was limited to one upgraded health center in Songea Municipal, which may restrict the generalizability of the findings to other regions or healthcare settings in Tanzania. The use of self-reported data from healthcare providers may have introduced reporting bias, as responses could be influenced by personal perceptions or the desire to present their work environment favourably. Moreover, it focuses solely on Songea Municipal upgraded health centers, which may limit the applicability of the results to other healthcare facilities in Tanzania or beyond. The use of perceived quality of healthcare services introduces an element of subjectivity, as respondents' views may differ based on their individual experiences and expectations. The study's timeframe is another limitation, as it does not account for seasonal fluctuations or long-term changes in healthcare services. Finally, the findings are drawn from a specific group of elders who attended the hospital during the study period, potentially leaving out perspectives from those who sought care elsewhere or did not seek healthcare at all

6.6.2 Areas for further research

Future research should expand to include multiple health centers across different regions to allow for comparative analysis and broader applicability of findings. It would also be valuable to incorporate the voices of elderly patients and caregivers to gain deeper insights into their experiences and expectations regarding healthcare services. Further studies could explore the long-term impact of interventions aimed at improving leadership, staff training, and care coordination, as well as investigate how

community-based approaches and digital health innovations could support the delivery of elder care in low-resource settings.

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APPENDICES

***Appendix* 1**

Questionnaire for Healthcare Providers at Upgraded Health Centers in Songea Municipal.

SECTION A: Demographic characteristics

i. What is your age?

1. Below 25 years
2. 25–34 years
3. 35–44 years
4. 45–54 years
5. 55 years and above

ii. What is your gender?

1. Male
2. Female

iii. What is your highest level of education?

1. Certificate in Health-related Field
2. Diploma in Health-related Field
3. Bachelor's Degree in Health-related Field
4. Master's Degree or Higher

iv. What is your professional designation?

1. Medical Doctor
2. Clinical Officer
3. Nurse
4. Laboratory Technician
5. Pharmacist
6. Other (please specify) _____

v. How many years have you been working in the healthcare sector?

1. Less than 1 year
2. 1–5 years
3. 6–10 years
4. More than 10 years

vi. How long have you been working at this upgraded health center?

1. Less than 1 year
2. 1–3 years
3. 4–6 years
4. More than 6 years

vii. What is your employment status?

1. Permanent
2. Contract-based
3. Part-time
4. Volunteer/internship

viii. What is your main area of work within the health center?

1. Outpatient Department
2. Inpatient Ward
3. Maternity Ward
4. Emergency Unit
5. Laboratory/Pharmacy
6. Administration

ix. Have you received any specialized training on elderly healthcare?

1. Yes
2. No

x. On average, how many elderly patients do you attend to per day?

1. Less than 5
2. 5–10
3. 11–15
4. More than 15

Section B: Enablers of Healthcare Delivery to Elders

xi. How would you rate the level of leadership support in your facility regarding elder care services?
    a) Very supportive
    b) Somewhat supportive
    c) Neutral
    d) Not supportive

xii. Do you consider the workforce in your facility to be adequately trained to handle geriatric care?
    a) Strongly agree
    b) Agree
    c) Disagree
    d) Strongly disagree

xiii. Are there sufficient resources (funds, equipment, space) to effectively provide services to elderly patients?
    a) Always sufficient
    b) Often sufficient
    c) Rarely sufficient
    d) Never sufficient

xiv. How effective are existing policies and regulations in supporting elderly healthcare services in your facility?
    a) Very effective
    b) Moderately effective
    c) Slightly effective
    d) Not effective

xv. To what extent is the community involved in planning and implementing healthcare services for elders?
    a) Highly involved
    b) Moderately involved
    c) Slightly involved
    d) Not involved

xvi. Does your health facility utilize technology (e.g., electronic records, telemedicine) to improve elder care services?

a) Extensively
b) Moderately
c) Minimally
d) Not at all

xvii. How frequently is research or evidence-based practice used in decision-making related to elder care?

a) Always
b) Often
c) Rarely
d) Never

Section C: Barriers to Healthcare Delivery to Elders

xviii. How often do resource constraints (e.g., drugs, equipment) affect the delivery of elder care services in your facility?

1. Very often
2. Sometimes
3. Rarely
4. Never

xix. Do infrastructure challenges (e.g., buildings, transport, equipment) limit service delivery to elders?

1. Strongly agree
2. Agree
3. Disagree
4. Strongly disagree

xx. Is staff shortage a major issue affecting the quality of care provided to elders in your facility?

1. Yes, significantly
2. Yes, moderately
3. No, only slightly
4. Not at all

xxi. How frequently do communication challenges affect patient-provider interactions with elders?

1. Very frequently
2. Occasionally
3. Rarely
4. Never

xxii. Do geographic or financial access issues prevent elders from receiving timely care in your catchment area?

1. Always
2. Often
3. Sometimes
4. Never

xxiii. To what extent do social factors like poverty, education, and housing impact elder care delivery?

1. To a great extent
2. Moderate extent
3. Small extent
4. Not at all

xxiv. How would you rate the coordination between different units or agencies involved in elder care?

1. Excellent coordination
2. Good coordination
3. Poor coordination
4. No coordination

xxv. Is there resistance among staff to adopt new technology or approaches in elder care?

1. Very high resistance
2. Moderate resistance
3. Low resistance
4. No resistance

xxvi. Do cultural or language differences create challenges when delivering care to elderly patients?

1. Very frequently
2. Sometimes
3. Rarely
4. Never

SECTION FOUR: DELIVERY OF HEALTHCARE SERVICES FOR ELDERS.

Assessment of delivery of healthcare services based on the SERVQUAL model, for self-evaluation of delivery of services to elderly at the upgraded health facilities in Songea, Tanzania:

TANGIBLES	**RESPONSE**
How would you rate the current condition of the physical environment (cleanliness, lighting, space) of your health facility?	A. Excellent and suitable for elder care B. Good, with minor improvements needed C. Poor, needs significant upgrades D. Not sure
Are the medical equipment and tools at your disposal adequate for providing quality care to elderly patients?	A. Always adequate and functional B. Adequate but sometimes non-functional C. Frequently inadequate or unavailable D. Not applicable
RELIABILITY	**RESPONSE**
How consistent are you in providing care according to schedules and promised timeframes for elderly patients?	A. Always consistent and on time B. Sometimes consistent, with minor delays C. Often inconsistent with frequent delays D. Rarely follow scheduled timelines
How often do you follow up with elderly patients to ensure continuity of care?	a. Always follow up regularly B. Occasionally, depending on the case C. Rarely due to workload or system issues D. I do not follow up
RESPONSIVENESS	**RESPONSE**
How do you respond to the urgent needs of elderly patients?	A. Immediately and with full attention B. After attending to other scheduled patients C. Response depends on staff availability D. I refer emergencies to other units
How would you rate your ability to provide timely service during peak hours or high patient load?	A. Very responsive, even under pressure B. Moderately responsive C. Often delayed due to workload D. Poor responsiveness

ASSURANCE	**RESPONSE**
How confident are you in your current knowledge and skills in managing elderly patients' health conditions?	A. Very confident – well-trained and updated B. Somewhat confident – need more training C. Not confident – lack relevant training D. Not applicable
Do you believe you instill trust and confidence in elderly patients through your communication and behavior?	A. Yes, consistently B. Sometimes C. Rarely D. I'm not sure
EMPATHY	**RESPONSE**
How well do you understand and address the specific emotional and social needs of elderly patients?	A. Very well – I take time to listen and understand B. Fairly well – depending on the situation C. Poorly – due to time or resource constraints D. I don't focus on those aspects
Do you make efforts to personalize care based on the unique needs of each elderly patient?	A. Always – I provide individualized care B. Sometimes – based on workload C. Rarely – one-size-fits-all approach D. Not applicable

***Appendix* 2**

Interviewing guide on quality of healthcare services delivered to elders at the upgraded health centers

Interview Guide: Quality of Healthcare Services Received by Elders at Upgraded Health Centers

Section A: Background Information

1. Can you please tell me your age?
2. How long have you been receiving healthcare services at this facility?
3. How often do you visit this health center for care?

Section B: Access to Healthcare Services

4. How easy or difficult is it for you to access the health center when you need care?
5. Are there any delays when seeking services at this facility?
6. How long do you usually wait before receiving care after arrival?

Section C: Service Quality and Experience

7. How would you describe the attitude of healthcare providers toward elderly patients?
8. Do healthcare workers explain your health condition and treatment in a way you understand?
9. How satisfied are you with the care you receive at this facility?
10. Have you ever been treated unfairly because of your age? If yes, can you share your experience?

Section D: Availability of Resources

11. Are the medicines you need usually available at this facility?
12. Are there enough healthcare staff to attend to patients here?
13. Do you ever experience being turned away or asked to come another day due to lack of staff or medicine?

Section E: Elder-Specific Services

14. Are there any services or arrangements specifically for older people (e.g., elder queues, chronic care support)?

15. Do you feel that your specific needs as an older person are understood and addressed here?

Section F: Challenges and Suggestions

16. What challenges have you experienced when seeking care at this facility?

17. What improvements would you like to see to make healthcare services better for elders?

***Appendix* 3**

Research Letter Permits

UNITED REPUBLIC OF TANZANIA
MINISTRY OF EDUCATION, SCIENCE AND TECHNOLOGY

MZUMBE UNIVERSITY
OFFICE OF THE DEPUTY VICE CHANCELLOR (ARC)

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MOROGORO, TANZANIA

In replying please quote:

Ref. No. MU/DPGS/INT/38/Vol. IV/171 **Date**: 18th March, 2025

Regional Administartive Secretariate (RAS),
P.O.BOX 1
SONGEA

RE: INTRODUCTION OF MS VICTORIA PANCRAS MTEGA

Refer to the heading captioned above

2. The bearer of this letter **Ms. Victoria P Mtega** whose registration number is 18417045/T.23 is a postgraduate student at our University (Mzumbe University) pursuing **Master of Research and Public Policy (MRPP).** As part of requirements for completion of her studies, she is collecting data on: **"HEALTHCARE SERVICES DELIVERY TO ELDERS IN TANZANIA: ANALYSIS OF CHALLENGES AND ENABLES IN SONGEA MUNICIPAL, TANZANIA."** She intends to collect data at Mjimwema hospital from 25th March up to 30th May 2025

3. This letter serves to achieve three purposes. Firstly, to introduce her to you. Secondly, to request you to grant her permission to undertake data collection at your jurisdiction, and thirdly to request you to facilitate any form of assistance she might need in order to successfully pursue this noble exercise at your jurisdiction. We can assure you that this activity is entirely for academic purpose and will never be used for any other purposes.

4. We trust that you will accord our student with necessary assistance.

5. Sincerely yours,

Dr. Juma Buhimila (PhD)
FOR DEPUTY VICE CHANCELLOR (Academic Research and Consultancy)

JAMHURI YA MUUNGANO WA TANZANIA
Ofisi ya Rais
Tawala za Mikoa na Serikali za Mitaa

HALMASHAURI YA MANISPAA YA SONGEA
(Barua zote ziandikwe kwa Mkurugenzi wa Manispaa)

Unapojibu tafadhali taja:
Kumb.Na. SO/MC/T.30/20/IV/115 24/03/2025

Mkuu wa Idara ya Afya,Ustawi wa Jamii na Lishe,
Halmashauri ya Manispaa ya Songea.

YAH: KUMTAMBULISHA MWANAFUNZI VICTORIA PANCRAS MTEGA KWA AJILI YA KIBALI CHA KUFANYA UTAFITI NA KUKUSANYA TAKWIMU KATIKA MADA INAYOHUSU;"HEARTH CARE SERVICES DELIVERY TO ELDERS IN TANZANIA; ANALYSIS OF CHALLENGES AND ENABLES IN SONGEA MUNICIPAL,TANZANIA"

Tafadhali rejea somo tajwa hapo juu.

2. Ofisi ya Mkurugenzi wa Manispaa ya Songea imepokea barua kutoka kwa Katibu Tawala Wilaya ya Songea inayomtambulisha Bli. **VICTORIA PANCRAS MTEGA. REG NO. 18417045/T.23** Mwanafunzi kutoka **Chuo Kikuu cha Mzumbe** ambaye anaomba nafasi ya kufanya utafiti na kukusanya Takwimu kuhusiana na mada tajwa hapo juu. Hivyo ofisi imekubali ombi la Mwanafunzi huyo kufanya utafiti na kukusanya Takwimu katika Halmashauri ya Manispaa ya Songea katika Vituo vya Afya vya **SUBIRA,LILAMBO,RUVUMA** na **MSAMALA**

3. Unaombwa kutoa ushirikiano ili kukamilisha utafiti huu.

4. Nakutakia utekelezaji mwema.

K.N.Y MKURUGENZI MANISPAA
SONGEA

Bakari A.Kawina
KNY: MKURUGENZI WA MANISPAA
SONGEA

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