Quality of life, health and social needs of slum-dwelling older adults in Ghana

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The research presented in this thesis was conducted at CAPHRI Care and Public Health Research Institute, Department Health Services Research of Maastricht University. CAPHRI participates in the Netherlands School of Public Health and Care Research, CaRe.

Printing: RIDDERPRINT

ISBN: 978-94-6483-294-5

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Dissertation

To obtain the degree of Doctor at Maastricht University,
on the authority of the Rector Magnificus,
Prof. dr. Pamela Habibović
in accordance with the decision of the Board of Deans,
to be defended in public
on Monday 4th of December 2023 at 16.00 hours

by

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Dedicated to a friend and father the late Apostle Sammy Akuamoah Boateng and all older adults in Ghana.

Contents

1

General Introduction

Global Ageing

Globally, the older adult population is increasing because of various health promotion activities such as research and education about healthy lifestyles and technological advancements in health services [1,2]. In addition, there is a global decline in fertility. Global statistics indicate that almost 1 in 10 people worldwide are over 60 years and that this will be 1 in 5 people by 2050 [3]. The ageing global population comes with an important health and sociodemographic problem. Projections show that this number will rise to nearly 4 out of 5 in developing countries by 2050 [4]. When looking at the different continents, Africa is currently having the smallest number of older adults. However, it is estimated that the number will increase from 60 million at this moment to 105 million by 2030. This increase is also due to the progressive improvement in public health activities such as health education on sanitation and hygiene and others [5].

Ageing and health care services in Ghana

Ghana is a developing country in sub-Saharan Africa with high poverty levels, high debt rates, and basic and under-developed healthcare services. However, the country is categorized as a developing country with an emerging economy, as educational levels are gradually improving, and rapid urbanization is taking place [6]. According to the Ghana Statistical Service [7], Ghana has a total population of 26 million; of these, 1.6 million are aged 60 years and above. The life expectancy in Ghana is 63 years, and 29% of the older adult population is within 60-64 years while 9.6% are 85 years and above. Ageing is associated with changes in the body system, multimorbidity, frailty and declining mobility. Therefore, many older adults need health care services in various forms. Ghana has three levels of health care services: primary, secondary, and tertiary. The primary level consists of community care services, including Community Health Planning and Services (CHPS) zones, healthcare centres, and polyclinics. Older adults receive first aid and treatment of minor ailments at the primary level. Community care nurses are working on the primary care level and are expected to carry out special visits to older adults as part of their job description. The second level of care consists of regional and district hospitals where people can receive (basic) acute medical care services. Lastly, the tertiary level of care consists of specialized medical care and is provided in teaching hospitals. They

are called teaching hospitals because many health professionals gain practical skills in these hospitals. Older adults in the slums, usually access care at the primary level when needed. Nursing homes are absent in Ghana, because of the cultural perception that family members are responsible for the care of their older relatives. Nonetheless, in recent times, day-care centres have been set up in some urban areas by non-governmental organizations. These day-care centres provide free activities such as medical screening, indoor games and health education for older adults supported by social workers, nurses, and other volunteers. In Ghana, there are no trained geriatricians or geriatric nurses in the country. Therefore, general physicians, nurses, and community or public health nurses care for older adults in the communities and the health facilities.

Health care services are financed by either the national health insurance scheme (NHIS), private insurance schemes and/or fee-for-service payments. To benefit from the insurance schemes, you must be registered. The NHIS is the cheapest of the options, but renewal remains a problem for some Ghanaians hence, limiting access to healthcare. Individuals or companies also register their staff on private insurance which though quite expensive offers categories of services (Premium, Gold, Silver) per the option registered.

Urbanisation and Slums in Ghana

As most jobs in Ghana are found in the larger cities, many people migrate to the urban areas in search of jobs to improve their living conditions. If many people move to urban areas, more living arrangements, and basic services (such as water, drainage systems, toilet facilities and electricity) are needed in these areas. However, as in many developing countries, the national government is unable to provide these arrangements due to their economic circumstances, and neither do most families living in urban areas in Ghana. Consequently, people who migrate to urban areas resort to building makeshift houses with non-durable materials on illegally occupied land. The result is the development of slums and squatter settlements.

The UN-HABITAT [8] defines a slum household as a group of persons in an urban area staying under one roof, who do not have one or more of the following: 1) a housing structure that is durable and protects against severe weather conditions; 2) enough space in a room implying that no more than three people should share a room; 3) affordable and easy access to safe

water whenever needed; 4) easily available toilet facilities either private or public; and 5) fear of forced eviction because the accommodation is not owned (either rented or owned by the occupant). It is worth noting that slums are not all standardized nor do they suffer the same level of deprivation [8-10]. More than 80% of slums in sub-Saharan Africa lack at least one or two of the characteristics stated in the UN-HABITAT's definition of a slum [11]. Additionally, almost 50% suffer from at least two housing deficiencies which are usually "affordable and easy access to safe water whenever needed" and/or "easy availability of toilet facilities, either private or public". The WHO [12] states that worldwide, an estimated 33% of people living in urban areas (which is close to one billion people), live in slums and informal settlements, and it requires "urgent action to address their needs". Ghana has 23 slums, of which the majority (n=11) are situated in the capital city (Accra). Others are mostly located in the major industrial cities (Kumasi, Takoradi and Tema) in the Southern part of the country. World Bank statistics indicate that 30% of people in urban areas of Ghana live in slums [13].

Ageing in slums

Because of an increasing life expectancy, the population of older adults in slums is also increasing. However, slums are not the most suitable place for older people. Slums lack basic amenities such as proper disposal, solid waste disposal, water, and legal access to electricity [14-16]. Poor and uneven road networks limit the mobility of older adults in the slums. Additionally, older adults are faced with poor housing conditions, noise pollution, and air pollution which can affect their health. Therefore, although life expectancy in slums also increases, it is likely that these additional years will not be experienced as being of good quality. Consequently, it is expected that older adults living in slums have a lower quality of life, compared to older adults not living in slums.

Quality of Life

The World Health Organization [17] defines Quality of Life (QoL) as "an individual's perception of their position in life in the context of the culture and value systems in which they live and concerning their goals, expectations, standards, and concerns. It is a broad-ranging

concept, affected in a complex way by the person's physical health, psychological state, level of independence, social relationships, and their relationships to salient features of their environment". In recent times, many definitions and summaries have been given on what QoL is [18]. QoL is therefore a broad concept integrating all factors that influence an individual's life. Various instruments have been developed to assess QoL. A distinction can be made between instruments measuring either the generic QoL and instruments assessing health-related or disease-specific QoL. Generic quality of life is usually measured among healthy populations and not targeted at people with a specific disease condition. Examples of instruments for assessing the generic quality of life are the World Health Organization Quality of Life Assessment (WHOQOL), Assessment of Quality of Life (AQoL-4D), and Control, Autonomy, Self-realization, and Pleasure (CASP-16). Some instruments such as the Medical Outcomes Study Short-Form 36 (MOS SF-36), 12-Item Short-Form Health Survey (SF-12), and WHOQOL also measure health-related QoL (HRQoL) as they generally contain questions in domains and are designed to assess specific problems that influence health and general well-being. Health-related QoL refers to QoL being assessed among a particular clinical population. Examples of disease-specific instruments include the Asthma Quality-of-Life Questionnaire (AQLQ-M), the Caregiver Quality of Life Index-Cancer Korean version (CQoLC-K), and the Dermatology Life Quality Index (DLQI) which are used in populations with the targeted disease.

The concept of QoL has been researched and measured among various populations in different settings, such as among those with a known medical condition (health-related QoL) in different countries [19-21], among people without a medical condition (general QoL) [22-24], among younger people [25,26], and among rural and urban populations [27,28]. Many studies focus on the QoL of older adults [29-31]. The reason for this is that older adults are regarded as a vulnerable population [13, 32,33], with an affected or reduced quality of life. Before intervening in, and improving their QoL, it is important to first get insight into their QoL and into the domains that are affected [20, 34-36]. Measuring QoL gives care providers, researchers, and policymakers guidance on developing interventions to improve QoL in specific domains. However, again, most studies focusing on QoL among older adults, have been performed in developed countries [29-31, 22, 23, 25].

QoL of older adults living in Ghanian slums

In the sub-Saharan region of Africa, only a few studies have been conducted on the quality of life of older adults [37,38] but rarely on slum-dwelling older adults. When looking at the different domains in most QoL instruments (such as psychological domain, physical domain, social relationships, environmental domain, and autonomy) it is expected that living in a slum has a detrimental impact on QoL. Psychologically, not having a secure house and living in fear of eviction can negatively influence an individual's quality of life. Physically, musculoskeletal impairments, cardiovascular problems, and poor vision may hinder the mobility of some older adults in the slums. As slums are characterized by inaccessible roads and unsuitable public transport, this also limits access to healthcare facilities. The same is the case for the social domain: the previously mentioned challenges in slums could limit access to friends and family, negatively impacting the social quality of life. Lastly, pollution and bad sanitation may have a large impact on the environmental domain.

However, there is a dearth of research on the QoL of older slum-dwellers in Africa. One study among older slum-dwelling adults in Nigeria looked at the functional limitations of the older adults [39] and another study compared the QoL of older adults in two contrasting neighbourhoods (one slum and a non-slum) in Accra [40]. Results from Gyasi et al., [39] showed older adults experience functional impairments with marked age and gender variations. Alaazi, et.al., [40] confirmed better housing and neighbourhood environmental conditions in the non-slum contributed to better QoL in this group. These studies show that more needs to be done to accomplish the 2030 Agenda for Sustainable Development which states that "no one will be left behind".

The QoL of older adults in slums in Ghana has not been studied and this is necessary to help this population age in place well. With the rapid increase in the older adult population, most countries in sub-Saharan Africa, including Ghana are ill-prepared to meet the needs of their older population, especially those living in slums. Therefore, it is necessary to outline steps to assess and improve the QoL of the slum-dwelling older adult population.

Health and social care access in Ghanian Slums

Good health is a vital component of one's overall QoL [21,23,25, 28] and improving access to health services may enhance the quality of life of individuals living in slums. As described

earlier, special focus is needed for slum-dwelling older adults due to their increasing need for support in self-care, mobility, healthcare, and social participation in combination with their bad living circumstances [41,42]. Access to health and social care services, such as health promotion, disease prevention, rehabilitation and primary care in Ghanaian slums is inadequate or absent. Evidence suggests that these barriers could highly influence the QoL of these older slum-dwellers [43]. Access to suitable health care services for older slum-dwelling adults is hindered by different factors: first, the earlier described physical access due to bad infrastructure and lack of services in the neighbourhood. Second, is the lack of access due to monetary constraints of slum-dwelling older adults. Thirdly, various health care services for the aged, such as nursing homes, are unavailable. Lastly, healthcare services for older adults must be provided by professionals with the requisite skills and understanding of who an older adult is and what peculiar needs they have. Earlier studies recommend the training of health professionals to be geriatric specialists [44-46]. However, in Ghana, the geriatric speciality is almost absent. Only recently, the Ghana Medical and Dental Council started offering geriatric specialities for medical doctors.

Older adults usually encounter general health professionals, community health nurses and social workers, either at the health facility or in the community. However, it is unknown if these professionals are aware of the health and social care needs of slum-dwelling older adults, and how they treat these. Therefore, seeking the views of health professionals and social workers on the health and social needs of slum-dwelling older adults and their ideas on the geriatric speciality could also provide recommendations for improving this population's health and social needs.

Objectives and Outline of the Dissertation

The main objective of this dissertation is to assess the QoL of older adults living in Ghanaian slums, including their health and social care needs from both the perspective of the slum dweller and the care professional. The results of this objective can be divided into several studies, comprising the chapters of this dissertation. Chapter 2 presents a scoping literature review focusing on the question of which tools exist to assess QoL among older adults in African countries, and which tool is most suitable for assessing the QoL of older adults in slums in sub-Saharan Africa. Chapter 3 describes the results of a cross-sectional study focusing on the QoL of older adults living in two Ghanaian slums, assessed with the WHOQOL-BREF. Using a qualitative design, chapters 4 and 5 focus on the perspective of older slum-dwellers (chapter 4) and care professionals (chapter 5) regarding the (unmet) health and social care needs of older adults living in Ghanaian slums. In Chapter 6, perceptions of student nurses on ageing and their attitude towards the care of older adults are explored. In Chapter 7, the major findings as well as implications of the studies are discussed, including a critical reflection on the methodologies employed, and provides recommendations for future research and practice.

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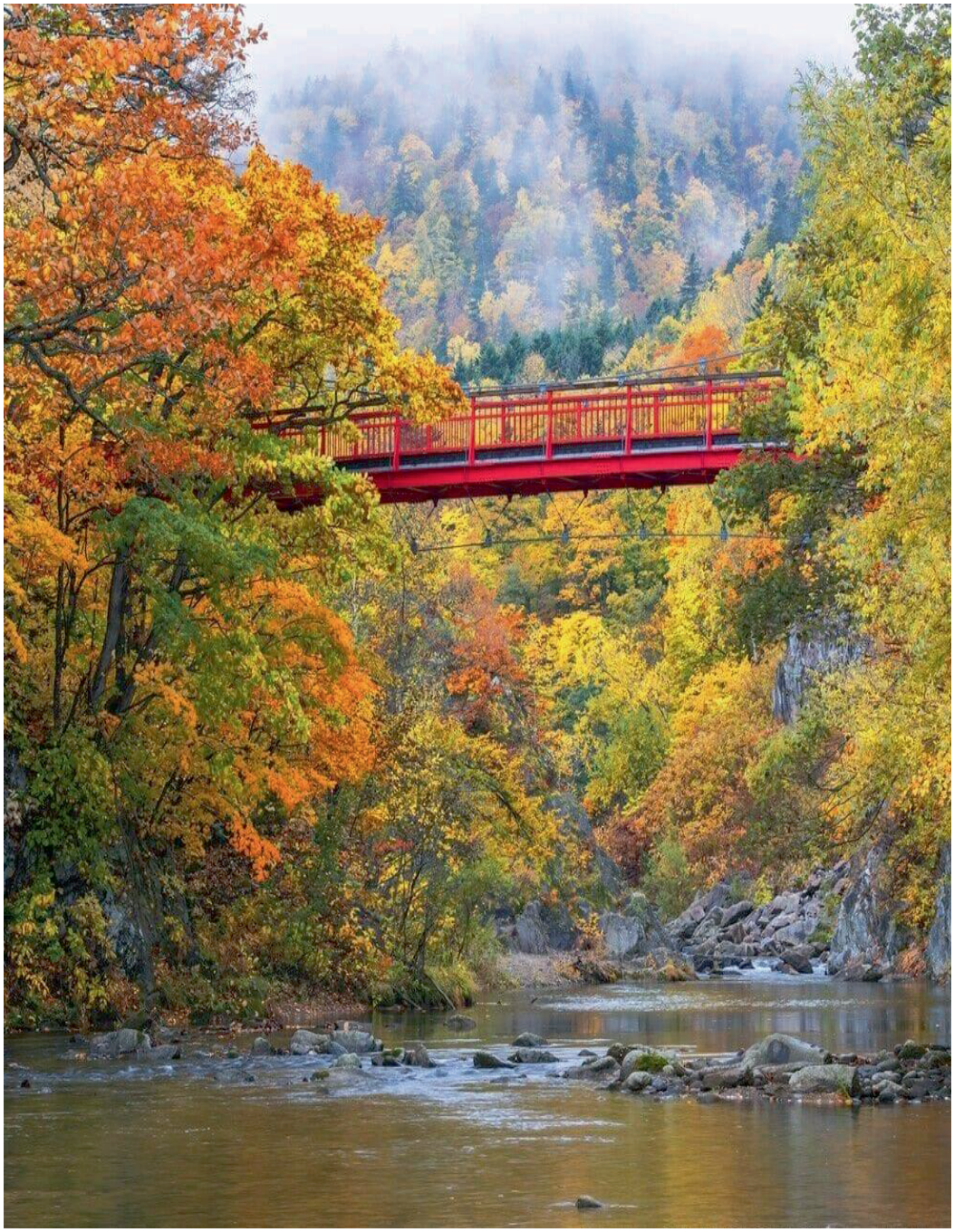

2

Instruments used to assess the quality of life of older adults in African countries: a scoping review

This chapter is published as:

Attafuah, P. Y., Everink, I. H., Halfens, R. J., Lohrmann, C., Abuosi, A., & Schols, J. M. (2021). Instruments used to assess the quality of life of older adults in African countries: a scoping review. BMC Geriatrics, 21(1), 1-11.

Abstract

Background: Over 60% of the population in sub-Saharan Africa, live in informal settlements (slums) with little or no resources. To be prepared to meet the needs of older people living in slums, it is necessary to know more about their quality of life (QoL). The objective of this review is to identify instruments, which can be used by researchers to assess the QoL of older adults living in African countries, especially those dwelling in slums.

Methods: A scoping review was performed using the databases Scopus, PubMed, and ISI Web of Science to retrieve studies published from January 2008 – September 2020. Studies were included if they reported generic QoL instruments, focused on adults with a mean age ≥ 50 and were conducted in African countries.

Results: In total, 18 studies were included using 7 unique instruments to measure QoL (EUROHIS-QOL-8, SWLS, WHOQOL-OLD, the WHOQOL-BREF, SF-36, SF-12 and RAND-38). All instruments could be interviewer-administered and had 5–36 items. However, little is known about their psychometric properties (validity and reliability), time investment and cultural sensitivity of the domains included in the instruments.

Conclusions: Even though this review retrieved instruments used to assess the QoL of older adults in African countries, there is a need for further research on the adjustment and validation of currently existing QoL instruments. In addition, the development and validation of a new instrument which can be used in (illiterate) older populations, living in slums in Africa should be considered.

Background

Evidence suggests that over 60% of the population in sub-Saharan Africa lives in informal settlements (slums) with little or no resources [1–5]. While formal settlements are usually equipped with good houses, sanitation, and services such as hospitals, marketplaces and schools, slums lack these amenities. Slum dwellers must deal with poor quality housing (such as wooden or metal structures or containers), lack of sanitation, overcrowding, extreme environmental hazards such as choked gutters, and burning and improper disposal of waste. Also, educational facilities or health care services are absent in slums [6, 7]. This causes a significant threat to both the health status and life expectancy of slum dwellers [2, 8, 9]. Also, research showed that older adults living in slums are dealing with anxiety about the poor prospects of their children, aggression, and disrespect from younger generations [4]. These factors, coupled with the high illiteracy rate, poor socioeconomic status, and high level of spirituality among the African population, can make older adults more religious as they cling to faith to survive [53]. It is common in Ghana, to seek spiritual assistance from pastors, imams, and traditionalists for most health problems rather than patronizing the hospital. The population aged 60 years and above in Africa is projected to be 10% of the total population by 2050 [10] and slums are becoming more populated with older adults. The deplorable circumstances slum dwellers must deal with are likely especially rough for them as they often deal with physical decline and a need for health and social care. To effectively develop interventions that focus on the needs of older adults, it is imperative to understand their quality of life (QoL). The WHO defines Quality of Life (QoL) as "an individual's perception of their position in life in the context of the culture and value systems in which they live and concerning their goals, expectations, standards and concerns" [11]. This wide concept encompasses one's physical health, psychological health, level of independence, social/family relationships, the quality of the living environment and personal beliefs [11]. To gain more insight into the QoL of older people living in slums, validated instruments with good psychometric properties which are culturally appropriate are needed. However, there is little to no research in QoL of the ageing population in Africa, and in slums in particular [12]. Available instruments for assessing QoL are generally developed and validated in high-income countries, which have different socio-cultural, environmental, and economic characteristics and different life standards compared to African countries. Additionally, most older adults living in slums are illiterate,

making it difficult to use QoL instruments where users must read or write. Therefore, this study aims to identify instruments which are used in African countries to assess the QoL of older adults, especially those dwelling in slums.

Methods

Study design and framework

For this study, a scoping review was performed. The first five steps described by Levac et al. on how to perform scoping reviews were followed [13]. These recommendations are outlined as follows: 1) identifying the research question; 2) identifying relevant studies; 3) study selection; 4) data extraction; 5) analysing, reporting results, and considering the implications of study findings to policy, practice, or research.

Research question

The research question guiding this scoping review is: Which instruments are available for assessing the quality of life among older adults in African countries?

Identification of relevant studies

The main literature search was conducted in May 2018 and updated in October 2020. The databases used were Scopus, PubMed, and ISI Web of Science, supplemented with a free search using Google Scholar. The database search query was composed of three search concepts: 'population' (adults 50 years+), AND 'instrument' (tools/questionnaires/measurement) AND 'context' (developing countries), AND 'outcome'(quality of life). Per the search concept, free text words were used, all separated by the Boolean operator "OR". The free words used for the population included: "frail elderly", elder*", "senior*", "older person*", "old people", "aged", "aged, 50 and over", "septuagenarian*", "nonagenarian*", "octogenarian*" and "centenarian*". The free words used for the instrument included "instrument*", "tools*", "questionnaires*" and "measurement tool*". The free words used for the context included: "developing countr*", "third-world nation*" underdeveloped countr*", "less developed nation*", "developing nation*", "Africa" and "subsahar*" The free words used for the outcome included: "Activities of Daily Living", "ADL", "quality of life", "QoL", "Health-Related Quality of Life". Hand searching and screening of references were done after the inclusion of a full text.

Study selection

Studies were included in the review if they met the following criteria:

- Research that used generic QoL instruments among non-disease-specific populations.
- Studies that use a multi-domain instrument to assess QoL, including at least the physical, psychological, and social domains.
- Research focused on populations of adults who are on average 50 years and above.
- Publications are written in English.
- Articles published since 2008 (to reflect recent research developments)
- Research conducted in African countries.

Studies using secondary data, case studies or conference abstracts were excluded, as well as studies in which the full articles were not attainable, also after contacting authors. Even though in this publication the interest was in finding QoL instruments which could be used in slum settings, research done in the slum setting was not used as an inclusion criterion. The reason for this was that imposing this restriction led to limited results. Authors PYAA and IHJE developed the literature search with the assistance of a librarian. After performing the search in the databases, all titles and abstracts were reviewed based on the inclusion and exclusion criteria. Articles which met the inclusion criteria were obtained in full text and reviewed for final eligibility by author PYAA. Author IHJE checked if she agreed with whether the final selection of articles met the inclusion criteria. The reference lists of the included articles were also hand-searched to see if any studies were missed in the initial search.

Data extraction

A data extraction sheet was developed by the authors including the following categories: authors, year of publication, the title of the article, country, study design, population (number of participants, minimum age), setting and name of the instrument used to assess QoL (Table 1). The first author PYAA conducted the data extraction. Next, the QoL instruments found were further assessed on the number of items, domains included in the instrument, reliability, validity, language of the instrument, mode of administration (interviewer administered or self-administered) and answer categories (open answers/ Likert scales / VAS scales or pictorial scales). All types of reliability reported in the included articles were considered and described in the data extraction sheet. For internal reliability, Cronbach's alpha score of > 0.70 was

considered a good score. Furthermore, all types of validity reported in the included articles were considered and described in the data extraction sheet. When the included articles did not report on the reliability or validity of the instrument used in their country and/or study population, this was described as 'ND' (Not Described).

Results

Figure 1 shows a summary of the screening and inclusion process. Databases and hand searches revealed an initial 704 records. After duplicate records (n = 22) were removed, 682 records remained. Screening of titles and abstracts of these records resulted in the exclusion of 561 records that did not meet the inclusion criteria. In total, 121 articles were retrieved for full-text assessment. After screening these full-text articles, 103 articles were excluded, as they did not meet all inclusion criteria. All reasons for exclusion can be found in Figure 1. The final number of articles included in this review was 18. In total, these studies assessed QoL using seven unique instruments. The main characteristics of the 18 studies included are shown in Table 1.

Research design

Out of the 18 studies included, nine studies (50%) used a cross-sectional design [12, 21, 23, 24, 26, 28–30] while eight studies (44%) performed a secondary data analysis of collected cross-sectional or longitudinal data [14–20, 22] and one study (6%) used a longitudinal design [27].

Participants and settings

The number of participants included in the studies varied from 80 [12] to 9341 subjects [20], with a total of 36, 919. All participants were above the age of 50. Most studies were conducted in South Africa (n = 6) [12, 14, 17, 18, 20, 24] and Nigeria (n = 5) [22, 25, 27–29], followed by Kenya (n = 2) [15, 16]. From the countries Tanzania [19], Senegal [21], Angola [23], Lesotho [26] and Tunisia [30], in each case, one study was included in this review. The community setting accounted for 14 of the included studies, two studies were performed in nursing homes or long-term care facilities [23, 24] and one study had a mix of nursing home residents and community-dwelling older adults [12]. Two of the studies [15, 16] specifically studied slum settings.

Instruments assessing QoL

In this review, 7 different instruments were found in 18 different studies (Table 1). The most often used instrument was the "EUROHIS-QOL" (n = 7). This is an eight-item instrument derived from the WHO-QOLBREF. The "Satisfaction with Life Scale" (SWLS) was used in 3 studies. The World Health Organization Quality of Life Scale-brief version" (WHOQOL-BREF), the "World Health Organization Quality of Life Scale-old version" (WHOQOL-OLD) and the Short-Form Health Survey-36 (SF-36) were all used twice. One study made use of the "Short-Form Health Survey-12 (SF-12; n = 1) and the other used the RAND-36 [12], which is equal to the SF-36 but uses a different scoring system. The two studies that included slum settings both used the EUROHIS-QOL to assess the QoL of participants [15, 16]. The instruments "EUROHIS-QOL", "WHOQOL-BREF" and "WHOQOL-OLD" are all derivatives of the WHOQOL-100".

Table 1. Characteristics of included studies

	Authors, year	Title	Country	Study design	Population, the minimum age	Setting	QoL instrument
1	Xavier Gómez-Olivé et al, 2010 [27]	Assessing health and well-being among older people in rural South Africa.	South-Africa	Secondary data analysis of WHO-SAGE study	• n= 4,085 • Age = >50 years	Community	EUROHIS-QOL-8
2	Wilunda, et al, 2015 [25]	Health and ageing in Nairobi's informal settlements- evidence from the INDEPTH: a cross-sectional study	Kenya	Secondary data analysis of WHO-SAGE and IN-DEPTH study	• n= 1,878 • Age > 50 years	Community /Slum	EUROHIS-QOL-8
3	Kyobutungi, et al, 2010 [26]	The health and well-being of older people in Nairobi's slums	Kenya	Secondary data analysis on the NUHDSS database	• n= 2,072 • Age > 50 years	Slum	EUROHIS-QOL-8
4	Xavier Gómez-Olivé et al, 2014 [23]	Social conditions and disability related to the mortality of older people in rural South Africa.	South-Africa	Secondary data analysis of WHO-SAGE study	• n= 4,047 • 75.2% female • Age > 50 years	Community	EUROHIS-QOL-8
5	Xavier Gómez-Olivé et al, 2013 [24]	Self-reported health and health care use in an ageing population in the Agincourt sub-district of rural South Africa.	South-Africa	Secondary data analysis of WHO-SAGE study	• n= 425 • 66.8% female • Age > 50 years	Community	EUROHIS-QOL-8

	Authors, year	Title	Country	Study design	Population, the minimum age	Setting	QoL instrument
6	Mwanyangala, et al, 2010 [28]	Health status and quality of life among older adults in rural Tanzania	Tanzania	Secondary data analysis of the SAGE study	• n= 5,131 • Age> 50 years	Community	EUROHIS-QOL-8
7	Ralston et al, 2019. [29]	Policy shift: South Africa's Old Age Pensions' Influence on Perceived Quality of Life	South-Africa	Secondary data analysis of the SAGE study	• n= 9,341 • Age> 50 years	Community	EUROHIS-QOL-8
8	Macia et al, 2015 [15]	Exploring Life Satisfaction Among Older Adults in Dakar.	Senegal	Cross-sectional study	• n= 500 • Age > 50 years	Community	SWLS
9	Gureje et al, 2014 [30]	Profile and determinants of successful aging in the Ibadan Study of Ageing.	Nigeria	Secondary data analysis of a longitudinal study	• n= 930 • 38.9% Female • Age > 65 years	Community	SWLS
10	Gutiérrez et al, 2013 [16]	Predicting life satisfaction of the Angolan elderly: a structural model.	Angola	Cross-sectional study	• n= 1,003 • 65.4% females • Age > 60 years	Long-term care facilities	SWLS
11	Van Biljon et al, 2015 [17]	A partial validation of the WHOQOL-OLD in a sample of older people in South Africa	South-Africa	Cross-sectional study	• n= 176 • 71.6% female • Age > 60 years	Long Term Facilities	WHOQOL-OLD

	Authors, year	Title	Country	Study design	Population, the minimum age	Setting	QoL instrument
12	Akosile et al, 2018 [32]	Depression, functional disability and quality of life among Nigerian older adults: Prevalences and relationships.	Nigeria	Cross-sectional study	• n= 206 • 56.3% female • Age > 65 years	Community	WHOQOL-OLD
13	Mugomeri et al, 2017 [19]	Quality of Life of the Elderly Receiving Old Age Pension in Lesotho.	Lesotho	Cross-sectional study	• n= 385 • Age > 70 years	Community	WHOQOL-BREF
14	Gureje et.al 2010 [31]	Determinants of quality of life of elderly Nigerians: results from the Ibadan Study of Ageing	Nigeria	Longitudinal study	• n= 2,175 • Age>65 years	Community	WHOQOL-BREF
15	Akosile et al, 2014 [18]	Fear of Falling and Quality of Life of Apparently-Healthy Elderly Individuals from a Nigerian Population	Nigeria	Cross-sectional study	• n= 261 • 49.8% female • Age > 65 years	Community	SF-36
16	Ogunyemi et al, 2018 [20]	Health-Related Quality of Life of the Elderly in Institutional Care and Non-Institutional Care in Southwestern Nigeria: A Comparative Study.	Nigeria	Cross-sectional study	• n= 360 • Age > 60 years	Community	SF-36
17	Younsi, 2015 [21]	Health-Related Quality-of-Life Measures: Evidence from Tunisian Population Using the SF-12 Health Survey	Tunisia	Cross-sectional study	• n= 3,864 • 51.9% Female • Age 18-85 years (50-59: n=711; 60–74: n=580; 75–85: 224)	Community	SF-12

	Authors, year	Title	Country	Study design	Population, the minimum age	Setting	QoL instrument
18	Ramocha et al., 2017 [22]	Quality of life and physical activity among older adults living in institutions compared to the community	South-Africa	Cross-sectional study	• N=80 • 42.5% • Age > 60	Community and nursing home	RAND-36

EUROHIS-QOL= 8-item WHOQOL questionnaire; WHOQOL = World Health Organization Quality of Life Scale; SWLS = Satisfaction with Life Scale; WHOQOL-OLD = World Health Organization Quality of Life Scale- OLD version; WHOQOL-BREF = World Health Organization Quality of Life Scale- brief version; SF-36 =Short-Form Health Survey-36 item; SF-12 = Short-Form Health Survey 12-item; SAGE study = Study on global AGEing and adult health; IN-DEPTH = International Network for the continuous Demographic Evaluation of Populations and Their Health in developing countries; NUHDDS = longitudinal Nairobi Urban Health and Demographic Surveillance System;

Instrument domains

As shown in Table 2, the number of items per instrument varied between 5 and 36. Domains included in all instruments were the physical, psychological, and social domains. In the EUROHIS-QOL-8, WHOQOL-OLD, WHO-QOL-BREF, SF-36, SF-12 and RAND-36, these domains are directly captured by asking specific questions such as 'How satisfied are you with your ability to perform your daily living activities?' (Physical domain, EUROHIS-QOL-8) or 'To what extent do you experience limitations in usual role activities because of emotional problems?' (Psychological domain, SF-36), 'how satisfied are you with your relationships?' (Social domain, WHOQOL-BREF) or "How satisfied are you with the conditions of your living place?" (Environmental domain, WHOQOL-BREF). The SLWS asks questions regarding general life satisfaction, using 5 statements that must be assessed on a scale of 1–7. An example statement is 'In most ways, my life is close to my ideal'. Besides the domains mentioned above, the WHOQOL-OLD includes domains of importance to older adults, such as 'sensory abilities' or 'death and dying'. The SF-36 and SF-12 are health-related quality of life instruments (HRQOL), asking to what extent one's health interferes with e.g., physical function, mental health, or social functioning. The environmental domain was only captured in the EUROHIS-QOL-8 and the WHOQOL-BREF.

Reliability and validity of instruments

Only 7 studies provided figures on reliability. All studies using the SLWS showed good internal reliability (Cronbach's Alpha ≥0.81) [21–23], one study showed good internal reliability of the WHOQOL-OLD (Cronbach's Alpha ≥0.72) [24] and two studies showed moderate to good internal consistency on the WHOQOL-BREF (Cronbach's Alpha ≥0.67 [26] and ≥ 0.85 [27]). One study described good internal reliability of the SF-12 (Cronbach's Alpha per domain ≥0.74) [30]. There were no descriptions of reliability in the studies using the EUROHIS-QOL-8 and the SF-36. The study using the RAND-36 did describe good validity of the comparable SF-36, but this was tested in another African country in a different target group [12]. Scores on other forms of reliability were not provided in any of the studies. Only four studies described results on validation. Macia et al., using the SLWS, described good content validity based on an expert meeting [21]. Van Biljon et al., described a good factor structure when using the WHOQOL-OLD [24] and Younsi et al., looking at the validity of the SF-12 in a Tunisian population, described a good

Table 2. Characteristics of QoL instruments

QOL instrument	No. of studies	No. items	Domains	Reliability	Validity	Languages	Mode of administration	Answer categories
EUROHIS-QOL-8 [23-29]	7	8	• physical. • psychological. • social. • environmental	ND for study cohorts under consideration	ND for study cohorts under consideration	• Shangaan [23, 27] • Xitsonga [24] • Local language Nairobi (Kenya) [25, 26] • The local language in Agincourt (South Africa) [29] • Kiswahili [28]	• IA [23-29]	5- point Likert scale
SLWS [15, 16, 30]	3	5	Satisfaction with life as a whole	Internal reliability: • α = 0.82 [15] • α = 0.81 [30] • α = 0.92 [16]	• Good content validity based on expert meetings [15] • ND [16, 30]	• Wolof [15] • Yoruba [30] • Portuguese [16]	• IA [15] • ND [30] • IA/SA [16]	7-point Likert scale
WHOQOL-OLD [17, 32]	2	24	• sensory abilities • autonomy • past, present, and future activities • social participation • death and dying • intimacy	• Per domain α ranging from 0.72 to 0.84 [17] • ND for this study cohort [32]	• Good factor structure [17] • ND for this study cohort [32]	• Afrikaans [17] • Unknown [32]	• SA/IA [17] • IA [32]	5-point Likert scale
WHOQOL-BREF [19, 31]	2	26	• physical • psychological • social • environmental	• Internal consistency in each domain α > 0.67 [19] • Cronbach α > 0.86 [31]	ND for this study cohort [19, 31]	• Sesotho [19] • Yoruba [31]	• IA [19] • SA/IA [31]	5- point Likert scale

QOL instrument	No. of studies	No. items	Domains	Reliability	Validity	Languages	Mode of administration	Answer categories
SF-36 [18, 20]	2	36	• physical health o physical functioning o physical role limitation o bodily pain o general health • mental health: o vitality o social functioning, o role limitation due to emotional problems o mental health	ND for this cohort [18, 20]	ND for this cohort [18, 20]	• Unknown [18]	• IA [18]	A mix of 5 / 3 – point Likert scale and yes/no answers
SF-12 [21]	1	12	• physical health o physical functioning o physical role limitation o bodily pain o general health • mental health: o vitality o social functioning,	Internal reliability: • Physical health α=0.76 • mental health α=0.74 [21]	• Construct validity good (differences between subgroups) • convergent validity good: (r>0.40) [21]	Tunisian [21]	IA [21]	A mix of 5 / 3 – point Likert scale and yes/no answers

QOL instrument	No. of studies	No. items	Domains	Reliability	Validity	Languages	Mode of administration	Answer categories
			○ role limitation due to emotional problems					
RAND-36 [22]	1	36	• physical functioning • bodily pain • limitation because of physical health problems • role limitation because of personal or emotional problems • emotional well-being • social functioning, • energy or fatigue • general health perception.	Not assessed (only refer to reliability of SF-36 tested in Ghanese setting where α=0.82) [22]	Description of adequate face and content validity [22]	Setswana and isiZulu [22]	IA [22]	A mix of 5 / 3 – point Likert scale and yes/no answers

ND=Not Described; IA = Interviewer Administered; SA = Self-Administered; EUROHIS-QOL-8: WHOQOL = World Health Organization Quality of Life Scale; SWLS = Satisfaction with Life Scale; WHOQOL-OLD = World Health Organization Quality of Life Scale- OLD version; WHOQOL-BREF = World Health Organization Quality of Life Scale- brief version; SF-36 =Short-Form Health Survey-36 item; SF-12 = Short-Form Health Survey 12-item

construct and convergent validity [30]. Lastly, Ramocha et al. described adequate face and content validity but did not give more information on how this was assessed [12]. All other studies did not describe anything about the validation of the instrument in their specific cohorts or countries.

Suitability of using instruments among the illiterate population

Seventeen studies described that the instrument was interviewer-administered or could be interviewer administered. One study did not provide information on the mode of administration [22].

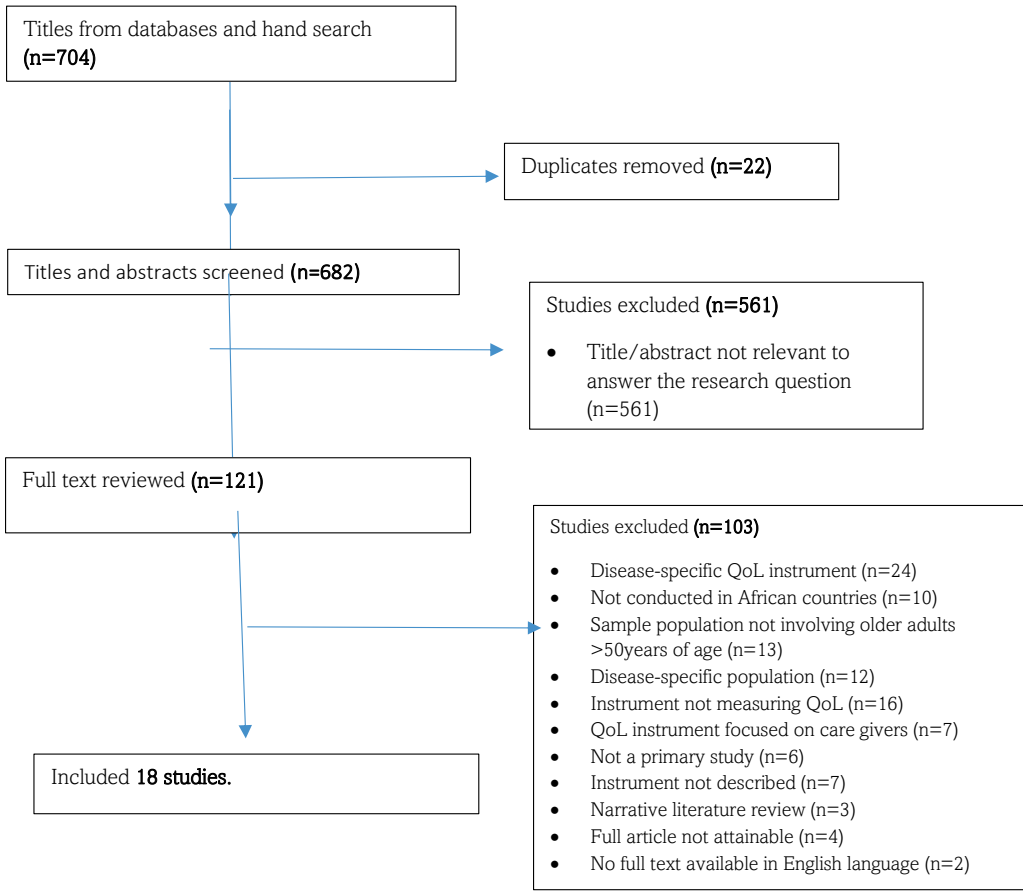

Figure. 1: Schematic flow of search results

All instruments used the Likert scale or yes/no answer categories and no instruments made use of VAS scales or pictorial scales.

Discussion

In this review, 7 different instruments in 18 studies were found which were used to measure QoL among older adults in African countries: the EUROHIS-QOL-8 (n=7), the SWLS (n=3), the WHOQOL-OLD (n=2), the WHOQOL-BREF (n=2), the SF-36 (n=2), the SF-12 (n=1) and the RAND-36 (n=1). After careful reflection on their respective psychometric properties, it appeared that the SLWS had good internal validity but that for all other instruments, little to no information was available about the psychometric properties of the instruments when using them in their specific countries or populations. As not all aspects of life are equally important for all age groups, cultures, and settings, it cannot be automatically assumed that all instruments are applicable for their intended purpose [33]. All studies using the EUROHIS-QOL-8 to assess QoL used data from the WHO Study on Global AGEing and Adult Health (SAGE study) refer to Kowal et al. (2010) [34] and Schmidt et al. (2005) [35] for information on the psychometric properties. However, even though the conclusion of Schmidt et al. is that the EUROHIS-QOL-8 showed good cross-cultural field study performance and satisfactory convergent and discriminant validity, this was only assessed in European countries [35]. Furthermore, although the EUROHIS-8 instrument is a derivate of the cross-culture validated WHOQOL-BREF, it is unknown if this instrument also shows good psychometric properties when using it in developing countries and more specifically in slum settings. Lastly, the seven studies using the EUROHIS-QOL-8 only report on outcomes and not on process-related measures such as experiences during data collection or the feasibility of using the scale in the specific (slum) setting.

As a large proportion of older adults in African countries live in slums and are illiterate, this study also reviewed if the instruments were suitable to use among an illiterate population. Even though there is little information available on time investment when administering the instruments, the number of items per instrument ranges from 5 to 36, which seems like a relatively permissible time investment. When looking at the mode of administration, one study did not describe how the instrument was administered [30] but all other studies described the possibility of interviewer-administration. However, there appeared to be no instrument which made use of VAS scales or pictorial scales, which could have made the application in an illiterate population easier. Something else that would make the use of instruments more feasible is the possibility of amendment of questions (to make it understandable to the illiterate

population) in the instruments to improve the suitability of the instrument towards the population or setting (e.g., climbing stairs in a slum setting is not common or performing heavy exercise is less common among an older population). However, doing this will have consequences for the performance characteristics of the instrument and should therefore be performed with caution. In doing this the original meaning should not change so as it measures the intended domain.

When looking at the domains included in the different QoL instruments found in our review, the physical, psychological, and social domains appeared to be (indirectly) included in almost all instruments. The environmental domain, however, was only included in the EUROHIS-QOL-8 and the WHOQOL-BREF. However, the environmental domain is likely to be of importance in African countries and more specifically in slum settings due to factors mentioned in the introduction paragraph of this manuscript, such as poor housing, lack of sanitation and environmental hazards such as improper disposal of waste. A study performed among adolescents in Bangladesh also showed worse scores on physical environment and QoL among slum dwellers compared to non-slum dwellers [36]. Also, in a study by Nilsson et al. [37], a literature search was performed to identify appropriate instruments to assess health-related quality of life (HRQoL) among older people in rural Bangladesh. In addition, in-depth interviews with these older adults were performed to retrieve information on QoL domains deemed important by the older adult population. This study concluded that the instruments which were found to assess HRQoL mainly looked at physical, psychological, and social domains, while older adults stated that spiritual, economic, and environmental domains are equally important but not present in these instruments [50]. Also, some studies argue that in low- and middle-income countries, quality of life is more described in family and group terms, including values such as interdependence and role fulfilment instead of e.g., autonomy. These concepts might currently be underrepresented in QoL instruments [38].

From these findings, it can be concluded that most of the instruments found to assess QoL in African countries can be interviewer-administered and are relatively short, providing a good starting point for use in an illiterate population. However, the instruments lack basic information on reliability and/or validity and more information is needed to know if the domains used in the different instruments reflect the quality of life of older adults living in African slums.

Strengths and Limitations

To the authors' best knowledge, this is the first scoping review which identified and critically reflected on instruments used to assess the QoL of older adults living in African countries. Therefore, this review provides valuable new insights into instruments used to measure the quality of life in African countries. Another strength of this study is the fact that the framework of Levac and colleagues on advancing the method of scoping reviews were followed, resulting in an excellent methodological foundation for this scoping review [14].

However, some limitations should also be mentioned. First, studies reporting on the quality of life among disease-specific populations and studies describing the development of QoL instruments were excluded from this review. There is a possibility that these studies used generic quality-of-life instruments that could have contributed to our results. However, as the search was to look for an instrument applicable to the general older population and not development but mainly feasibility of applying the instrument in specific settings, it was decided to exclude those publications. Second, only two articles were found describing the use of a QoL instrument in the slum setting and these studies did not provide any data on psychometric properties and the feasibility of using the scale in the slum setting. Consequently, very few conclusions can be drawn on the use of QoL instruments in older adults living in slums. Lastly, all articles were excluded that were written in another language than English. As the focus of our study was quality of life in African countries, this might have led to missing publications written in another language. However, by consulting a librarian when creating the search strategy, it is expected that this bias is minimized.

Recommendations for future research

As there is little information available on the psychometric properties of the instruments used to assess the QoL of older adults in African countries, further research should focus on the validation and reliability of the instruments used among this specific population. Furthermore, there is a need for more in-depth research on the content and domains of instruments to assess QoL among older adults in African countries, and more specifically, in slum settings. Only two studies performed QoL measurements in slum settings but did not describe anything about their experiences of using the scale. Therefore, it is also recommended to perform in-depth interviews with aged slum dwellers to see if the content of currently used QoL instruments

matches the concept of QoL experienced by them. A possibility that could also be explored is the weighing of specific domains based on the importance valued by respondents [38]. Finally, further research should not only look at the content of the instruments but also at their feasibility to use in an illiterate population. Aspects such as how easily an illiterate population can understand (e.g., short, and clear questions, pictorial scales or only performing in-depth interviews) and time investment are important aspects to investigate.

Conclusion

This scoping review aimed to synthesize the current body of knowledge on the instruments used to assess the quality of life of older adults in African countries. The following instruments were found: the EUROHIS-QOL-8, the SLWS, the WHOQOL-OLD, the WHOQOL-BREF, the SF-36 and the SF-12. It appeared that little information is available on both psychometric properties and the feasibility of using these instruments among older adults in African countries. Also, it is unknown in the domains used in the instruments reflect the quality of life in this specific population. This highlights the need for further research on the adjustment and validation of currently existing instruments and/or for the development and validation of a new instrument, which can be used in illiterate, older populations living in African slums.

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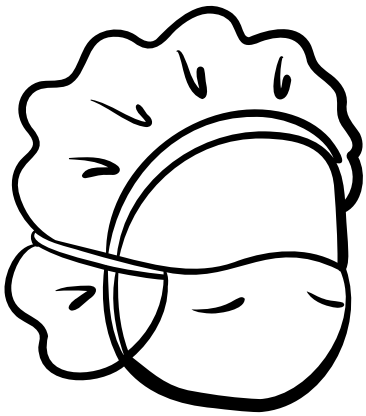

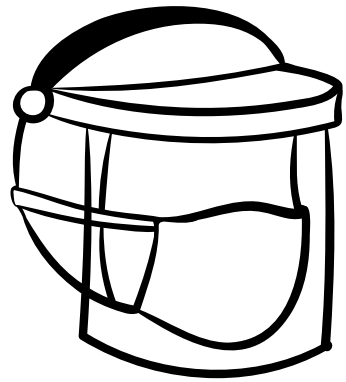

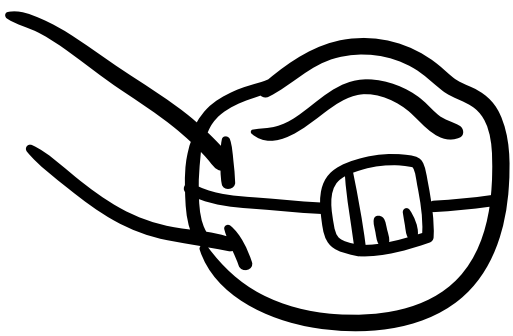

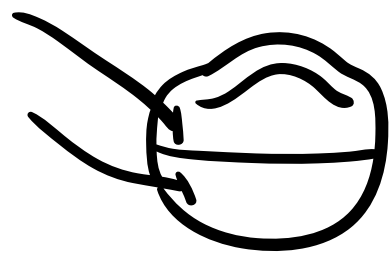

3

Quality of life of older adults and associated factors in Ghanaian urban slums: a cross-sectional study

This chapter is published as:

Attafuah, P. Y. A., Everink, I., Abuosi, A. A., Lohrmann, C., & Schols, J. M. (2022). Quality of life of older adults and associated factors in Ghanaian urban slums: a cross-sectional study. BMJ open, 12(2), e057264.

CHAPTER 3
CROSS-SECTIONAL STUDY

Abstract

Objective: This study provides insight into the quality of life (QoL) of older adults living in urban slums in Ghana. Design The study employed a community-based cross-sectional design to assess QoL among older adults in two slums between April and May 2020. QoL was assessed using the WHO Quality of Life-Brief version (WHOQOLBREF) questionnaire.

Settings: Participants were drawn from two slums in Ghana, one in a fishing-dominated community and the other in an industrial community.

Participants: This study included 400 participants aged 60 and above who had lived in either slum for at least 1 month and were able to communicate verbally.

Results: Although the means of all participants' transformed scores were poor in the physical and psychological domains, they were moderate in all other domains. When viewed as a whole, the perceived overall QoL is neither poor nor good and participants were neither satisfied nor dissatisfied with their health. Participants had a moderate level of QoL in the WHOQOL-BREF psychological (mean score 45.7), social (mean score 57.0) and environmental (mean score 51.6) domains. The mean score for physical QoL of older adults was 43.3, which denotes poor QoL. In all domains, male participants have a significantly higher mean QoL than their female counterparts. An analysis of variance comparing the living arrangements of participants showed that those who lived with extended family had high mean scores in environmental QoL, overall QoL and satisfaction with health. Regression analysis revealed that QoL was influenced mostly by the environmental (46.2%), followed by the psychological (43.7%), physical (31%) and social (20.4%) domains.

Conclusions: The findings from this study show that older adults living in slums had moderate psychological, social, and environmental QoL and poor physical QoL. Although the mean scores for QoL are higher than anticipated, health policy development must consider the specific needs of older adults.

CHAPTER 3
CROSS-SECTIONAL STUDY

Introduction

The difference in life expectancy between people in developed countries and people living in African countries is approximately ten years [1]. These differences are caused by a variety of factors, including demographic differences, varying family and social structures, social security arrangements, health infrastructure, and spiritual beliefs [2 - 4]. These factors impact how a person addresses health issues and other aspects of their life. Life expectancy in Africa is rising, in line with global trends and despite regional differences. However, an increased life expectancy does not always imply an improved quality of life (QoL). Ageing often comes with problems affecting the quality of life, such as loneliness, ill health, and depression [5, 6, 7]. As a result, as people in African societies are ageing, the QoL of older adults in African countries is increasingly becoming an important issue [8,9].

Quality of life is defined by the World Health Organization as "an individual's perception of their position in life in the context of the culture and value systems in which they live and with their goals, expectations, standards and concerns" [10]. Older adults are particularly vulnerable to poor QoL because of changes and events in their physical health, psychological state, social circumstances, and relationship to their environment [8, 11, 12]. Ageing may decrease human vitality, which leads to frail health and dependency. Moreover, frailty may express itself as cognitive impairment and neglect in the psychological and social domains respectively. When this is combined with deplorable living conditions, the quality of life of these older adults can be affected.

Slums are visible evidence of deplorable living conditions. Slums often lack basic amenities, are overcrowded, and are polluted [13,14]. In developing countries, mainly African countries, rural-urban migration is one of the causes of slum communities [13-17]. Slum-dwelling older adults are predisposed to non-communicable diseases as they age. They are also susceptible to different forms of communicable diseases due to unsanitary conditions and lack of access to healthcare. [14, 15, 18, 19]. As a result, the overall health status of older adults in slums has been reported to be lower than that of older adults living in formal settlements [20-22].

Supporting older people in slums is an important objective of the WHO "Global strategy and action plan on ageing and health 2016-2030" [23]. One of the targets of the Millennium Development Goals (MDG) 7, was to achieve a significant improvement in the lives of at least 100 million slum dwellers worldwide by 2020. However, there have not been any marked improvements in Ghanaian slums yet [24, 25,].

Many studies have been conducted globally, on the QoL of older adults either in the community or in care homes [26, 27], and also in those with different health conditions [28- 30]. However, there is a dearth of research on the QoL of older adults living in slums in developing countries. It is hypothesized that older adults living in slums generally have poor QoL. To improve the lives of slum dwellers, it is necessary to assess their QoL to determine which aspects require improvement. Therefore, this exploratory study aims to provide insight into the QoL of slum-dwelling older adults using the WHOQOL-BREF questionnaire to assess the QoL of older adults living in two Ghanaian slums. Additionally, associated factors which influence their QoL were explored post-hoc.

Methods

Study design and study population

A community-based cross-sectional study was conducted between April and May 2020. The population under consideration involved older adults living in two urban slums in the Greater Accra region of Ghana. These slums are in the Ashaiman and Teshie communities. The two slums were adopted for this study due to the comparable literacy rates, despite the prevailing disparities in the type of housing structures and socio-economic activities.

Ashaiman is located close to an industrial city in Ghana and consists of people from different regions and tribes in Ghana. Teshie is mainly a fishing community with most of the population being indigenous.

Participants were included if they were older adults aged 60 years (retirement age) or older, who have lived in the slums of Ashaiman or Teshie for at least one month and

could communicate verbally. Critically ill older adults and people with speech impairments who were not able to express themselves verbally were excluded from the study.

Study Instrument

The primary outcome measure of this study is quality of life, assessed using the World Health Organisation Quality of Life -brief version (WHOQOL-BREF) [31]. This instrument was chosen based on the results of a scoping review of instruments assessing QoL in African countries [32]. Detailed information on psychometric properties, related to the use for the slum population, is lacking from previous studies, but the included domains, the feasibility, and the length of the instrument, nevertheless, convinced the authors to use the WHOQOL-BREF in this study.

The WHOQOL-BREF consists of four domains. The questions in each domain vary from 3 to 7. Every question in each domain is rated on a 5-point Likert scale, where 1 represents 'very poor' and 5 represents 'very good'. The first domain is the 'Physical Health' domain. This includes seven (7) questions related to sleep, energy, mobility, the extent to which pain prevents the performance of necessary tasks, the need for medical treatment to function in daily life, and the level of satisfaction with their work capacity. The second domain is the 'Psychological' domain with six (6) questions, focusing on the ability to concentrate, self-esteem, body image, spirituality, and the frequency of positive or negative feelings. The third domain covers 'Social relationships' and includes three (3) questions related to satisfaction with personal relationships, social support systems and sexual satisfaction. The fourth is the 'Environmental' domain, which comprises eight (8) questions related to safety and security, satisfaction with one's home and physical environment satisfaction, finances, availability of health and /social care availability, access to general information and leisure activities accessibility and satisfaction with transportation.

In addition to the 4 domains, the WHOQOL-BREF includes two general questions, one about the respondents' QoL in general, and one related to their satisfaction with health. These questions also have five response options varying from 1 'very poor' to 5 'very good' for rating the QoL and 'very dissatisfied' (1) to 'very satisfied' (5) for rating

the satisfaction with health. Besides using the WHOQOL-BREF, demographic characteristics of subjects (gender, age, educational level, religion, and marital status) were collected. In addition, data on access to health care, current health condition, health services patronized, living arrangements, social support, and sources of income were gathered.

Data collection

The WHOQOL-BREF questionnaire was used to conduct face-to-face interviews during data collection, given difficulties with reading (caused by both difficulties in reading and/or poor vision) in the population under consideration. The interviews were done by the first author, PYAA and 4 research assistants' undergraduates of the University of Ghana. The interviewers all have a background in nursing and were trained before the commencement of data collection. During the training, they were introduced to the WHOQOL-BREF and taken through the process of intended data collection. The interviewers needed to be conversant with the questions in two local languages (Twi and Ga). During the face-to-face interviews with subjects, interviewers read the questions out loud and filled in the responses of participants. The original English version of the instrument was translated and administered to participants in the local languages (Ga and Twi). Local language experts translated and back-translated the WHOQOL-BREF questionnaire to be sure that the intended meaning of the original content was intact. Additionally, a pretest of the questionnaire was carried out in a nearby slum and no changes were made afterwards. The STROBE cross-sectional checklist was used in writing the report [33].

Sampling method and Sample size

Recruitment took place by involving a key informant in each slum. This key informant was a person working at the Municipal Assembly of the specific community and visiting the slums very often due to the nature of their work. The key informant used a convenient sampling method to select participants living in the slums. After selecting participants, the snowballing technique was used to increase the participation rate. This technique is not new as previous QoL studies involving older adults also used snowballing sampling techniques during sample recruitment [21, 34]. The key

informant also familiarized the research team with the slum community. Eligible participants were invited, and the research team provided study-specific information personally to the participant. The sample size was calculated to get the number of participants that will be representative of the entire population of older adults in the slums. The sample size is an estimate of how many participants will be needed as a representation of the total sample population. The sample size calculation was done using the Yamane formula [35]. The two slums under consideration consist of approximately 6,000 older inhabitants. Filling in the formula gave an estimated sample size of 375 participants [35].

Ethical Approval

Ethical clearance (37MH-IRB IPN 199/2018) was obtained from the 37 Military Hospitals Institutional Review Board. Permission to perform this study in Ashaiman and Teshie was provided by the Municipal Assemblies of the selected slums. Written informed consent, either by signing or thumb-printing (in the case of those who were unable to sign) was required for participation.

Patient and Public Involvement

Patients and the public were not involved in the development of the research questions, the design, and the conduct of the study. However, participants were involved in the recruitment of others through the snowball method. The study results will be shared with the participants and other relevant stakeholders through various social media handles and conferences.

Data Analysis

The data were analysed using Statistical Package for Social Sciences (IBM SPSS) version 24.0. Domain scores were scaled in a positive direction (i.e., higher scores denote higher QOL). The mean score of items within each domain is used to calculate the domain score. An Excel sheet calculator created by Skvarc [36] was used to transform the different WHOQOL-BREF domain scores to a 0-100 scale. Cut-off points for QoL in this study were determined based on the literature by Silva and

colleagues [37]. According to Silva and colleagues [37], a score ≤45 is considered poor QoL, 46-64 is considered moderate QoL and any score >65 is recorded as a high QoL.

In further analyses, the demographic data served as independent variables and the domains of the WHOQOL-BREF as dependent variables. Gender and place of residence were depicted as a binominal variable where '1' is male/Teshie and '2' is female/Ashaiman respectively. All other demographic data were categorical variables. Educational level was categorized into four groups: no formal education, elementary school, high school, and above high school. Marital status comprised of single, married, divorced, and widowed depicted with numbers. Age was grouped into five categories (60-65, 66-70,71-75, 76-80, >81) also depicted with numbers. Finally, the place of residence: Teshie or Ashaiman, was documented.

Descriptive analyses were performed to describe the background characteristics, as well as the domain scores of the WHOQOL-BREF. To compare the mean distribution of participants' characteristics and their QoL per domain, an independent t-test and analysis of variance (ANOVA) were used. Regression analysis was done to assess the relationship between sociodemographic characteristics and the QoL domains. Analyses of QoL scores in the four domains were performed after transformation to a 0-100% scale. For the primary hypothesis in this study, the level of significance was set at $P < 0.05$. For all other analyses, p-values are reported for generating hypotheses and high false positives were controlled for using multiple comparison adjustments. Nonetheless, results should be interpreted with caution.

Results

Background Characteristics of Participants

In total, 400 people were approached for this exploratory study and they all agreed to participate. This means that a 100% response rate was achieved. Three subjects were excluded from the analysis as they were below the age of 60 years, resulting in a total sample of 397 respondents.

Table 1: Background characteristics of participants by residence

Characteristics	Teshie	Ashaiman	Total n (%)
Gender			
Male	43(21.6)	114(57.6)	157(39.5)
Female	156(78.4)	84(42.4)	240(60.5)
Age group (in years)			
60-65	90(45.2)	99(50.0)	189(47.6)
66-70	36(18.1)	39(19.7)	75(18.9)
71-75	32(16.1)	23(11.6)	55(13.9)
76-80	18(9.0)	20(10.1)	38(9.6)
>81	23(11.6)	17(8.6)	40(10.1)
Marital Status			
Single	28(14.1)	9(4.5)	37(9.3)
Married	41(20.6)	85(42.9)	126(31.7)
Divorced	25(12.6)	56(28.3)	81(20.4)
Widowed	105(52.7)	48(24.3)	153(38.5)
Education			
No formal	82(41.2)	96(48.5)	178(44.8)
Elementary	38(19.1)	56(28.3)	94(23.7)
High School	73(36.7)	24(12.1)	97(24.4)
Above High School	6(3.0)	22(11.1)	28(7.1)

In Table 1, the background characteristics can be found. Of all participants who participated, 240 persons (60.5%) were female, and the largest age group was 60-65 years (47.6%). Most of the older adults in this population were widowed (38.5%), followed by participants being married (31.7%). In total 44.8% of the participants had no formal education. When asked about their current illnesses/diseases, 25.2% had

osteoarthritis, followed by 19.2% with body pains, and 17.1% had high blood pressure. Participants were also asked about their source of income. Most participants (31.5%) received their income from their children, 22.9% were into trading, and 2.0% were either mechanics, electricians, or welders. On the sources of healthcare utilized, most participants 39.8% patronized pharmacies, with herbal preparations being the least accessed 4.5%. When asked about the living arrangements of participants, 33.5% each, either lived alone or with extended family members. Those who lived with their children were 17.1% of the total sample population while 2.5% lived with others, including friends and church members. Daughters were the biggest form of social support (28.7%), followed by siblings of older adults (17.4%), and then sons, 16.9% (See Table 2 below).

Table 2: Descriptive Analysis of Associated Factors

Characteristics	Frequency	%
Current Illness		
Body Pains	76	19.2
Diabetes	19	4.8
Difficulty Walking	33	8.3
High Blood Pressure	68	17.1
Joint Pains	100	25.2
Old Age	26	6.5
Poor Eyesight	43	10.8
Others	32	8.1
Sources of Income		
Children	125	31.5
Farming	38	9.6
Fishing	52	13.1
Friends	37	9.3
Pension	27	6.8
Siblings	19	4.7
Trading	91	22.9
Others	8	2.0
Source of healthcare		
Clinic	63	15.9
Drug Ped	37	9.3
Herbalist	18	4.5
Hospital	121	30.5
Pharmacy	158	39.8
Source of Social Support		
Sibling	69	17.4
Daughter	114	28.7
Son	67	16.9
Grandchild	44	11.1
Other	21	5.3

The outcomes of the WHOQOL-BREF are described in Table 3. When looking at the total population, the perceived overall QoL is neither poor nor good, with participants neither satisfied nor dissatisfied with their health. Transformed QoL scores were rated poor, moderate, and high, based on the literature by Silva and colleagues [37]. According to Silva and colleagues [37], the participants in these slums recorded a moderate level of QoL in the psychological (mean, 45.7), social (mean, 57.0) and environmental (mean, 51.6) domains of the WHOQOL-BREF. The physical QoL of the older adults in these slums recorded a mean score of 43.3.

When looking at the differences between male and female participants, statistically significant differences were found in general quality of life ($p<.001$), general satisfaction with health ($p=.017$), the psychological domain ($p=.019$), and the environmental domain ($p=.001$). In all these domains, male participants showed a significantly higher quality of life compared to their female counterparts.

In the analysis of the various age groups, there were significant differences in the psychological ($p=.036$), physical ($p=.003$) and environmental ($p=.003$) domains.

Table 3: Bivariate Analysis Showing Participants' Mean Scores and Association of Background Characteristics with QoL Scores

	General QoL	General Health	Psychological domain **	Physical domain**	Social domain**	Environmental domain**
Total group (n=397)	2.73	2.90	45.07[b]	43.25[a]	56.97[b]	51.63[b]
Gender						
Female	2.53	2.78	41.95 [a]	44.63 [a]	56.44 [b]	49.21 [b]
Male	3.04	3.09	45.22 [b]	45.75[b]	57.77 [b]	55.30 [b]
Mean difference	.515	.310	3.27	1.11	1.33	6.09
p-value	.000*	.017*	.019*	.611	.506	.001*
Age group						
60-65 years	2.08	2.98	45.44	49.14	57.11	54.41
66-70 years	2.84	3.04	41.89	43.65	58.48	51.69
71-75 years	2.80	2.95	40.31	42.49	57.47	49.75
76-80 years	2.58	2.66	42.34	40.11	53.97	48.95
>80 years	2.25	2.45	40.30	36.89	55.60	43.26
F	2.139	1.966	2.600	4.180	.397	4.111
p-value	.075	.099	.036*	.003*	.811	.003*
Marital status						
Single	2.43	2.54	35.97	37.46	48.41	46.89
Married	3.00	3.02	47.44	47.66	62.18	56.13
Divorced	2.95	2.95	44.52	46.05	49.57	52.34
Widowed	2.47	2.86	40.88	44.27	58.66	48.69
F	6.370	1.420	9.861	2.359	10.385	5.583
p-value	.000*	.237	.000*	.071	.000*	.001*
Education						
No formal education	2.61	2.66	39.51	40.73	54.76	47.71
Elementary school	2.78	2.96	45.81	46.73	57.63	52.19
High school	2.72	3.14	45.02	50.23	58.60	54.41
Above high school	3.39	3.43	52.25	49.25	63.14	64.86
F	3.498	4.990	10.938	5.084	1.982	10.241
p-value	.016*	.002*	.000*	.002*	.116	.000*
Residence						
Teshie slum	2.29	2.87	41.28	45.99	58.19	47.59
Ashaiman slum	3.18	2.93	45.22	44.15	55.74	55.71
Mean difference	-.885	-.065	-3.94	1.84	2.44	-8.12
p-value	.000*	.618	.004*	.389	.211	.000*
Sources of Income						
Pension	3.04	3.33	44.96	50.96	56.52	53.56
Fishing/Farming	2.76	2.81	42.39	44.00	56.09	49.47
Trading	2.48	2.58	41.75	41.47	54.55	49.74
Children	2.86	3.06	44.88	44.79	58.49	53.22
Friends	2.65	3.24	41.97	49.92	59.27	52.62
Family/Siblings	2.90	3.05	46.35	50.70	59.10	55.45
Other	2.25	1.75	37.00	46.13	56.25	51.75
F	1.500	3.434	1.118	1.389	.518	.842
p-value	.177	.003*	.351	.218	.794	.538
Source of Social Support						

Sibling	2.72	2.88	44.06	43.62	53.35	52.93
Daughter	2.61	2.74	42.73	42.21	57.16	49.07
Son	2.84	3.07	42.52	48.87	58.03	54.09
Grandchild	2.66	2.68	41.86	44.61	55.18	50.64
Other	2.86	3.38	47.05	53.95	62.19	53.48
F	.481	1.761	.695	2.134	1.049	1.192
p-value	.749	.137	.596	.076	.382	.314
Living Arrangements						
Extended family	3.10	3.10	45.15	46.28	56.92	54.59
Family	2.45	2.60	42.87	36.08	56.57	48.70
Alone	2.41	2.81	40.27	47.21	55.96	49.36
Children	2.91	2.96	45.37	46.62	58.53	52.18
Others	2.50	2.70	45.10	37.80	62.40	54.33
F	7.080	1.72	2.747	3.275	.396	2.067
p-value	.000*	.144	.028*	.012*	.811	.084

**All raw scores are transformed to a 1-100 score, *Significant p-value $\leq$0.05, [a] =poor QoL, [b] = moderate QoL

From Table 3, it appears that as age increased, QoL decreased significantly in the physical and environmental domains. Yet, in the psychological domain, those between 76-80 years had a better psychological QoL compared to those 66-70 years.

For marital status, significant differences in the various domains were seen, in the perceived QoL ($p<0.001$), psychological ($p<0.001$), social ($p<0.001$), and environmental($p=0.001$) domains. Participants who are married had the highest scores in these domains, followed by participants who are divorced, widowed, and single.

In an examination of differences in QoL among the various educational levels, there were significant differences in all domains, except for the social domain. In general, QoL was significantly higher among participants with a higher educational status. Lastly, when looking at the difference in QoL between the place of residence, older adults in the Ashaiman slum showed a statistically significant difference in perceived QoL ($p<0.001$), psychological QoL($p=0.004$) and environmental QoL($p<0.001$).

In a one-way analysis of variance (ANOVA) of the mean differences in QoL of participants with different sources of income, there was a statistical significance in the satisfaction with the health domain only. Participants who received pensions had higher means in most domains (overall QoL, satisfaction with health, physical QoL) followed by participants who had financial

support from family/siblings (higher scores on the environmental and psychological domains). Participants who received financial support from friends had the highest QoL score in the social QoL domain.

An ANOVA comparing the mean QoL scores of participants, with different sources of social support showed no statistical differences in scores between different sources of social support (See Table 2). An ANOVA analysis comparing the living arrangements of participants showed that people who lived with extended family had high environmental QoL scores, overall QoL scores and satisfaction with health scores. Those who lived with their children had high psychological QoL scores.

Table 4: Linear Regression analysis showing the degree of influence of the various domains of the WHOQOL-BREF on older adults' overall QoL.

Predictors	B	SE	Standardized Coefficients Beta	t-value	p-value
Psychological domain	.013	.003	.21	3.726	.000
Physical Domain	.004	.002	.09	1.833	.068
Social Relationships	-.004	.002	-.09	-1.882	.061
Environmental Domain	.016	.003	.34	5.843	.000

Note(s): $R^2 = 0.277$, adjusted $R^2 = 0.270$, F value = 37.486, p = 0.000

A linear regression analysis (Table 4) of QoL scores was done to show if certain domains are influencing QoL to a higher extent than other domains. At the multivariate level where confounding variables were controlled, it was found that of the four independent variables (i.e., psychological QoL, physical QoL, social QoL and environmental QoL) of overall QoL, psychological and environmental domains of QoL emerged as significant predictors of overall QoL. Variances between the various domains showed that the environmental domain had the highest influence at 34.3%, followed by the psychological domain (21.4%), the physical domain (9.5%) and the social domain (9.1%). This means that a unit change in the environmental domain of an individual's QoL will contribute to a 0.343 change in their overall QoL. Similarly, a unit change in psychological QoL will result in about 0.21 change in the overall QoL of an older adult, such that if the change is positive, then there will be an increase in the overall QoL.

Discussion

This study aimed to assess the QoL of older adults living in two Ghanaian slums using the WHOQOL-BREF questionnaire. It was hypothesized that older adults living in slums generally have poor QoL. Overall, there is an indication that older adults living in slums have a poor to moderate QoL indeed. As previously indicated, this study is exploratory and additional hypotheses were generated post-hoc. The first is that the physical QoL of older adults in slums is poor. Secondly, males have higher mean scores in all domains than females. Thirdly, educational level and marital status influence the QoL of older adults in most domains. Additionally, receiving financial support positively impacts QoL. Also, the population recorded an average rating of neither poor nor good in the overall QoL question and neither satisfied nor dissatisfied in the health satisfaction question. Finally, results from a comparison of the two slums, underscore the need to pay particular attention to the environmental QoL of older adults in the Teshie slum and the psychological QoL domain of those in the Ashaiman slums.

Overall, there is an indication that older adults living in slums have a moderate QoL in the environmental QoL domain. The results underscore the need to pay particular attention to the environmental QoL of older adults in the Teshie slum and the psychological QoL domain of those in the Ashaiman slums to improve the QoL in total. Overall, there is an indication that older adults living in slums have poor physical QoL. Averagely, a moderate QoL level was observed in the environmental QoL domain of the older adults in the slums. This is remarkable because, in slums, one would have expected a very poor QoL in the environmental domain due to confirmed [38-40] well-known characteristics of slums such as the lack of safety and security, poor quality of housing, overcrowding, and unavailability of health and social care. An explanation of this finding could be that most older adults might have adapted to their environment and tried to make the best of what is at their disposal. Another explanation could be that slum amenities and living conditions are not much worse than the prior living arrangements (rural life) of these older adults.

In the current study, females constituted the majority (61%) of the population, like the study by Akosile et.al., [26]. This was expected as females are estimated to live longer than their male counterparts [41,42] even in underdeveloped countries. Additionally, the ages of this study population ranged between 60-98 years with a mean age of 68.89. Similar to most

studies carried out in Africa among older adults, the age of most participants was between 60-69 years [43]. This is indicative of an increasing life expectancy and the need to promote interest in older adults. Participants in this study mostly had no formal education and this is consistent with studies conducted in slums from various countries like India [44], Iran [45], Bangladesh [46] and sub-Saharan Africa [43,47-49].

Low QoL scores were observed for all participants in the physical and psychological domains. This result affirms a study by Alaazi, and colleagues [21] comparing slum and non-slum dwellers, where participants had low QoL mean scores in both psychological and physical health domains. Poor health conditions and increased dependency, as well as low self-esteem and frequency of negative feelings, as postulated by Pathak, Deshpande, and Manapurath [50] could account for the low scores. Although older adults may receive social support from their family members, older adults might feel more comfortable if this support is from their children. This may also account for low scores in the psychological QoL domain of those living with their extended family compared to the high psychological scores of those living with their children.

Males recorded higher means than females in all domains of the WHOQOL-BREF. This is similar to findings by van Nguyen and colleagues [51], who suggested comparable cultural, economic, and environmental contexts could yield a similar outcome. The psychological and environmental domains had statistically significant differences for gender on QoL, where males showed higher QoL compared to females. In the psychological domain, males in the slum have better self-esteem and often have positive feelings as they try to make ends meet in their current settlement. The gender differences could be attributed to the roles males and females play in Ghanaian society. Anecdotal evidence suggests that males show dominance and supremacy in Ghanaian culture. Additionally, most males in the slums first migrated from the village and brought their spouses to live with them after settling in the slums [52, 53]. In the environmental domain, males who often leave the slums to work are more financially sound and have access to general information compared to females. Moreover, as breadwinners, Ghanaian men usually put up the expression “all is well” even when it is not, and therefore do not easily admit failure compared to females. In addition, when it comes to issues of safety and money, females are often dependent on their husbands. For females, the lowest mean score was shown in the psychological health domain (mean = 41.95), implying

negative feelings, low self-esteem, low body image and appearance. Females living in slum communities might feel they have not achieved much and feel demeaned because of the stigma of living in slums [54] and societal upbringing [55]. This is consistent with the findings of Alaazi, and colleagues [21].

The highest overall QoL score was found for the social relationship domain (mean= 57.77), an indication of relative satisfaction of both males and females with personal relationships and support received. This may be attributed to the potential role of the Ghanaian extended family system, in which children offer support to their older family members even in the slum. Children were the highest source of income for the older adults in this study. Nonetheless, older adults in this study who received pensions were most satisfied with their health. This could be attributed to the ability of such individuals to access and afford healthcare when ill as their previous employers will usually, refund hospital bills.

QoL of participants generally decreased with age like previous studies [8, 21, 26, 56 - 58]. This could be attributed to the gradual degeneration and weakness of the human body as individuals age. Medically diagnosed osteoarthritis was the prevalent condition among the study population. Considering the uneven walkways in the slums, the degeneration of joint cartilage and the underlying bone causes pain, especially in the hip, and knee making older adults more dependent on others. Participants between 76-80 years had a better psychological QoL compared to those 66-70 years, implying they had better self-esteem, body image, spirituality, and the frequency of positive or negative feelings similar to a study by Charles, & Kulandai [59]. Spirituality in the Ghanaian culture is very prevalent most especially among older adults as they draw closer to their Maker. This could account partly for this result as older adults at this stage feel they are ready to exit the world accepting their previous life, by which they may not have considerable doubts anymore [6, 16, 21, 47, 48].

With the sociodemographic characteristics of the current study population, both the marital status and educational level of participants had a significant effect on the QoL of participants. Married participants had higher means in all domains compared to all the other categories, especially the single participants. This confirms the findings of studies by Lee, Xu, & Wu, [60] and Yaya, Idriss-Wheeler, Vezina, & Bishwajit, [57]. Except for the physical health domain,

higher educational levels could be equated to better QoL in the other domains similar to findings by Ejiakor, et.al., [61].

Comparing the two slums, older adults in Ashaiman showed a better QoL in the perceived overall QoL and the psychological and environmental domains. This could be attributed to the proximity of Ashaiman to the industrial city and therefore inhabitants could more easily get access to the resources the non-slum dwellers in the industrial city enjoy. Additionally, caregivers of these older adults engage more frequently in various economic activities compared to the restricted/narrower options (fishing, fish mongering and small-scale trading) of those in Teshie. However, there were no significant differences in the physical and social relationship domains between participants of both slums.

Strengths and Limitations

A strength of this study is that this is the first study assessing the QoL of older adults in two different slum communities in Ghana.

A 100% response rate and no data were missing, which contributes to the methodological strength of this study. The 100% response rate can be attributed to the fact that all participants were approached personally, and the presence of the first author and research assistants encouraged respondents. Additionally, breakfast packages given to participants after completing the questionnaires could have contributed to the 100% response rate. However, what could have biased our results is the fact that a convenient sampling technique was used to select participants, instead of a probability sampling method. The reason for this is the nature of the slum set-up and the frail population involved. It was not possible to apply a probability sampling method among the older adults living in the slums, and therefore, convenience sampling was used. Additionally, when comparing the background characteristics with other studies focused on older adults in slum settings [21, 51], they are comparable to our findings, which makes it likely that our convenience sampling method did not affect the generalizability of our results.

Another limitation could be ascribed to the crowded nature of the slum setting: there was no privacy during data collection and other slum dwellers were often listening to the interviews. This could have influenced the answers given by participants. Lastly, even though the

WHOQOL-BREF questionnaire is validated in various languages, this is not the case for the languages used in this study. A translation–back-translation procedure was performed, and the instrument was pre-tested in a neighbouring slum, it is therefore, expected that this did not influence the results to a large extent.

Implications for Practice and Research

In all domains of the WHOQOL-BREF, females have a lower quality of life than males. Therefore, governmental, and non-governmental agencies are advised to focus on helping women in slums get better self-esteem and increase the frequency of positive feelings. An important method to achieve this is generally through education. Also, poor scores in physical QoL among study participants are observed. Further research is needed to determine what could account for the moderate QoL recorded in this slum setting. Additionally, assessing which factors could contribute to the poor physical QoL of old people in slums. Policymakers on health are also encouraged to incorporate structures to assist community health workers to strategize home visits to these older adults. Establishment of community facilities well equipped to meet the QoL in totality. The findings from this study can assist in policy development to include strategies to further improve the QoL of older adults in slums.

Conclusion

The findings from this study show that older adults living in slums in Ghana had a moderate psychological, social, and environmental quality of life and a poor physical quality of life. Therefore, health policy development must consider the specific needs of older adults in slums and direct policies to meet these needs to further improve their overall QoL.

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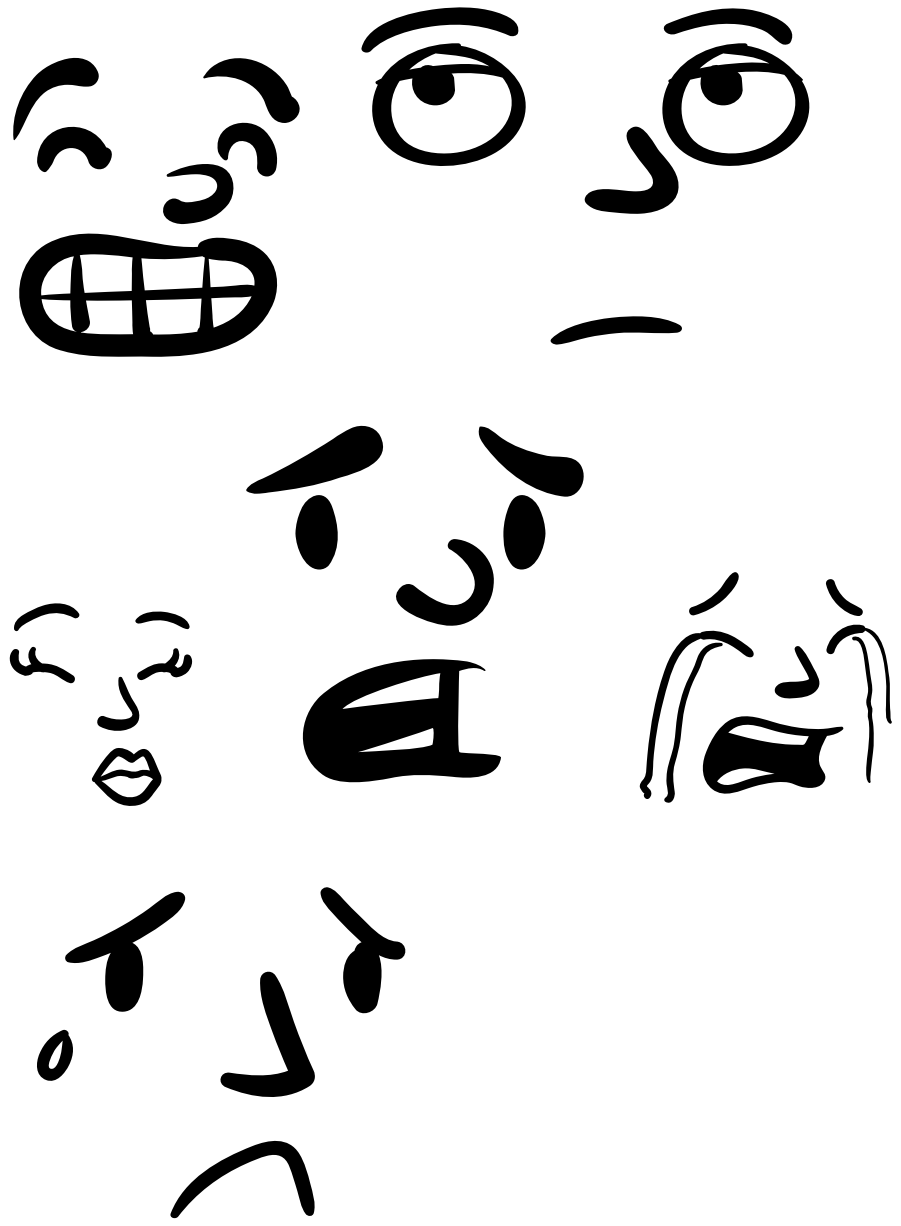

4

Health and social needs of older adults in slum communities in Ghana: a phenomenological approach

This chapter is published as:

Attafuah, P. Y. A., Everink, I. H., Lohrmann, C., Abuosi, A., & Schols, J. M. (2023). Health and social needs of older adults in slum communities in Ghana: a phenomenological approach used in 2021. Archives of Public Health, 81(1), 1-15.

CHAPTER 4
PHENOMENOLOGICAL STUDY

Abstract

Background: Slum-dwellers lack several essential amenities (such as water, sanitation, and electricity) which make them more vulnerable than non-slum dwellers. As there is limited to no access to health and social care services in slums, the slum environment is expected to be an even more dangerous environment for older adults, negatively impacting their quality of life (QoL). To provide an overview of the perceived (unmet) health and social care needs and how it affects the QoL, this study aims to explore the self-perceived health and social needs of older adults in urban slums in Ghana.

Methods: Using a phenomenological approach, 25 semi-structured interviews were conducted between May and June 2021, in the homes of older adults in two slums in Ghana. After coding and analysing the transcripts, five main themes emerged: a) perception of health; b) (de)motivators of health service use; c) perception of social care, d) social needs, and e) influence of phenomena on QoL.

Findings: Perceived health needs were mainly current disease conditions (arthritis, diabetes, hypertension, vision/hearing challenges), challenges with health insurance, the behaviour of some health professionals, the proximity of health facilities, and unnecessary queues at major health facilities. Unmet social needs identified by this study were a sense of neglect by family (need for companionship), requiring assistance with activities of daily living, and the need for financial support. Participants had more health needs than social needs. Health providers do not usually prioritize the care of slum-dwelling older adults. Most participants still have challenges with the NHIS. Their social needs were mainly related to financial difficulties and help with some activities of daily living.

Conclusion: Participants expressed that they desired companionship (especially the widowed or divorced ones) and the lack of it made them feel lonely and neglected. Home visits by health professionals to older adults should be encouraged to monitor their health condition and advocate for family members to keep older adults company. Healthcare providers should exhibit positive attitudes and educate older patients on the advantages of formal health services use, as well as the need to seek early treatment as this will influence their QoL to a large extent.

CHAPTER 4
PHENOMENOLOGICAL STUDY

Introduction

Older adults living in developing countries face various challenges regarding their health and social needs. These challenges are even more profound among older adults living in slum areas in developing countries, because of poor living environments [1-4] and humans are influenced by the environment. Rural-urban migration has resulted in the emergence of slums in the large cities of most developing countries like Ghana. When comparing formal settlements with slums, people living in slums lack basic amenities like water, electricity and proper collection and disposal of solid waste. They are also exposed to health risks by noise pollution, poor sanitation, and hygiene, face poor housing conditions, overcrowding and violence [4,5] and have limited access to health and social care services. The pollution and environmental hazards as well as the uneven road networks in the slums have negative effects on the older adult. As people age, they increasingly need support in various domains, such as mobility, self-care, social participation, and healthcare [6,7]. As access to health and social care services, including primary care, disease prevention, rehabilitation and health promotion in slums is limited or non-existent, the basic needs of these older adults are often unmet. This could highly influence the quality of life (QoL) of these slum-dwellers [2].

The WHO policy framework on Active Ageing (Figure 1) outlines three pillars that can ensure a positive QoL among older adults [8]: health, participation, and security. The first two pillars were used in the conceptualization of this study. The first pillar, health, refers to the physical, mental, and social well-being of an individual and includes access to health care services, nutritional needs and having a healthy environment. The second pillar, participation, refers to the involvement of an individual in spiritual, social, cultural, and community affairs. The third pillar, security is out of the scope of this study as it cannot be influenced by healthcare professionals.

Health as defined by the WHO (1948) is the "state of complete physical, mental and social well-being and not merely the absence of disease or infirmity". Health needs are associated with the treatment, management or prevention of an injury or disability, disease, illness, and the care of an individual. However, every individual can have his/her perception of what being

healthy or unhealthy means. When looking at the first pillar, in this population, health issues can be enormous [1, 9,10,11]. Studies have stated that frequent health problems of older slum-dwellers include depression, physical injuries, malnutrition, chronic diseases, and substance abuse [10,12,13,14]. Furthermore, a study in India revealed that social distancing protocols developed during the COVID-19 pandemic were badly implemented in slums, causing higher COVID-19 rates in slums compared to formal settlements [15] mainly because of overcrowding.

Even though these older adults suffer from severe health issues, they seem to make limited use of healthcare services [9, 16-20]. Their perception of health could be a likely influence on healthcare patronage [13, 16]. Additionally, studies show that the poor financial status of slum dwellers, in combination with the lack of healthcare facilities in the proximity could account for this [18-20]. Uneven walkways and decreased mobility of older adults, also limit access to healthcare services [16, 21, 22]. Still, even though health has a large influence on QoL, little research has been done on the health needs of this group of older slum-dwellers.

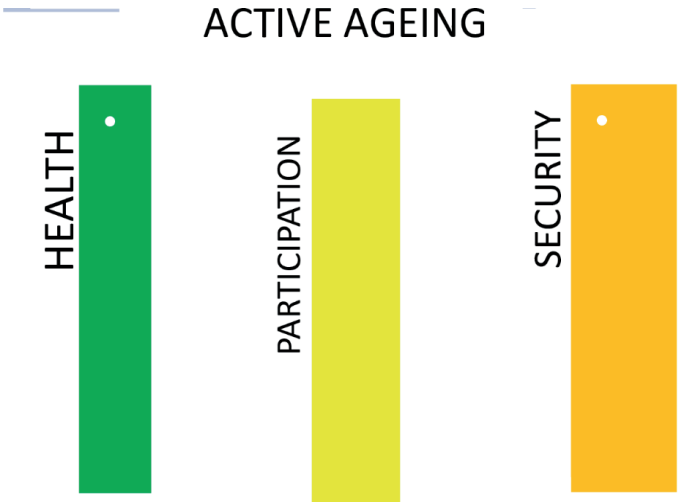

Figure 1: WHO policy framework on Active Ageing

When looking at the second pillar, participation, it appears that the social needs of older people are diverse [22]. Social isolation and loneliness among slum-dwelling older adults can result in a reduction in both mental and physical well-being. Social needs include love,

acceptance, and relationships with family and friends. In satisfying these social needs, it is necessary to identify what is classified as a social need among older slum-dwellers. This is because mutuality is important to meet this need. For example, the older adult wants to feel a sense of belonging and connectedness to a community or neighbourhood. Staying active by joining family events or participating in social activities is particularly cherished in countries in Africa [22, 23] and positively impacts their quality of life [22,24]. In slums in Ghana, recreational centres are rare. Therefore, there are not many options for older slum dwellers to engage in social activities. Also, if older slum-dwellers need social support they mostly rely on family members. However, these may not always be available [24,25]. Unmet social needs may lead to loneliness and social isolation, which may, in turn, cause psychological and physical health problems [24, 26]. These two concepts: health and (social) participation are the motivators of this phenomenological study among older adults in the slums.

When looking at what is known about (unmet) health needs and social needs, studies mostly focus on populations with specific conditions such as mental illnesses, joint pains, hypertension, and diabetes [27-29]. Additionally, studies focus on different settings, such as rural areas [30], and mostly on populations living in developed countries [31]. However, in sub-Saharan Africa, specifically, Ghana, the health, and social needs of older adults in slums have been rarely explored. The uniqueness of this study is that it is from the perspective of older adults living in urban slums. considering the needs and resources available to older adults in rural areas, their counterparts in urban slums may perceive things differently. For example, health facilities may be available but the finances to patronize them is an issue. One study published by Attafuah et al. [32] showed that older adults in slums had a moderate psychological, social, and environmental QoL and a poor physical QoL. Previous studies by the authors on the quality of life of older adults in slums revealed that the health and social needs of this population have not been explored in Ghana. To improve the QoL of this population, it is essential to have, more in-depth information on their (unmet) needs in these domains. Therefore, this study aims to describe the health and social care needs of older adults living in slums and explore how they influence their quality of life.

Methods

Study design

A qualitative exploratory descriptive design was used specifically, Husserl's transcendental phenomenology. This design was chosen as qualitative studies allowed for in-depth exploration of the experiences of the population under consideration [33] and this phenomenological approach constantly assesses the influence of the researcher on the inquiry so that biases and preconceptions are neutralized. Leaning on the constructivism theory as the study sought to understand the subjective reality of what health and social care are and their influence on the quality of life from the view of older adults in slums.

Study setting

This study was performed in two slum communities (i.e., Teshie and Ashaiman) in Ghana: a fishing area and an industrial area respectively in the Greater Accra region. Teshie is a settlement with a dominated population of the Ga tribe while Ashaiman is a mixture of tribes from all over Ghana. Houses in Ashaiman slums are made of containers and wood while those in Teshie usually have mud or cement. Older adults in Teshie will normally live alone in a room but, next door are some family members; however, the same population in Ashaiman living alone have their family in the next town or the rural area. The diversity of these two slums influenced the selection choice as an overall view of the health and social needs of older adults was the goal.

Participants and recruitment

Older adults were selected based on the following criteria: (1) aged at least 60 years (retirement age in Ghana); (2) lived in one of the two slums for at least 1 year; and (3) gave consent to participate. People who were severely ill, e.g., who had no energy to go through the interview session, were excluded from the study. The first author asked participants who had previously participated in a study that examined the quality of life of older adults in slums [32] for this study. Next to this, a snowballing technique was used to recruit the remaining

participants. People who participated in the interview were asked if they knew others who were potentially interested in participation. This technique was most appropriate because of the nature of the slum arrangement [34]. Additionally, it has been widely used in similar settings [35-37]. If an older adult met the eligibility criteria, the purpose of the study was explained, as well as information on confidentiality. The interview was conducted by the first author who has experience in conducting qualitative interviews. Data collection continued until saturation was reached.

Study Instrument

A semi-structured open-ended interview guide was used to collect data from each participant. The guide was developed based on the research questions which stemmed from two pillars of the WHO policy framework on Active Ageing and in consultation with the literature on health (care) and social needs [29-31,38,39]. After developing the first draft of the guide, two qualitative methods experts reviewed the guide and gave suggestions for improvement whereafter the guide was pilot tested among some older adults in another slum with similar characteristics and adjusted. These suggestions were mainly focused on additional probes for the selected topics. Topics in the interview guide included a) the current health situation/experiences of participants; b) their health needs; c) experiences with healthcare personnel at healthcare facilities; d) their social needs; e) their influence on the quality of life in old age; and f) coping strategies adopted to meet their health and social needs. Questions asked were further probed to get more information about participants' responses. In addition, the background characteristics of participants were gathered, including information on gender, age, place of residence and religion. The interview guide was guided by research questions such as:

1. What is the slum-dwelling older adults' perception of health and social care?
2. What are the health and social care needs of slum-dwelling older adults?
3. How do the health needs of slum-dwelling older adults influence their QoL?
4. How do the social needs of slum-dwelling older adults influence their QoL?
5. How do older adults in slums cope with these potentially unmet needs?

Data collection procedure

Data were collected between May and June 2021 in the homes of the participants using face-to-face audio-recorded interviews. The first author, and two trained graduate nurses, fluent in the local languages (Twi and Ga) conducted interviews. The purpose of the study was explained orally and subjects who agreed to participate were given an informed consent form to sign or thumbprint. Interviews were done immediately afterwards, and audio recorded. The interviews lasted between 45 minutes to 1 hour.

Rigour (Trustworthiness)

Analysis was done after the first 3 interviews so that new themes that are seen in the responses can be better probed in subsequent interviews ensuring that emerging themes were better probed in successive interviews. The same interview guide was maintained for all interviews to certify consistency. Detailed field notes were kept which allowed for verification and understanding of responses. Direct verbatim quotes were used to buttress the views of older adults. To ensure confirmability, the audio recording was replayed when reading through transcripts to confirm that the results did not include researcher bias. Additionally, a selected participant who was literate and able to read was contacted with the transcript of her voice recording to ensure what she said had been properly documented. Finally, all recordings, transcriptions, field notes, diaries and literature reviewed were kept on an external drive with the first author at the university only for the audit trail.

Ethical Considerations

Ethical clearance was obtained from the Institutional Review Board of 37 Military Hospital (37MH-IRB IPN 199/2018). Also, permission from the municipal assemblies of the data collection sites was obtained. Additionally, information on voluntary participation and the right to withdraw was shared with all participants. Confidentiality and privacy were guaranteed by keeping the data of participants protected and restricted. No third party had access to the data (as specified above); this was to ensure the confidentiality of participants is protected.

Data Analysis

Analysis was done using the procedure of reflective thematic content analysis where themes were generated both inductively and deductively [40]. Based on Colaizzi's phenomenological approach seven steps were followed during the analysis [59]: 1) The first author played, listened to the audio recordings, and transcribed them verbatim. The transcripts were read several times to help the author familiarize herself with the data and make meaning of the narrations given; 2) Significant statements were noted and extracted to a separate sheet. 3) meanings were made from the statements by assigning preliminary codes to the data to describe its content. The Atlas Ti 9 software was used to manage the data. Each interview transcript was uploaded into Atlas Ti 9 software as separate files for coding. PYAA and MI coded transcripts independently by reading individual sentences critically and allocating words or phrases that captured the meanings of the sentences; 4) patterns or themes were searched for in codes across the different interviews. Similar codes were grouped to form subthemes while similar subthemes were regrouped and refined to construct themes. Codes that fit into the two pillars of the framework for Active ageing were grouped; 5) Review of themes was done to be sure it describes appropriately the perceived health and social care needs of the sample population. The field notes served as an additional context for interpretation in making decisions about the codes and themes; To ensure that the data were well represented, a series of meetings were held to build consensus on the agreed themes and subthemes; 6) the complete structure of themes and subthemes was used to produce the report; 7) Finally, validation of the findings was sought from some research participants to compare the researcher's descriptive results with their experiences. Four main themes and fifteen subthemes emerged from the transcripts (See Table 2). The COnsolidated criteria for REporting Qualitative research (COREQ) were used to guide the reporting of this study [41].

Results

Background Characteristics of Participants

A total of 22 interviews were conducted whereafter saturation was reached. After these 22, three more interviews were performed to conclude that indeed saturation was reached. Overall, 25 participants were interviewed, and fifteen (60%) of them were females. The ages of participants ranged from 60 to 86 years. These are summarized in Table 1a.

Table 1a: Background Characteristics of Participants

Characteristics of participants	Categories	Frequency(n)	Percentage %
Age	60-65	12	48
(years)	66-70	8	32
	71-75	3	12
	76-80	1	4
	>80	1	4
Gender	Male	10	40
	Female	15	60
Religion	Christian	15	60
	Moslem	4	16
	None	6	24
Educational level	Primary	9	36
	Secondary	7	28
	Illiterate	9	36
Marital status	Single/ Never married	3	12
	Married	11	
	Widowed	8	44
	Divorced	3	32
			12
SOURCE OF INCOME	Vocation	6	24
	Trading	7	28
	Family	11	44
	Friends	1	4
LIVING ARRANGEMENTS	Spouse only	1	4
	Family	17	68
	Alone	7	28

Organization of themes

After analysis of transcripts, four main themes were identified: older adults' perception of health, (de)motivators of health service use, challenges of older adults, and coping strategies. Overall, eighteen subthemes were generated from the data. The themes and their corresponding subthemes are presented in Table 2.

Table 2: Generated Themes and sub-themes

Themes	Sub-themes
Older adult's perception of Health	Physical disease conditions
	Mental well-being
	Relationships with people
	Superstition
(De)motivators of health service use	Perceived cause of health condition
	Healthcare providers attitude
	Challenges with the National Health Insurance Scheme (NHIS)
	Effectiveness of medications
	Length of waiting time
	Proximity of major health facilities
Challenges of older adults	Isolation
	Need for assistance with activities of daily living
	Need for financial assistance for basic care
	Sleep deprivation
	Limitation in activities
	Stigma by health workers
Coping strategies	Social support
	Engagement in Religious activities

Older adults' perception of health

An individual's perception of health is an important influence on their QoL. This theme described the views of older adults about what health is, their current health status, and their view on factors that influence it. Participants felt that their health referred to their physical health, disabilities, handicaps, having a sound mind and being at peace with people. They mentioned that the ageing process, and "external powers" influence an individual's health. Some mentioned their current disease conditions either medically or self-diagnosed. Physical disease/medical conditions, mental well-being, relationships with others and superstition were captured as subthemes. These are described below with supporting quotes from participants.

Physical disease conditions

Participants (15) mostly reported having chronic diseases such as hypertension and diabetes meant they did not have good health and were taking medications for these diseases.

"The only challenge I have now is High blood pressure. The last time I went for a check-up was around February… I buy my drugs from the pharmacy here" TOA3

Mental well-being

Participants stated that if you can reason and think normally like everyone then you are healthy. The mental well-being issues described in their view were mainly influenced by old age: forgetfulness, and excessive thinking about death. The majority (22) of the participants said they easily forget and require support in finding their misplaced items when they need them for IADLs. This also hinders their autonomy.

"I easily forget things… with my current state, I just pray for death because I cannot move anywhere always in bed. Is this what growing old is about?" AOA3

A few participants (3), however, said they easily remembered things. One woman specifically mentioned that she was very "smart" in remembering things.

"…me I don't forget things … I am very smart…I easily remember things" TOA1

Participants stated they were usually lost in their thoughts regarding one issue or the other. One participant held grudges from the past with other family members. Other older adults narrated that they think about their age mates and loved ones who had died when alone. They think excessively.

"My daughter (referring to the interviewer), … *I can't help it. I think a lot. To give birth and all your children turn their back on you is not a pleasant experience"* TOA8

Relationships with others

Participants also mentioned that being at peace with people meant you are healthy. In describing their social health, all participants stated they could easily form relationships with others. Most participants expressed gratitude to technology with the development of mobile phones (non-sophisticated) as this enables them to communicate with relatives, even if they live far away.

"They call me, and I also call them, so they don't feel so far away…thanks to the phone" AOA12

Eight (8) participants expressed their religion as an important part of their happiness. They maintained that having a close relationship with the church or another religious body, even after being home-bound due to immobility keeps them cheerful.

"I miss the fellowship with the bigger church. Because of my arthritis, I don't attend church nowadays … But they come to give me communion every month" AOA11

Widowed participants expressed they missed the companionship of their deceased spouses. They expressed that the emptiness created had greatly affected them. They feel lonely and sad as there is nothing to engage in.

"Things have not been the same since my husband passed away… with my knee pains also I can't farm so I rely on my sisters whenever I need something…there's nothing for me to do. I sometimes feel lonely and sad" AOA11

Some female older adults became caregivers of their spouses and could hardly attend any social function.

> *"….my husband is battling with illness and has become bedridden, so I take care of him and the home … I cannot go anywhere … I don't have money to employ anyone to take care of him for me"* AOA4

Superstition

Various participants were under the observation that their current health status was a result of "external powers", and they believed nothing could be changed about their health status. For instance, one participant who experienced a stroke was under the impression that this was the result of a colleague who envied him because he was "the bosses' favourite". Another older adult who experienced a stroke perceived he had been bewitched by his spouse.

> *"I have had a stroke for about 3 years now. They said my blood pressure was up, but I was not aware…I know it was my colleague from work who did this to me"* AOA13

> *"I came back from a work trip and my wife had left with the children. Some days after I developed a stroke. I believe my wife had a hand in it… but I leave her to God"* TOA8

(De) Motivators of health service usage

Participants expressed that their use of health services was influenced by various factors. Some were individual concerns, beliefs in one medication or the other and various challenges with the health sector. Sub-themes that emerged in this topic were 'perceived cause of health condition', 'healthcare providers' attitude', "challenges with the National Health Insurance Scheme (NHIS)", "effectiveness of medications", "the length of waiting time at health facilities", as well as "proximity to major health facilities".

Perceived cause of health conditions

Older adults have varying views on the causes of their diseases. Under this theme, the perception of the health status of older adults contributed to whether they will access healthcare or not. Participants who perceived their current health condition to be because of someone bewitching them did not see it necessary to visit the healthcare facility. They stated that they will not receive a cure for their disease if they go to a hospital, because it is a spiritual battle, not a "science" one.

> *"…I don't go to the hospital also because this was caused by my former wife spiritually so the hospital cannot reverse it…"* TOA8

Others who viewed their health condition to be a result of poor lifestyles and changes in the ageing process will visit a health facility for treatment.

> *"I see when I'm passing stool that I'm sick. I feel very constipated all the time… My feet also hurt when I walk for a while, old age… I plan to visit the hospital"* TOA4

Healthcare providers attitude

Under this theme, participants stated that the attitude of some healthcare providers influenced older adults' usage of healthcare services. participants described some professionals as being nice or friendly, others were rude, and some complained that some were selective in who to be nice to.

> *"They are sometimes nice. At times also they are busy so when I go to the hospital, they may not notice you …"* AOA3

Others felt that health professionals gave preferential treatment to patients they know. Therefore, they rather practice self-medication and not waste their time going to the hospital.

"They do their work and I also watch them. I don't have a friend there, so I wait. Usually, those who know the nurses and doctors are moved ahead fast in the queue" TOA2

Challenges with the National Health Insurance Scheme (NHIS)

Another important factor influencing health services use is issues with the NHIS. Some issues discussed included expired cards, financial difficulties renewing cards, poor services provided to those with valid cards, non-subscription to the NHIS and limited coverage of services provided by the scheme.

Most participants (20 out of 25) did not have a valid National Health Insurance Scheme (NHIS) card due to financial challenges.

"I previously used the card but when it expired, I currently don't have money to renew it…" AOA12

Participants narrated that when they utilised the NHIS card, the standard of services provided was not acceptable. They were also not treated with respect because health professionals felt they were not paying for services.

"When you go with the card, there is no rush to attend to you, they lump us together at one corner and attend to those who pay out of pocket…" AOA9

Some older adults narrated that they have never had an NHIS card. They explained that queues for patients on the NHIS card are usually long and stagnant, so they preferred to seek healthcare from pharmacy shops.

"I have never subscribed to the scheme... I prefer to buy from the pharmacy than to go to the hospital... The queues are too long, and the services provided are poor" TOA7

There were also complaints about NHIS not providing a lot of health services which could have benefitted older adults.

"The health insurance does not cover my physiotherapy… but most of my drugs are covered" AOA3

Effectiveness of medications

Participants had diverse views and beliefs regarding the potency of the medications prescribed.

Some participants felt that conventional medications were not working as expected, and therefore looked for alternative treatments, such as herbal therapies.

"I want to be able to walk well but still nothing is happening that is why I am doing herbal" AOA3

However, this view was not shared by everyone: some participants preferred conventional medications as they viewed herbal medications as not safe.

"I have heard of people who have had reactions and even died after taking herbal preparations. I don't trust herbal medicine…I don't think it is safe" TOA3

The length of waiting time at health facilities

Almost all participants complained they had to wait a long time to be served at the health facility.

"…if I have to go to the hospital, I have to get up very early otherwise I join a long queue and spend the whole day there" TOA2

Proximity to major health facilities

All participants admitted that there was a health facility close by. However, they explained that there was limited health care provision in these centres. For instance, in the Teshie slum, they only provided first aid. Most participants expressed that larger healthcare facilities were situated far away and therefore, transportation is required.

"… the clinic at the centre is hardly active. You only meet people who come for weighing children…but for us the old people we need the bigger hospital which is far from us…" TOA5

Older Adults' Interpretation of social care

Participants expressed that being in good relationships, supported by family and friends, having some assistance with laundry, cooking etc., and receiving financial assistance for their medications and day-to-day needs meant that they cared for them. Sub-themes that emerged in this theme are "good relationships with friends and family", "assistance with Instrumental Activities of Daily Living (IADL)", and "financial assistance for health and basic care".

Good Relationships with friends and family

All participants except one had a good relationship with their family members. Even when not living together, they maintained communication.

> *"We are on good terms. We call each other and meet occasionally at funerals and family meetings"* TOA5

Receiving support with Instrumental Activities of Daily Living (IADL)

Some participants (16) were fortunate to have neighbours and family around who assisted with shopping and washing. They appreciated this and said it took a burden off. They could not imagine having to do everything by themselves.

> *"…my grandchild here helps me wash my clothes and … I send her on errands, so it helps me a lot."* AOA8

Having Financial support

Participants stated that financial assistance from their children and some family members helped them to meet their day-to-day needs. Some relied solely on their children for purchasing medications. When these are not forthcoming, they become very disturbed. Some also sell drinking water so they can save some money for difficult times.

> *"My son always sends money for my medicine. I sell this bottled water here to those who come to the church so that I use the money for myself."* TOA2

Challenges of older adults

Participants narrated that they have challenges with social care as well as health care and these influence their quality of life. They mentioned needs like companionship, financial assistance for their basic needs and assistance with washing, shopping and sometimes cooking. They also stated they had trouble sleeping, and mobility problems, and sometimes they feel stigmatized by health workers. Sub-themes that emerged are isolation, assistance with activities of daily living, and financial support, sleep deprivation, limitation in activities and stigmatization by health workers.

Isolation

Most participants stated that they will love to have people visit them to keep them company. One participant narrated he had been neglected by his wife and children for a long time. Additionally, his extended family members (family members who are not spouses or children) have ignored him as he currently has no money and had problems with his mobility. He feels isolated.

> *"……I was here with my wife and the children before she left with the children…I don't know what she told them, so no one visits me… No one visits me, they only wave at me when going to family meetings…"* TOA8

Assistance with IADLs

Some participants mentioned they were unable to perform instrumental activities of daily living easily usually because of immobility and needed assistance with various tasks, such as mobilising, washing, doing laundry, and going to the market.

> *"I cook food for myself, but I need help, especially with going to the market and washing some clothes… I do get help sometimes"* TOA3

"…I can't do anything for myself, I need to be carried to the washroom and everywhere…" TOA8

Financial assistance for health and basic care

Irrespective of the age of the participants, many of them were still working to be able to financially support themselves. Still, they argued needing financial assistance as well for basic care.

> *"…the sachet water I sell here is not enough to feed and pay medical bills for my husband …if the government will come to our aid, we will be grateful"* AOA15

The study also explored the impact of perceived needs on the QoL of slum-dwelling older adults. Most participants said they encountered sleeping difficulty for one reason or the other. Reasons ranged from noise in the environment, and body pains to missing loved ones and worrying about money for upkeep.

> *"I will say that I struggle to sleep most often because of the noise from the bar opposite. Also, I have pains all over my body…it makes me very dull and sluggish during the day."* AOA6

> *"… I am always thinking about my late husband and my friends who have passed on…my husband was my companion and source of financial support. My life has not been the same since he left last year."* TOA9

A few slum-dwelling older adults explained that mobility problems limited their participation in activities they would have wished to engage in. Others also mentioned that the absence of meeting places for older adults restricted the social activities of older adults in the slums.

> *"I am not able to move about on my own because of the stroke. I used to attend family gatherings but not anymore…and no one visits me"* TOA8

> *"… aside from this big tree, there is no meeting place where we can sit and socialize as older adults. We must always be indoors or sit in front of our house. When it rains, we can't sit under the tree…even the front of this house gets flooded* (laughs)*."* AOA7

Some participants were deterred from visiting health facilities because of perceived stigma and searching for alternate treatment when they were not well.

"…they (health workers) are selective in whom they attend to first. I join long queues and stay for hours in the hospital…I look for other treatment when I am not well." AOA13

Coping Strategies

The theme of coping strategies referred to how older adults managed their socioeconomic and health needs. Participants either supported themselves by engaging in petty trading, or other menial jobs, or relying on others for support. Two subthemes emerged: social support and religious engagements.

Social support

Physical support, financial support, and self-support were themes that emerged from the subtheme 'social support'. Participants mentioned that they received some physical and financial support from family members and friends most of the time. They expressed that because of their ability to develop relationships, they could also rely on people who are not family members to assist with things in the home. However, they also do a few things to support themselves.

Physical support

Participants discussed that they sometimes received support for healthcare, and IADL from their children, good Samaritans, and neighbours. Additionally, extended family members provided updates on family meetings for participants with mobility problems.

"…good Samaritans sometimes pass by to visit but I wash my clothes by myself, and my sisters also help" TOA4

"I am glad my wife is around me because she helps me greatly and I owe it all to her support" TOA10

Financial support

Most participants were not previously formally employed and therefore do not receive pension remittances. Children of older adults were the main supporters of their parent's finances. More than half of the participants reported that their children provided financial support for either food or medications.

> *"My older children usually send me something* (money) *every month for our upkeep. I am not working now because at 71 I am very old"* AOA13

Siblings also gave support for food. Other family members also provide some financial support. Those who lived alone received donations from some family members who visit.

> *"I help my sisters to prepare kenkey* (food made from ground corn) *for sale and they give me food when we are done*" TOA4

> *"I don't work because of my age, and I am not strong enough. … other family people who visit me give me money"* TOA7

Sometimes neighbours also help. Given the uncoordinated arrangements in the slums, the entrance to someone's house is someone's place for selling. These neighbourly sellers also provided financial support for some older participants in the slum.

> *"… my child supports me, but she also goes to work so this lady here selling charcoal comes to my aid and sometimes buys food for me"* TOA8

Self-support

To help meet their financial needs and be engaged, most participants were involved in some form of activity for money for their daily upkeep. Older adults stated that they did not want to burden their children and were reluctant to depend solely on their children for financial and social support.

> *"My children are working and have the means to help but I decide not to be a liability. Even though they will help when I ask, I am also selling. It also keeps me active"* TOA3

> *"I can wash my clothes and cook my food. I buy my ingredients from a woman next door, so I don't need to go to the market. I don't like disturbing people, so I try to do things by myself"* AOA11

Some older adults who live alone explained that they help themselves by working and doing what they can to get money as they often buy food from vendors.

"...I live alone, and this place is not big, so I do everything myself…because I am a driver, I buy food from the station. I only come home to sleep…." AOA14

Religious engagements

Participants relied on religious engagements to relieve sadness, loneliness, and boredom. Religiosity is one major aspect of the life of Ghanaians and most especially older adults.

Some older adults expressed that talking to God minimizes sadness.

"I get sad when I hear my age mates are dying. When I am sad, I chat with God. I pray and discuss a lot of issues with Him" TOA4

Other participants sang hymns to relieve idleness and loneliness.

"I was a chorister, so I sing hymns when I am alone" AOA8

A few older adults explained that reading the Bible and preaching to customers were some religious engagements they employed to cope with boredom.

"If I am to be idle, I engage myself in reading the Bible" TOA1

Discussion

This study aimed at exploring the perceived health and social care needs of older adults in two slums. When comparing responses from the two slums on their views on health and social care needs, they all have similar views. The main variation was in their "financial needs". Most people in the slum close to the industrial area were actively engaged in informal jobs and could have enough money to care for themselves. Almost all the participants who lived alone were also in this slum. So, there is a high probability that they had a low dependency rate therefore they could manage their finances and did not have to rely so much on others.

Perceived health needs were mainly current disease conditions (arthritis, diabetes, hypertension, vision/hearing challenges), challenges with health insurance, the behaviour of some health professionals, the proximity of health facilities, and unnecessary queues at major health facilities. Unmet social needs identified by this study were a sense of neglect by family (need for companionship), requiring assistance with activities of daily living, and the need for financial support. Older adults often had difficulty sleeping as they thought of how to meet their needs and waited on death. Generally, it was observed that there were more perceived health needs than social needs among these older adults. This leads to the question of whether older slum-dwellers perceive health-related needs as more important.

Our study found nine perceived issues related to the health of older adults living in slums: 1) disease condition, 2) mental well-being, 3) relationships with others, 4) attitudes of health care providers, 5) National Health Insurance Scheme (NHIS), 6) effectiveness of medications, 7) proximity to health facilities, 8) superstition and 9) length of waiting time in health care facilities. The themes fit into the two pillars of the WHO policy framework on Active Ageing which was used in the study conceptualisation.

To improve self-perceived healthcare needs, participants mentioned that access to healthcare facilities should be improved by a) having more well-equipped health facilities close to slums, b) reducing waiting time for healthcare services, c) decreasing costs for healthcare use by restructuring the NHIS, d) increasing and improving the services provided under the insurance scheme. Furthermore, how an individual perceives his/her health condition also influences the use of modern health services. An example is that participants who attributed their illness to spiritual powers such as “bewitchment” are not likely to visit modern healthcare facilities for treatment. A reason for this is that in African countries, spirituality is often regarded as an explanation for many occurrences. These findings are consistent with studies in Tanzania [42] and Malawi [43] where bewitchment and spirituality were linked to eclampsia and anaemia. The belief that spirituality influences health status, made participants believe that medications were unable to reverse their health status, influencing healthcare use. Therefore, educating slum dwellers on finding, understanding, appraising, and applying health information to make health-related decisions, also known as health literacy, might improve their self-perceived

health [44]. Health education should take the strong spiritual and religious beliefs of this population into account.

In the slums, as most older adults are low-income earners compared to formal settlement, financial constraint is a major barrier to the utilization of healthcare services among older adults living in slums. This finding is consistent with that of Fayehun, et al. [45], and Cadmus, et al., [46] which were conducted in Nigeria. The findings on the use of the NHIS card, the attitude of health professionals, and the length of waiting time influencing the healthcare use of older adults also agree with findings by Agyemang-Duah, et al. [47] in a rural Ghanaian community. The NHIS is supposed to be free for all older adults above 70 years however this does not seem to be the case. Participants also complained about the poor and inadequate services provided under the NHIS. As most older adults in this study had expired health insurance cards, they often purchase medications from the pharmacy or prepare herbal medications when not well. This confirms a study by Awoke et al., [48] and Amiresmaili, et al., [49] which postulated that possession of health insurance cards influenced the utilization of healthcare services.

In this study, it was also observed that some participants patronized pharmacies and herbal preparations more than the hospitals. The findings also confirm a study in Mumbai by Naydenova, et al. [50] where some participants utilised pharmacies and alternative medications instead of the healthcare facility.

Older adults in this study perceived social care to be having good relationships with family and friends and receiving both physical and fiscal assistance for basic care needs. This is similar to previous studies where participants referred to social care as having support from family and friends, support for self-care and instrumental support (monetary) [55,56,57]. It appears that the unmet social needs among older slum-dwellers were fewer than expected based on the living conditions in the slum. Most participants appreciated social support from family and friends. This finding confirms the quantitative study by Attafuah et al. [32] where the older adults in the slum appeared to have a moderate QoL in the social domain. Findings from this study revealed three social needs 1) companionship; 2) assistance with IADLs; and 3) financial assistance for food and medications. When looking at companionship, most

participants desired the company of friends and family, but they had to make do with phone calls because of distance. One participant felt he had been neglected by family and close friends. When looking at the other factors influencing social needs, most participants argued that they needed assistance with IADL and financial support for basic needs. These were also found by Iriarte, & Jimenez, [51] among ethnic/racial minority groups in Chile. Married men in the current study viewed their wives as their main support system, consistent with findings by Tkatch et al., [52]. According to Iriarte, & Jimenez [51], a caregiver must be healthy to care. However, in our study, some older adults who are not physically fit themselves were caregivers of their spouses because there is no one to take up the role. In agreement with Cash, et al. [53], caregiver responsibility is seen as an expectation in marriage. This perspective additionally supports research on both the benefits of social support and the reciprocity of social support exchanges or being able to both give and receive, as having significant benefits for older adults in slums. According to Akinrolie, et al., [54], the feeling of reciprocity could be the reason why children were the main social support system for older adults. This also affirms the bond between children and parents in the Ghanaian setting despite the breakdown of the extended family system. Another finding was that most participants were currently engaged in menial jobs because as they stated, they did not want to depend too much on their children. This occurs as most slum dwellers are into non-formal employment and hence do not benefit from pensions in their old age. Also because of the high level of illiteracy in the slum, private pension schemes are not widely known.

On the influence of the perceived health and social needs on their QoL, participants mentioned that they had difficulty sleeping because of pain in their joints. Additionally, they have mobility issues, and this restricts participation in activities. At the health facilities, they sometimes feel stigmatized by health workers coupled with feelings of loneliness from family neglect/absence hence they try to keep to themselves. This prevents them from going to health facilities and negatively affects their QoL. Generally, having a good perception of health and social care issues has a positive influence on QoL as stipulated by Ingrand, [58]. Participants who harboured superstitious beliefs about disease conditions do not rate their QoL as good and had issues with everyone around them.

This study also sheds some light on strategies older adults used to cope with unmet needs. It is observed that slum dwellers are better able to cope with unmet social needs than with unmet healthcare needs. Even though some participants expressed a feeling of neglect from family and friends, most older adults were satisfied with the family support received. Firstly, most participants narrated they received some form of support from family and friends to help cope with their health and social needs. Children in the African setting are expected to be the primary social support for their parents. Therefore, for more than half of the participants, children provided financial support for either food or medications for older adults in the slums. Secondly, to cope with unmet social needs, older adults engaged in religious activities such as singing and evangelising to people to form relationships. Religiosity is very prominent in the African setting, and this is therefore not surprising especially in the slums as most participants showed over-reliance on God with hopes for survival and getting a better quality of life. Health education in churches could be emphasized to improve the health and social needs of the populace. Lastly, participants said they supported themselves as much as possible either by engaging in a trade or cooking their meals. This could be attributed to the need to be active and maintain autonomy as they aim to be less dependent on others.

Understanding the perceived health and social needs of older adults living in slums can help health workers in providing appropriate care. The uneven walkways and distance to major health facilities for example can be temporarily managed if health workers especially community health nurses are committed to rendering services at the doorsteps of older adults in the slum. Additionally, policy development can be directed towards providing geriatric services close to slum neighbourhoods.

Strengths and Limitations

To our knowledge, this is the first study exploring the health and social needs from the slum-dwelling older adult's perspective in Africa. Because of the qualitative nature of the study, participants had the opportunity to express themselves freely in their local languages. Varieties in background characteristics between participants were sought to increase the internal generalizability of research results in the slum setting. However, external generalizability may be difficult as additional studies in comparable contexts may reveal new meanings. A

limitation of this study is that there was a lack of privacy when performing the interviews due to the slum setup: other people from the slum setting were often present and listened along. This could have influenced the answers given by participants. Secondly, older adults who were interested in participating received a breakfast package after the interview. This could have also led to selection bias. Nevertheless, the participants in this study provided significant insight into a general perspective of health and social needs that can provide researchers and clinicians with knowledge of what older adults in slums may need to improve and sustain their health. Future research should consider expanding these insights through larger populations of more slums.

Implications

This study underscores the need for improved access to health and social care services for older adults living in slums. Policymakers are advised based on the results of this study, to consider restructuring the NHIS regarding price and services provided under the scheme for older adults. In addition, the provision of well-equipped, older adult-friendly health facilities close to slums will decrease the issues of proximity and waiting time. Religious leaders should be involved in promoting health education activities among their congregations.

Conclusion

Participants discussed more healthcare issues than their social care needs. Health-related issues included their understanding of their health status, health insurance challenges and the attitude of health professionals. Social care needs largely emphasized by most participants related to companionship. This study presents an important understanding of the health and social needs from the perspective of older adults in the slums as this affects their overall quality of life. The provision of formal services such as improved home visits by healthcare professionals can assist in the individual education of older adults on their health needs and how to manage them. Lastly, older adults receive some social support from family and friends, but this is not consistent. Hence the creation of daycare centres for slum-dwelling older adults in nearby communities will enable socialization with peers.

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5

Improving Health and Social care services for slum-dwelling older Adults: Perspectives of health professionals

This chapter is published as:

Attafuah, P. Y. A., Everink, I. H., Lohrmann, C., Abuosi, A. A., & Schols, J. M. (2022). Improving health and social care services for slum-dwelling older adults: Perspectives of health professionals. Frontiers in Public Health, 3649.

CHAPTER 5
PERSPECTIVES OF HEALTH PROFESSIONALS

Abstract

Background: Besides confronting the challenges of a growing older population, developing countries are dealing with limited resources and infrastructure, to ensure good health and social care services. One of these developing countries facing these challenges is Ghana. The healthcare system in Ghana currently does not have specialized geriatric services and is funded through the National Health Insurance Scheme (NHIS), private insurance companies and an out-of-pocket expenditure system. Social care services are important in improving Quality of Life (QoL) as they help in building and strengthening relationships while also keeping slum-dwelling older adults active. There are various challenges with the health and social care of older adults in slums and practical ways to improve these have not been explored among the providers of this care.

Aims: This study, therefore, aimed to explore 1) the views of health professionals on older slum-dwelling adults' health and social care needs, access, and use; and 2) recommendations for improving access to health and social care services among slum-dwelling older adults.

Method: A qualitative exploratory descriptive approach was used among health professionals by conducting a focus group discussion (FGD) and interviews. A semi-structured interview guide was used to collect data from each participant.

Results: A total of 27 participants took part in the study. In the analysis of transcripts, three themes and fourteen subthemes were conceptualized. Financial difficulties, queueing issues, distance to health facilities, health illiteracy and negative attitude of health professionals were identified as some barriers to the utilization of formal healthcare services. Social care services were described as non-existent, not structured, and having limited resources to cater for attendants. The health professionals also provided recommendations for improvement.

Conclusion: Health professionals in this study discussed barriers to access and use of health and social care services. Addressing these barriers is essential to improve the use of formal health and social care services and diminish health inequity among older adults.

CHAPTER 5
PERSPECTIVES OF HEALTH PROFESSIONALS

Introduction

Adequate and sufficient healthcare and social services contribute to the quality of life (QoL) of older individuals and need to be present to promote healthy living [1,2]. Globally, societies are ageing, and this is also the case for developing countries. Besides facing the challenges of a growing older population, developing countries are dealing with limited resources and infrastructure, to ensure good health and social care services. One of these developing countries facing these challenges is Ghana.

Ghana is a lower-middle-income country (according to the World Bank country classifications) with a total population of about 29.6 million inhabitants. Approximately 976,000(3.2%) of the population are older adults (60 years and over). It was projected in 2013, that Ghana's older adult population will reach 2.5 million (7.2%) by 2025 and 6.3 million (11.2%) by 2050. As ageing is often associated with frailty, multimorbidity and handicaps [3,4], many older adults need help and support.

The healthcare system in Ghana currently does not have specialized geriatric services and is funded through the National Health Insurance Scheme (NHIS), private insurance companies and an out-of-pocket expenditure system [5-7]. The NHIS is open to all Ghanaians, and one must be registered to enjoy its benefits. For formal workers, registration in the NHIS is free. Non-formal and private workers must pay a fee for NHIS registration and must renew their membership every year [5-7]. As has been outlined by various authors, this is one of the deficits of the NHIS [8-10]. Many people living in slums are part of this group of non-formal workers. Due to their lack of financial resources, they are often unable to pay the NHIS fee, and therefore, they often lack health care insurance. What also makes healthcare insurance less attractive is that most of the health conditions experienced by older adults are not covered. For example, most cancer treatments, hearing, and optic aids, as well as prostheses and physiotherapy, are not paid for by the NHIS [11,12]. Consequently, many older adults living in Ghanaian slums do not have healthcare insurance. As they are often unable to pay for healthcare themselves, they usually do not receive the required care and support they need and are highly dependent on relatives.

A population in Ghana that are particularly vulnerable to this lack of access to care and support are older adults living in slums. Slums are characterized by uneven walkways, poor

ventilation, improper housing structures, lack of water supply and poor sanitary conditions. As postulated by previous studies, slum environments as mentioned above may negatively impact the health and QoL of older adults [13-16]. Therefore, older slum-dwellers in Ghana represent a particularly vulnerable population, who need adequate formal healthcare services.

However, access and utilization of formal healthcare services for Ghanaian older slum dwellers are problematic. Next to the already mentioned problems related to the insurance scheme, the first reason for this are the financial constraints of older adults in slums. Older adults living in slums used to be either farmers, fishermen or petty traders in their working lives and these professionals do not benefit from any formal pension schemes [9]. Therefore at 60 years and over, they possibly experience financial difficulties if there is no continual financial support from their jobs or relatives.

Largely, the services are not free for older adults below the age of 70 years. Considering that the general life expectancy is 64 years old, there is only a small group (those who live above 70 years), benefiting from these free healthcare services [11]. As stated earlier, the NHIS does not reimburse health facilities for services provided for most health conditions of older adults as it is not part of the insurance package. Therefore, a large group (older adults between 60 and 69 years old) still must pay for services that are not affordable for them [9].

The second reason for the lack of access and utilization is that slums are usually situated rather far away from formal health care services [17,18] and this is also the case in Ghana. As described in a study by Attafuah et al. [19] on the health and social needs of older adults living in slums, participants stated that health facilities are not in the vicinity, making it difficult for patronage. Proximity to formal health care has been reported to be one of the hindrances to healthcare utilization [17,18], not only in Ghana [20,21] but also in other countries like Iran [22]; Dhaka [23] and Indonesia [24].

The third reason is that older slum dwellers are often health-illiterate [25,26]. Health literacy refers to the extent to which these older adults have the skills and available resources to access, recognize, consider, and use health information and services to make informed decisions regarding their health [27]. As Nutbeam[28] explained, health literacy influences an individual's health behaviour and is crucial to empowerment and a good QoL [29-31]. The health literacy of older adults in slums is mostly very poor, which makes older adults' resort

to spiritual healing. As described by Attafuah et al.,[19] most older adults living in Ghanaian slums trust traditional medicine more than evidence-based practices provided by formal care services.

The last reason for the lack of healthcare use is older adults argue that it seems as if health professionals in Ghana, often have a bad attitude towards older adults [19,32]. Not giving priority to older adults, not addressing them politely, and talking harshly to them were some bad attitudes and behaviour mentioned by slum-dwelling older adults. All these factors taken together influence the access and use of health services by older slum dwellers negatively [32, 21,22, 33]. Therefore, it is important to see how the healthcare needs of the older slum dwellers can be met more appropriately, and how access to care can be improved.

Besides looking at the use of and access to healthcare services, it is also important for slum-dwelling older adults to be able to use social services. Social services such as counselling, health education, interaction with peers, and engaging in mind development games are important and meaningful for older adults and could be provided at a centre in the community. Social care services are important in improving QoL as it helps in building and strengthening relationships while also keeping slum-dwelling older adults active. However, social services are few to non-existent in slums in Ghana [34,35]. A few day-care centres have been opened in some parts of Accra, the capital city. However, the fees that must be paid to make use of these services are not affordable to older adults in the slums.

A previous study by Attafuah et.al.,[19], showed older slum-dwelling adults' perceptions of their health and social needs. Following up on that study, this study is seeking the views of professional caregivers regarding the current and future access to health and social care services of these older adults.

This study, therefore, aimed to explore 1) the views of health professionals on older slum-dwelling adults' health and social care access and use; and 2) recommendations for improving access to health and social care services among slum-dwelling older adults.

Method

Study design

This study used a qualitative exploratory descriptive approach by conducting a focus group discussion (FGD) and interviews.

Study Setting

Two private care homes and two hospitals located close to slums in Accra were purposively selected for this study. The care homes were chosen because of the social services they provide to possibly meet the social care needs of slum-dwelling older adults. The hospitals are the main providers of formal healthcare in the region.

Care homes in Ghana provide day care services for older adults, for instance when relatives are going to work. Professionals working in these care homes are managers, registered general nurses, social care workers and health care assistants. They mostly provide services at home i.e., community-based where they keep the older adult company and assist in laundry and cooking among others. They rarely offer in-house residency services. With in-house daycare services, older adults gather for social activities, such as Christmas parties, indoor games on holidays and health talks.

The hospitals are both district hospitals with a 50-60 bed capacity. There are no specialized geriatric units in either hospital, but they provide medical and surgical services to older adult patients. Professionals working here include general nurses, community health nurses, public health nurses, midwives, and medical doctors. General nurses are usually in the outpatient department and the admission wards while the community and public health nurses carry out home visits to older adults in slums within the communities. Sometimes these home visits are conducted based on referrals from the general nurses.

Participants

To be included in this study, the following inclusion criteria were used: 1) being a registered general nurse, a community health nurse, a social worker, or a nurse manager; 2) being employed in one of the four health care facilities selected for this study; 3) having at least one year of working experience in their respective health professions, and 4) having cared for at

least one slum-dwelling older adult. Additionally, participants should be able to communicate in English or Twi (a local Ghanaian language). Registered midwives were excluded.

Recruitment

To recruit participants, the first author PYAA contacted hospital managers by telephone to ask if they had staff members who were eligible according to the inclusion criteria. If this was the case, PYAA received telephone numbers to contact these staff members. The contact details of care home providers were taken from the internet. The managers recruited other health professionals from their facilities for the study. The invited professionals were contacted in person, via telephone, and met at a date and time convenient for the professionals for the interview. After informed consent was given, an appointment was made for an interview. Interviews were held either at the facility or in the community.

Study Instrument

A semi-structured discussion/interview guide was used to collect data from each participant. The interview questions were classified into two sections: the first section focused on personal and professional information such as the participant's age, sex, work position, and work experience; and the second section was designed by the authors, based on literature to explore health professionals' views on slum-dwelling older adults' access to health and social care, facilitators and barriers of care and recommendations on ways of improving healthcare and social services of these older adults. Questions in the discussion/interview guide included: 1) how do you perceive the current health and social services of slum-dwelling older people? 2) How would you describe older adults living in slums' accessibility and use of hospital services/community care services/ access to aged care services? 3) What social care services are available in and around Teshie and Madina? 4) How can accessibility and usage of health and social care services among slum-dwelling older adults be improved? During the discussion/interview, additional open-ended questions were asked to enable a deeper exploration of the issues. Participants were made to further describe their responses and obtain additional data using probing questions [36,37]. The guide was developed following the objectives of the study and the results of a previous study by the authors [19]. Expert consultations were done with IHJE, JMGAS, and CL to ensure that the interview guide reflected the objectives of this study. The interview guide was pretested on two health

professionals (a community health nurse and a general nurse) in a district hospital in the Greater Accra region to identify ambiguous questions and clarify them. This ensured the content validity of the interview guide. There was no need to change any questions after the pre-test. Participants involved in pretesting were not included in the final analysis of the data.

Data collection procedure

Data were collected between March and April 2022 using face-to-face audio-recorded interviews and one focus group discussion (FGD), all led by PYAA and supported by a research assistant, who tape-recorded the discussions/interview for between 50 minutes and one hour. Only one FGD was done because, during the initial FGD, it was observed by the researchers that some participants felt intimidated by their senior colleagues for fear of victimization despite reassurances from the interviewer. Also, it was very difficult to get most categories of health professionals at the same time for a discussion. Individual interviews were the preferred option in most facilities.

At the start of the interview, the purpose of the study was explained orally and participants who agreed to participate were given an informed consent form to sign. The interviews were carried out in private offices at the health centre or aged care centre. For interviews with community health nurses, interviews were carried out in the hospital or their Community Health Planning and Services (CHPS) zones. Two interviews were conducted in Twi mixed with English as the participants jokingly said they don't understand some of the questions if stated in English. The rigour of the data collection process was ensured throughout the conduct of interviews and FGD. The credibility of participants was established through the method and analyst triangulation.

Ethical Considerations

Ethical clearance (No.37MH-IRB IPN 29/2022) was obtained from the Institutional Review Board of the 37 Military Hospital. Also, permission from the municipal assemblies of the study sites was obtained. Informed consent from individuals was sought. Additionally, information on voluntary participation and the right to withdraw from the study at any point were shared with all participants. Confidentiality and privacy were guaranteed as pseudonyms were used. Anonymity was maintained by assigning participants with special codes and confidentiality was also maintained by making sure all audio tapes, transcribed data, field notes, and

documented information given by the participants were stored and data encrypted. Access to the data is restricted to the research team alone.

Data management, analysis, and reporting

Interviews and discussions were transcribed verbatim by a research assistant and proofread by the first author to ensure the accuracy of the accounts of the health professionals thereby enhancing the reliability of the findings. Data analysis took place after the first author checked the audio recording and transcriptions. The data were processed using Atlas Ti version 9. A reflexive thematic analysis procedure from the critical realist and constructionist points of view was followed for the analyses of the data. Critical realists believe there is a reason why slum-dwelling older adults (from [19]) expressed varying perceptions about health professionals based on their observations. Only health professionals can explain the "real" reason. Hence an interaction with health professionals themselves will better explain their actions as observed by the slum-dwelling older adults and provide recommendations to curtail them. Taking the critical constructionist view was to critically identify various ways of improving health and social care services through a discourse with the health professionals.

The first author familiarized herself with the data by listening to the audio and reading the transcribed data. Following the transcription, two experts who were fluent in both the local language (Twi) and English languages translated those transcribed Twi interviews to English adhering to the "back-to-back" translation rule. This ensured the preservation of the content and meaning of the data. Next, the transcripts were methodically coded by the first author, after which, the codes were organized under deducted themes. The consolidated criteria for reporting qualitative research (COREQ) were followed for this report [38].

Results

Background characteristics

A total of 27 participants took part in the study. Table 1 shows the distribution of age, gender, professional role, work experience, job title and qualification of participants in the study. The age of participants ranged between 23 and 63 years, of whom half were between 25 and 34 years of age. Most participants were female (n=25), which reflects the current predominance of female health professionals in Ghana. The professional experience of

participants ranged from 2 years to 35 years and most participants had worked for more than 8 years (n=20).

Table 1: Background Characteristics of Participants

Characteristic	Frequency
Age group (years)	
30-35	6
36-40	4
41-45	8
46-50	3
51 and above	6
Total	**27**
Gender	
Male	2
Female	25
Total	**27**
Work experience (years)	
<5	3
5-10	10
>10	14
Total	**27**
Professional category	
General nurse	8
Community health nurse	11
Public health nurse	5
Social worker	2
Nurse manager	1
Total	**27**

All interviews lasted between 50 minutes and 1 hour. Data saturation was reached after one FGD with 10 participants and 17 individual interviews (as described in the methods section, the FGD appeared to not be the best method to get an in-depth understanding of the theme and therefore individual interviews were performed). In the analysis, three themes and fourteen subthemes were conceptualized. This process is detailed in Figure 1 below.

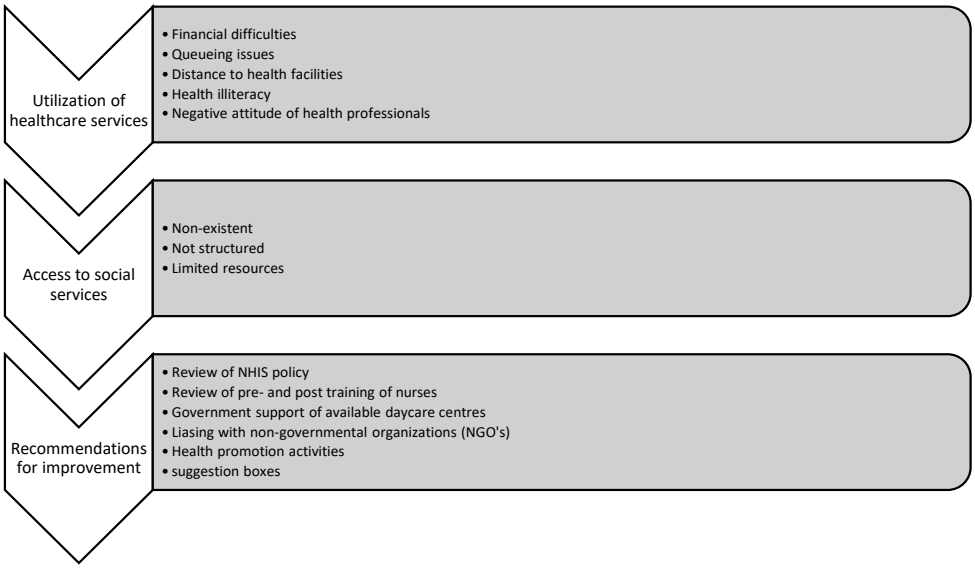

Figure 1: Chart showing themes and subthemes.

Utilization of healthcare services

Participants discussed their perspectives on the reasons for the under-utilization of healthcare services among older adults living in slums. From these discussions, five themes emerged. The theme most often mentioned (by all 27 participants) was "financial difficulties". This was followed by "queues" (n=25), "health illiteracy" (n=24) and "unwelcoming health professionals" (n=20; mostly nurses). Lastly, the "proximity of health facilities" to the slums was mentioned by some participants as a factor influencing the utilization of healthcare services. Below, the themes are described in more detail, including supporting quotes.

Financial difficulties

Health professionals mentioned that most slum-dwelling older adults face financial challenges and are not able to access health facilities for this reason. They explained that although some older adults have registered with the National Health Insurance Scheme (NHIS), most do not have an active card or are not registered at all. Besides, even with an NHIS registration, additional payments must be made. The narratives of 2 participants exemplify the theme of 'financial difficulties'.

"… They pay for some of the services they receive at the hospital even with the introduction of the NHIS Card and this should not be. They are suffering especially financially…" (PHN2)

"Most of them do not have health insurance. … so, they find it difficult going to the hospital because they must make payment for everything" (CHN11)

Queues

Participants mentioned long waiting times at the health facility as an important reason for not accessing healthcare services. Professionals argued that the processes patients go through before seeing the doctor can be stressful for older adults. Because there are no special units for older adults, they are seen by the same doctors attending to the younger adults. Participants who work in the hospital said they sometimes select the patients and create a different queue for older adults although not every health professional does this.

"…when they come to the facility, they have to go to records first and search for their folders (Patients records) *and it takes a long time before they come to have a physical assessment done and then be seen by a doctor… the process is tedious for them…"* (RGN 4)

"Although there are no special units for old people, we sometimes separate them from the young ones to minimize the waiting time…" (RGN 1)

Health illiteracy

Participants discussed that not every old slum-dwelling adult was illiterate. However, health illiteracy remains a problem which influences the use of formal health services. Participants observed that most older adults in the slums attribute every ill health to spiritual factors and will not usually use formal care services. They argued to see that some older adults receive medication from the hospital but do not adhere to the treatment regimen because of preferences for herbal preparation.

"I cannot vividly say yes, and I cannot say no, … in the setting in which we live, superstition supersedes a lot of things… most of them will rather use herbal medicine…" (CHN 9)

Unwelcoming health professionals

Health professionals mentioned their attitude towards older slum-dwellers. They stated that older adults from slums were not treated with a lot of respect. Nurses were the health professionals mostly accused. Participants attributed the unwelcoming nature of most nurses to work challenges as well as personal problems.

"Well, I can say that during our training we did not receive much education on caring for older adults. So, the skills in attending to older adults may be missing… Also, especially at the OPD (Outpatient Department), *the patients can be many whilst staff on duty are few so they may be overwhelmed…"* (RGN 6)

"Our attitude … it's zero I won't even say one because if an old lady comes to the hospital and you being the health worker, for example, cannot give the older person priority care, … some of our people (nurses) are very rude. We all have our frustrations, but you should not displace them on the poor old patient… So, for our attitude, it is nothing to write home about" (RGN 2)

The proximity of health facilities

Health professionals reported that poor quality of roads and uneven walkways, as well as the distance from the slum to the health facility influence utilization of health facilities.

"The poor road network and many untarred roads in the slums predispose the old people to falls so they would not be comfortable walking. Also, the place is far but there is no money for transportation. So, they stay at home and combine herbal mixtures till the complications begin to surface" (CHN 9)

Access to social services: non-existent, unstructured, limited resources

Under the main theme 'access to social services', three subthemes emerged: social services being non-existent, social services being unstructured, and limited resources in available services to cater for all older adults in nearby slum communities.

Most health professionals (n=24) mentioned that social care services were non-existent in the slum communities nearby.

"A recreational place for old people? I have not heard of any around here…in the slums, everyone is thinking about the children (playground) and the government has not set up anything for the old people" (PHN 5)

A few health professionals (n=3) described a social care service but also described that this service did not have a guiding structure (schedule).

"There is a big tree in the community across the street. I know the old people go and sit there and have conversations. Sometimes we (nurses) *gather them* (old people) *and give them a health talk. But they don't have any structured organization for their activities…"* (CHN 8)

Participants from the aged care centres stated that even though they provided some social care services such as local indoor games, health screening and health education to older adults from slum communities, resources were not available to make them freely and widely accessible.

"In our place, we accept the old people within the vicinity three times a week. We give them health talks, engage them in local games like Ludu and Oware (local games with dice and pebbles) *and sometimes we allow them to tell stories. We feed them breakfast and lunch provided by benevolent people… However, because of the limited resources, we cannot transport people to the centre so only the few who are nearby will attend…it's sad"* (SW2)

Recommendations for improvement

Under the main theme recommendations for improvement, six subthemes were identified: 1) review of NHIS policy, 2) review of pre-and post-training of nurses 3) government support with available day-care centres, 4) liaising with non-governmental organizations (NGOs), 5) health promotion activities, and 6) placement of suggestion boxes around health facilities.

Review of NHIS policy

All participants suggested a review of the NHIS policy to make healthcare free for people 60 years and above. They also stated that including treatment for more disease conditions common among the aged population is essential.

"The NHIS policy should be reviewed if we want to improve the health and overall QoL of our older people especially those in the slums. They don't have the money so at least if they are registered free with no renewal costs, it will be a big relief! … they should also review the health conditions covered by the NHIS to include diseases of old people …" (CHN 9)

Review of pre-and post-training of nurses

All nurses in this study spoke about the current training of nurses and lamented that a lot of nurses are being trained, but the quality of professionalism among nurses is questionable because of their approach to health care. They added that training should result in intrinsic motivation and a professional attitude to care for older adults.

"The best way to curb and improve on this [unwelcoming/unfriendly professionals] *is to encourage students in our various nursing training institutions to have the desire to care for people and also make gerontology an interesting course for nursing students to appreciate…"* (NM1)

"Training students on not stigmatizing old people will possibly improve their attitude when they start practising. Having regular workshops, post-training, on avoiding discriminatory actions towards old people in the slums may perhaps help" (RGN 3)

Government supporting available day care centres.

Participants who were from the aged care centres advocated for governmental support so that services can spread to a wider catchment area.

"…Yes, we are trying our best with the little resources…if the government can factor us in their budget planning and help us financially, there will also be enough to care for older adults in the slums. A bus to transport people will be appreciated also…" (SW 1)

Liaising with non-governmental organizations (NGOs)

Health professionals also suggested that NGOs and private individuals should collaborate and set up centres in communities to provide social services.

"…in the demarcated constituencies in every region, at least there should be one centre where social services can be provided for old people. Just like playgrounds have been set up for the children, NGOs can also do something for the old people in the slum communities…." (PHN 3)

Health promotion activities

All participants expressed that health promotion activities and free health screening to prevent and detect any health issues should be held frequently in the slums for older adults and their informal caregivers. They hoped that doing this will improve the health literacy of the slum-dwelling older adult while bringing health services to the doorsteps as the hospitals are far and the roads are not the best for the older adults. The narrative below by RGN 6 summarizes the perspective of all participants.

"…I will say that if we carry out health education and health promotion activities more often in the slums, we can improve the health literacy of the older adults…and also get closer to them..." (RGN 6)

Suggestion boxes

Some health professionals working in the 2 hospitals suggested placing suggestion boxes in the compound of health facilities which should be regularly checked for patient complaints, especially regarding staff attitude.

"Suggestion boxes at vantage places will also be very helpful. Now it is compulsory to wear your name tag on duty so patients can easily identify us. Now patients can name health professionals who are rude and unprofessional … so that authorities can take appropriate action..." (RGN 4)

Discussion

Previous studies have indicated general barriers to health care services however this study specifically focused on barriers for older slum-dwellers. This study explored the views of health professionals on the access to and use of health and social care services among older slum-dwelling adults and their recommendations for improvement. The participants in the study stated that slum-dwelling older adults' access to, and use of health and social care services was influenced by financial barriers, queues to access care services, the attitude of health professionals, long distance to health facilities, health illiteracy, and unavailability of formal social care services. All healthcare professionals interviewed commented that healthcare and social services for older adults need improvement. The general recommendations for improving health and social care services for older adults in slums that emerged from this study were: 1) review of NHIS policy to include free healthcare for adults aged 60 years and above; 2) review of pre-and post-training of nurses on geriatrics; 3) government support for day care centres for older adults; 4) liaising with non-governmental organizations (NGO's) to provide formal social care services and free registration of the health insurance; 5) health promotion activities by health professionals in slum communities; 6)provision of suggestion boxes around health facilities for compliments and complains.

The barriers to health care (financial challenges, health illiteracy, long distances to services, long waiting times in healthcare facilities and poor attitude of health professionals) described by participants in this study are not new, as they were also found in earlier studies performed in Ghana mentioned by Braimah, and Rosenberg [39], and Wuaku, et.al., [40]; in India by [41], and in Thailand by Jirathananuwat [42].

Health professionals in this study stated that older adults in Ghanaian slums were aware they needed to pay for their health insurance cards as well as yearly renewals, but that they were financially unable to do so. This finding agrees with a study by Amiresmaili, et.al, [22] in Iran (which is comparable to Ghana as it is an emerging lower-middle-income country), where lack of financial support was a major barrier because of the low economic status of the slum-

dwelling older adult in Ghana. As postulated by Amiresmaili, et.al., [22] reducing financial and non-financial barriers to accessing healthcare is likely to encourage the utilization of healthcare services. Recommendations of health professionals in this study regarding a review of the current NHIS policy (to ensure free healthcare for older adults 60 years and above instead of the current age range of 70years and over) resonate with previous studies in Africa which suggested that better insurance coverage improved access and use of healthcare services [18, 39, 40,43].

From the focus group discussion, it emerged that the poor attitude of health professionals is also a barrier to the utilization of healthcare services by older adults in slums. Wang, et al., [44] in their study of attitudes of Community health professionals also reported negative attitudes towards dementia patients which affected healthcare use in Changsha, China. This confirms a scoping study on low- and middle-income countries by Sarikhani, et al., [45] which suggested that attitudinal barriers affect the utilization of healthcare services. Health professionals in this study recommended a review of the pre-and post-training of nurses to improve their attitude towards older adults in slums and make them more welcoming. This agrees with the recommendation by Wang, et al.,[44] that providing opportunities for education and training will be beneficial in improving the attitude of community health professionals and with more recent studies by Amsalu, et.al. [46] in Ethiopia; Tsiga-Ahmed, et al., [47] in Nigeria and Tavares, et al., [48] in Portugal.

Queueing at health facilities by older slum-dwellers was cited as a barrier to healthcare service access and use. This confirms previous studies by Oche, et al., [49]; Chauhan, and Saxena, [41] and Naz, et al., [50] from Nigeria, India, and Pakistan respectively. From these studies, older adults resorted to self-medication from pharmacies as this was an easier option compared to visiting the hospital. In more developed countries options for telehealth are being explored [51] but considering the literacy and economic level of older adults in Ghanaian slums, this will be a difficult initiative (but not impossible) to implement in this setting.

Lastly, the literature suggests that social care provided by family members is commonly seen in most African countries [52-54], moreover, from this study, formal social care services appeared to be next to non-existent [35, 55-57].

Strengths and Limitations

A strength is that this study is the first of its kind which has explored the views of health professionals on improving health and social care services for slum-dwelling older adults in Ghana. The findings of this study can be used to guide the design and formulation of policies that aim at removing barriers to formal health and social care use among older adults in Ghanaian slums. A possible limitation of this study is the absence of physicians/medical doctors and other health professionals from the participants. These professionals were approached but they declined, stating they were unavailable or uninterested. Therefore, it is recommended for future studies think of incentives that would make medical doctors and other health professionals interested to participate in such studies. Additionally, having a small number of participants from social services is a limitation, which makes external generalizability limited. Future studies should include more social workers as participants to provide more suggestions for better interventions to meet the social care needs of older adults in slums.

Implications for practice

This study stresses the need for health professionals in Ghana to change their attitude towards slum-dwelling older adults, which might be achieved through regular post-training workshops at the health facilities. Additionally, as health illiteracy is a contributing factor to low accessibility and use of healthcare services, this study encourages community and public health nurses to conduct activities aimed at improving health literacy among older adults in slums. A method could be health education at durbars in the communities or home visits to the older adults to interact with them. Lastly, health professionals in this study, are advocating for the government to support available day-care centres in Ghana to provide resources for the provision of social care services in these centres.

Implications for further research

Based on the results of this study, future research should focus on what social care services could improve the quality of life for slum-dwelling older adults. It is recommended to involve more social workers in these studies. Additionally, recommendations are made for

interventional studies to see if some of the practical strategies suggested in this study, can indeed remove some of the barriers intended to address. An example could be the post-training of nurses to address attitudinal barriers or health screening and health education to improve health literacy among older adults in slums. Lastly, similar studies can be replicated in other big regions of the country to ascertain any differences or similarities in the findings.

Conclusion

This study found barriers to health and social care access and use among slum-dwelling older adults, according to the perspective of health professionals. Addressing these barriers is essential to diminish the negative influence on their utilization of formal health and social care services and health inequity. Furthermore, the health professionals participating in this study suggested practical strategies to overcome these barriers, such as providing free healthcare for adults 60 years and over as well as ensuring a positive attitude of health professionals. It is hoped that these recommendations if adhered to, will improve the health and social care which is given to older adults.

Additionally, slum reforms and policymakers can implement these recommendations to help meet the health and social needs of older adults in slums. To be able to reach the goal of the Universal Health Coverage policy [12, 58] of "ensuring that all people have access to needed, quality health services without suffering financial hardship", Ghana needs to aim at improved healthcare for its population.

Ethical Approval and Consent to participate

Ethical approval (No.37MH-IRB IPN 29/2022) was obtained from the Institutional Review Board of the 37 Military Hospital. The purpose of the study was explained orally and participants who agreed to participate gave consent.

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6

‘I decided to attend to him because it’s my duty’: Student Nurses Perception and attitude towards care of older Adults

This chapter is published as:

Attafuah, P. Y. A., Amertil, N., Sarfo, J. O., Deegbe, D. A., Nyonator, D., Amponsah-Boama, C., & Abuosi, A. A. (2022). ‘I decided to attend to him because it’s my duty’: Student Nurses perception and attitude towards care of older adults. BMC medical education, 22(1), 23.

CHAPTER 6
STUDENT NURSES PERCEPTION AND ATTITUDE

Abstract

Background: Nurses' perceptions and attitudes towards an older patient can positively or negatively influence the quality rendered. As students under training, the views of this population need to be sought and shaped to improve the quality of care the older patients receive. This is because life expectancy is on the rise. The study aimed to explore students' perception of ageing and their attitude towards care of the older adults.

Methods: An exploratory descriptive design was used. Data form containing the sociodemographic attributes of the students and a semi-structured interview form developed by the researchers in line with the literature. The participants interviewed were student nurses who had been in clinical practice for at least one semester. Four focus group discussions (FGD) were held.

Results: Average age of the participants was 22.30 years. An equal number of males and females (15 each) were recruited to have a balance in gender. Students expressed that they saw the older adults as their grandparents, so they try to accord them respect and care. However, older adults are perceived as not receptive to nurses in training. The students stated that registered nurses neglected the basic care of older adults such as diaper changes, bathing, and feeding, and would rather beckon student nurses to attend to the older adults.

Conclusion: Gerontology as a stand-alone course is necessary for early years of training to give an in-depth education to nursing students and instil a positive attitude towards older adult patients.

CHAPTER 6
STUDENT NURSES PERCEPTION AND ATTITUDE

Introduction

Nursing education and practice complement each other to improve the care rendered to patients. Student nurses receive training to take care of the sick in various practice settings. Geriatric care is one of these settings. People worldwide are managing their health to live longer. Globally, the aged population is increasing daily because of improved technology and diverse ways of sharing information [1-4]. The UN [25] defined older persons as people 60 years and over. Additionally, the age range for defining an older adult in Ghana is 60 years because that is the stipulated age for retirement. Nonetheless, increasing age comes with an increased probability of various health conditions because of the degeneration of body systems. With the increased life expectancy [2,4] the care of older adults is prone to be a challenge [5] in the future if steps are not taken to put solutions in place.

Currently, the care of older adult patients in Ghana is not in separate units like the paediatrics unit. They are seen together with the adults and youth in the general wards. Studies have shown that nurses with specialist training are better equipped to render care to patients [6-7]. Looking at the curriculum of most nursing schools, gerontology is usually not a stand-alone course [4,8,9] but students are expected to learn it in their medical-surgical nursing classes. Hence, training or education of student nurses regarding the care of older adults is an area that is not taught in-depth [10-13]. With the rising number of geriatrics [4,15,16,], it is expected that nurses will be given the requisite skills to cater for them [5,8].

In Africa, older adults are respected because of the culture of society. Titles especially for older adults are very necessary and not calling an individual with the appropriate title is perceived as a sign of disrespect. The attitude of student nurses towards caring for older adults needs to be examined and shaped, to meet the ideals of culture [8,17]. Studies, which showed negative attitudes of student nurses towards the care of older adults, have been carried out in various countries [18], while others also documented positive attitudes [5,17,19]. A study by Rathnayake et.al. [4], showed an almost 50-50 (49-44) ratio between those with positive attitudes and those with negative attitudes.

Faronbi, et.al., [14] reported a positive attitude among student nurses towards older adults in a study in Nigeria. They however recommended a qualitative study to explore the perception and attitudes of these students. It is reported that students over the years prefer to work in

general adult wards and paediatric wards at the expense of older adults [4,8,9]. It is disturbing that the older adult population is growing but interest in the attitude of health personal towards this group is not rising simultaneously. The quality of nursing care the older adult patients will receive is highly reliant on the training of today's student nurses. Student nurses have had contact with older patients, and it is necessary to assess their perception of older adults' care as well as their attitude towards care of the older adults. The authors also sought to identify any students with an interest in career progression in the field of geriatrics.

Method

Study design

An exploratory descriptive design was used. This enables researchers to explain a phenomenon from the perspective of the individuals being studied (student nurses) in their natural setting (the university).

Study Procedure, Participants and Recruitment

This is a qualitative study using an exploratory descriptive design, conducted among nursing students, who have had exposure to the clinical setting. The study was carried out at a private university in Ghana. A semi-structured interview guide was developed using questions from Kogans' Attitudes Toward Old People scale [19] to guide the focus of the research. Data forms containing the sociodemographic attributes of the students and a semi-structured interview guide were developed by the researchers in line with the literature. Eligibility was for all students who had experienced at least a semester of clinical attachment. Class leaders recruited participants, and those who volunteered were given appointments by the first author per available slots.

Participants were informed that they will be recorded however, they do not need to use real names for anonymity. Verbal consent was given, and they were permitted to withdraw if they so wish. Four focus group interviews were conducted in this study. Each group was made up of five participants. Although this group size has been criticised by Merton, Fiske, and Kendall [26] as small, Greenbaum [27] justifies this number as a mini group. Nonetheless, Kitzinger

Kitzinger & Barbour [28] and Twinn [29] suggest four to eight and four to five respectively is an ideal size as it allows for increased interaction among group members.

Each interview lasted for 30-45 minutes. Focus group discussions were held in an appropriate room in the university. Before beginning the focus group discussions, participants gathered in a room and were seated around a table facing the interviewer, and the aim of the study was explained to them. Participants were assigned a pseudonym to be used instead of their actual names and all discussions were tape-recorded.

Ethical Considerations

Ethics approval and consent to participate: All methods were carried out following relevant guidelines and regulations. All experimental protocols were approved by Dodowa Health Review Centre (DHRCIRB/73/03/19) and the School of Nursing, Valley View University. confirming that subjects. Informed consent was obtained from all participants to be involved in this study.

Analysis

Content analysis data was carried out alongside data collection. Verbatim transcription of interviews was done and read severally to precisely comprehend the views of student nurses by two independent coders. First, codes were allocated to meaningful portions after getting the core of the data. Similar codes were carefully assembled to form subthemes and subsequently, themes. Differences in coding or cataloguing were discussed by the two researchers until an agreement was reached. The researchers deliberated on the themes generated and ensured that the data were free of personal biases. The themes were then put under the various objectives set for the study; “perception of older adults”, “attitudes towards older adults” and “interest in career progression as a geriatric nurse”. The data was finally exported to NVivo version 11 which was used to manage the data. Thick verbatim quotations were also used to support the findings of the study which revealed the perception and attitudes of student nurses when caring for older adults.

Results

Socio-Demographic Characteristics

The average age of the participants was 22.30 years. An equal number (15) of males and females were recruited to have a balance in gender. They were all undergraduate students who have had at least one semester of clinical interaction. There were five each from levels 100 and 200 and twenty from level 400, which is the final year. Level 300 students were not on campus during the time of the interview.

Three main themes and six subthemes that emerged from the analysed data of this study are presented in Table 1.

Table 1: Themes, subthemes, and codes

Themes	Subthemes	Sample codes
Perception	Perception of the ageing concept	chronological age, physical appearance, activity level
	Perception of problems of older adult patients	excessive complaints, communication issues, grieving, depression, loneliness, domineering, overly dependent, forgetfulness, poor gait
Attitude	Attitude towards care of older adults	Grandparents, Opportunity to learn,
	Perception of the attitude of registered nurses	Patients, Duty.
		Kind, patient,
		Humble, rude, neglect
Career progression	Career progression into geriatric nursing needs	Knowledge and Skills
		Patience
		Maybe, Not all,
	Desire to progress into geriatric nursing	Definitely,

Perception

This theme describes the students' opinions about the concept of ageing and the perceived problems of older adults. Participants narrated their views on who they referred to as an older adult and some problems they feel older adults' experience. An individual's physique and age contribute to influencing how student nurses identify as older adults.

Perception of the ageing concept

According to participants, the chronological age, physical appearance, the activity level of an individual determines if they belong to the older adult category or not.

"As you age, you become weaker, there is a change in appearance and usually around 60+" FGD2, K2

"I think it is dependent on how active the person is. Someone can be 70 years and still be active more than someone who is 55" FGD3, K3

Perception of problems of older adults

Students narrated what they had observed as problems of older patients they nursed.

"They didn't understand why a young person should be taking care of them. Often made statements like: a small girl like you can you nurse me?" FGD2, A2

"When I was about nursing him, he said he would like the staff nurses to nurse him. With no reason" FGD3, AK

Participants also identified communication as a problem for older adults.

"…either they did not understand the expressions of the student, or they talked too much or just would not talk at all (not because they were unable to but just didn't want to). And the woman was very interesting. She was good at conversation." FGD3, K3

Additionally, the older adults were observed to be depressed and lonely.

"79 years old, he didn't understand why we were bothering ourselves to nurse him. …felt we (student nurses) *should leave him to die and didn't want to cooperate with any procedure"* FGD2, KW2

"I nursed a patient who was always sad… They start their grieving very early" FGD4, NU

Furthermore, they observed that some older persons struggle with shyness.

"It is difficult for them to cooperate when we are attending to them … They are either shy or don't think we are capable" FGD3, KA

Generally, though, the older adults were seen as being forgetful and having gait issues.

"……. they could not walk properly ……., their memory is affected. You can ask them if they have eaten and ……., they will say they haven't eaten" FGD4, N

Again, participants observed some expressions of domination and overly dependence on the part of older adult patients.

"...mine was a bossy patient always wanting to control" FGD1, K1

"…Because I was nursing her to the best of my ability, she took advantage and called me for every little thing. Even things she could have done by herself" FGD1, Y1

Attitude

For this theme, students were asked to assess their attitude and that of registered nurses towards older adults. We enquired about the attitude of the students themselves towards older adults. Subthemes that emerged were the attitude of students towards older adults and the observed attitude of registered nurses towards the care of older adults.

The attitude of students towards older adults

Participants reported that they see older adult patients "as their grandparents", " as patients" and nursing them as " an opportunity", and "a duty".

Students voiced that they saw the older patients as their grandparents.

"I was happy nursing the patient because I didn't see her as a patient, but I took her as my grandmother. So, nursing her was like I'm just doing something for my relative" FGD1, KO

There were also expressions of seeing nursing older adults as an opportunity to learn because when their parents grow old, they would have to take care of them.

"I see nursing them as an opportunity to learn as my parents will also grow old" FGD4, W

There were also times when students only take care of the older adults because they have been assigned to them.

"…I decided to attend to him because it's my duty" FGD2, KW2

The attitude of registered nurses

When asked to report on the attitude of staff nurses observed by students on the ward, the study reveals both the good and bad sides of some nurses. Some nurses were seen as kind and patient, humble and attending to calls of older patients.

"I have also worked with some nurses who were kind to such patients. FGD4, B

"… they gave her a bell so she can ring the bell to call for attention" FGD1, K

"They were humble to the patients. … It was quite different from taking care of a younger person" FGD3, AK

Most of the participants, however, had observed negative attitudes.

"…others were rude because the patient was always complaining. We had to lift the patient whenever she wants to attend the washroom or do anything" FGD2, KW

The nurses of higher ranks were reported to mostly attend to "troublesome' older adults.

"The nurses on duty were running from their duty except for the In-charge nurse who took it upon herself to nurse him" FGD2, KW2

The lower-ranked nurses neglected the older adults.

"…some of the nurses were not paying much attention to older adult patients. Rather sent us students to attend to the needs of such patients. Especially diaper changing and bathing. Because their issues are complicated, some nurses don't want to get close" FGD4, J

Career progression

The study aimed to find the views of students on what is needed to care for older adults and whether they would be interested in a career progression as geriatric nurses. Subthemes were needs for career progression into geriatric nursing and desire to progress into geriatric nursing.

Career progression into geriatric nursing

Almost all the students were of the view that although in their training they have acquired skills and knowledge to take care of patients, older adults need special skills and above all a lot of patience.

"We need more skills to be able to take care of them easily. We might have learnt a lot in our general nursing but if we can specialize or have more knowledge when caring for the aged…" FGD2, K2

"As much as I believe nursing care is general when caring for the aged, we need to do times 2 of what would have been done for an adolescent. Patience is a key characteristic needed" FGD4, A4

Upon probing to identify how many students would like to work in the geriatric unit after graduation. After a 3-minute think-through, 3 students managed to volunteer to say they would not mind but it was not going to be a first-choice option.

"… well, I would not mind but that would be after I run out of options (laughs)*"* FGD2, K2

Discussion

This study assessed the perceptions and attitudes of student nurses towards the care of older adults. The findings showed that students had a good perception of older adults and ageing. Most participants were of the view that when one is advanced in years, he/she is an older adult. The students also believed that being physically weak, fragile not being able to handle

much activity, as well as being forgetful identifies an older person. This agrees with studies by Ghimire et al. [18]; Hakverdioğlu et al. [20]; Neville and Dickie [21]. Furthermore, some students opined that being an older adult is individualistic. Thus, it depends much on how one carries him or herself.

The challenge was often with the reaction of the older adults towards students who took care of them. Some older adults did not understand why young nurses should be taking care of them so they either did not allow students near them or did not cooperate entirely with the students. This though unfortunate is what happens in our setting. Students in clinical practice are seen as "experimenters" so some patients would want the "experts" to attend to them. This sometimes limited the practice of the students as they are not allowed to nurse the older adults. Additionally, there were students in this study who perceived older adults as boring and stated that they cared for them as part of their assigned duties but not their own will. This comment by students is also found in Bleijenberg [22], a study among Dutch undergraduate nurses.

This study found that students had a positive attitude towards older adults which confirms the study by Lee, et. al., [17], that education can influence the attitude of students towards older adults. The level 400 students who formed most participants, had been taught palliative care and introduction to gerontology in their final year. There is also a possibility that these students respected the older adults possibly because of the cultural background of the population. Like the study in Nigeria by Faronbi, et.al., [14], most of the students were not ready to work with geriatrics in future. They saw geriatric care to be tedious, demanding and needing a lot of patience which per their assessment they had not acquired. This result is like research by Natan, et.al., [23], where students had no interest in working in geriatric units upon graduation. Most of the students advocated for special training to enable nurses to take better care of older adults just as was recommended by Abreu, & Caldevilla [24] and Özdemir, & Bilgili [5].

Strengths and Limitations

Several limitations of this study that may influence our results must be addressed. First, due to the small size of this study and because the participants were limited to Ghanaian nursing students at a private university, the results are difficult to generalize to other populations. Also,

although there are registered nurses in the regular program none volunteered to be part of the focus group discussions so views of the generic nurses may have been biased.

A strength of the study however is that being a qualitative study, the responses of the participants were a true reflection of what happens on the ground. Secondly, level 400 students who formed most participants had been taken through the Introduction to Gerontology and palliative care course in the last semester, so they had better knowledge of caring for older adults. To the best of our knowledge, no study has yet been conducted in Ghana looking into the perception and attitude of student nurses towards the care of older adults.

Conclusions

Students generally had a positive perception of the older adults and accorded them the respect due them. They are fond of older adult patients; however, they were not enthusiastic about nursing older adult patients. Further in-depth training of nurses and student nurses on how to care for the older population possibly in separate units so that soon, our older adults will have an improved quality of life is recommended. Secondly, the better orientation of student nurses to older adult patients during clinical practice will also make older adult patients more receptive to them and enhance the young-old relationship.

Implications for nursing education and practice

- If gerontology is not properly taught in nursing schools, soon there will be burnout in geriatric units as there will be few nurses with many patients to care for.
- Incorporating gerontology in the curriculum of nursing schools from the first year instead of only in the final year will be appropriate.
- Older patients do not cooperate with student nurses, and it is a challenge to render quality nursing care. Hence proper orientation of students to patients is very important.

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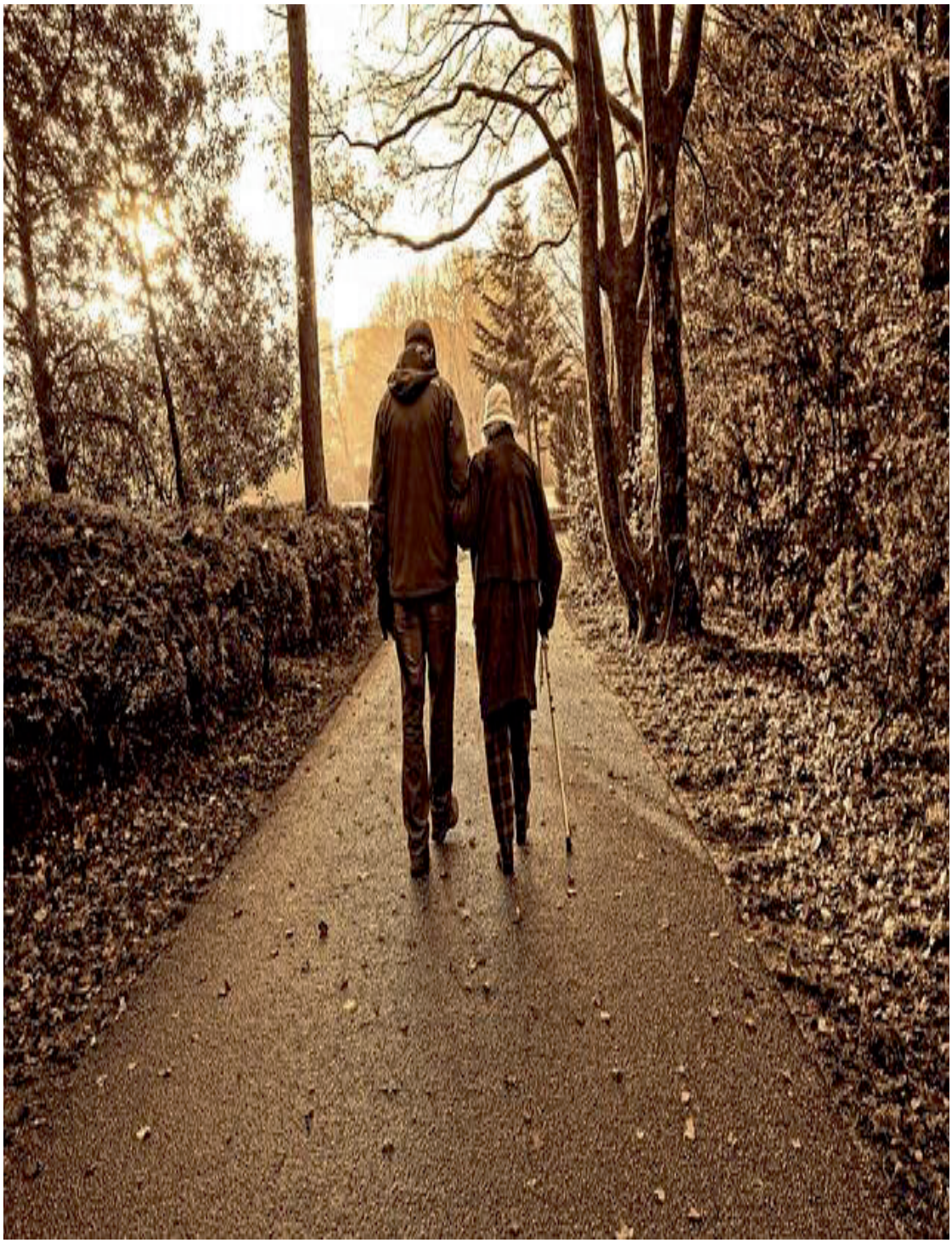

7

General Discussion

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GENERAL DISCUSSION

Due to the ageing of the population, maintaining or improving the quality of life of older adults is a key policy objective for many governments and other organisations worldwide. One of the most vulnerable older populations is the ones living in slums. The objective of this dissertation was to assess the QoL of older adults living in two Ghanaian slums, including their health and social care needs from both the perspective of the slum-dwelling older adult and the care professional.

In this chapter, the findings from this dissertation are discussed. The **first part** of this dissertation describes instruments that can be used to assess QoL among slum-dwelling older adults and the actual application of one of these instruments (WHOQOL-BREF) among this population. The **second part** of this dissertation focused on the health and social care needs of older adults living in slums, as they greatly influence their QoL. These health and social care needs were assessed both from the perspective of the older adult as well as from the perspective of health care professionals. The **third part** of this dissertation explored the attitude of Ghanaian student nurses regarding the process of ageing and caring for older adults.

Five different studies were performed to reach the research objectives. The first study focuses on the question of which instruments are suitable for assessing the QoL of slum-dwelling older adults. The second study assesses the QoL of slum-dwelling older adults living in two Ghanaian slums, using the most feasible instrument. Based on the findings of study two, the third study focused on exploring the health and social care needs of slum-dwelling older adults from their perspective. In the fourth study, the view of health professionals on the health and social care needs of older adults living in slums was gathered, as well as the professional's practical recommendations for meeting these needs. The fifth and last study aimed to explore the perception of student nurses regarding the process of ageing, as well as their attitude toward caring for older adults. Both quantitative and qualitative research methods were applied in these studies, as well as a variety of research designs. This chapter presents a summary of this dissertation's main findings and an empirical reflection on these. Furthermore, the methodological strengths and limitations of the studies are discussed, as well as practical implications and recommendations for future research.

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Main Findings

Overall, this dissertation established that older adults living in slums had a moderate overall QoL and that they were dealing with various health and social challenges (chapter 3). Additionally, health professionals appeared to be aware of the health and social challenges of slum-dwelling older adults and admitted that sometimes the poor attitude of health professionals is a barrier to health service use (chapter 4). This dissertation also highlights the views of student nurses who are expected to take over the care of older adults after training. It was also discovered that the passion to care for older adults is absent in most student nurses.

Quality of life

In the scoping review of this dissertation (chapter 2), where instruments that assessed QoL were reviewed, the included studies used generic instruments to assess QoL and these instruments usually included various QoL domains. However, most of the included studies did not report on the psychometric properties of the instruments, nor on the length of time for administration of the instrument, which made it difficult to select the most appropriate tool to use among slum-dwelling older adults. Based on the scoping review, the WHOQOL-BREF was ultimately selected as the most appropriate and feasible tool as it had already been used in communities and some slums in various countries. In Chapter 3 the QoL of older adults in slums was assessed, using the WHOQOL-BREF. The findings revealed that although the environment influences a person's QoL, slum-dwellers exhibited a moderate QoL as opposed to our hypothesized poor QoL. The participants generally recorded a poor physical QoL, and females had a significantly poorer psychological QoL compared to males.

Health and social care needs of older adults

In chapter 4, the health and social care needs of older adults were explored from their perspectives. Findings from this qualitative study showed that most older adults had one or more disease conditions which confirmed their poor physical QoL in Chapter 3. Despite their rather ill health, various participants believed their health conditions were caused by witchcraft or evil spirits, which negatively influenced their use of formal health services. Additionally, the negative attitude of some health professionals, financial difficulties, and national health insurance scheme (NHIS) challenges were barriers to slum-dwelling older people's use of healthcare services. When looking at their social care needs, participants mentioned that they

sometimes felt lonely and neglected as their children left them to go to work and their friends had died earlier. There were no designated (meeting) places close by to interact with other older adults. In Chapter 5, the health and social care needs of slum-dwelling older adults were described from the viewpoint of health professionals. Health professionals confirmed what the older adults had stated in Chapter 4. They mentioned the poor attitude of some health professionals and recommended improving the health and social care needs of slum-dwelling older adults. A more comprehensive education of nursing students on geriatric care and workshops and seminars for nurses at various health facilities were suggested. They also recommended sanctions such as revoking the license of health professionals who are reported to portray negative attitudes towards older adults.

Student nurses and geriatric care

In Chapter 6, student nurses described their views and attitudes towards older adults. Also, their interest in geriatric care post-training was explored. Student nurses in this study mentioned that they respected older adults because they saw them as their grandparents. However, they also stated that caring for older adults is tedious, and most participants expressed no interest in future geriatric care. Most of the student nurses said they only care for older adults because they were assigned to the task.

Empirical reflection of main findings

Enhancing QoL is crucial to the sustainable development of older adults living in countries such as Ghana [1]. Considering that about 6 of the United Nations' 17 Sustainable Development Goals (SDGs) have a link with slums, which are: 1) no poverty; 2) zero hunger; 3) good health and well-being; 4) clean water and sanitation; and 5) reduced inequality; 6) sustainable cities, and communities [2]; slum-dwellers must be given the necessary attention for sustainable development of nations. The SDGs aim to increase life expectancy, but not only life expectancy is important; the quality of these lives also needs to be considered. With increased life expectancy, policies regarding older adults must be in place to meet the needs of this growing population.

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Assessment of Quality of Life in slum-dwelling older adults

In Ghana, little is known about the QoL of slum-dwelling older adults. However, as recommended by Gobbens, & Remmen [3] health professionals need to carry out interventions to improve the QoL of low-income populations, including older adults in slums. The assumption is that people living in slums have a poor QoL because of environmental factors such as low-quality housing, choked gutters, noise pollution, inadequate ventilation and overcrowding and the study sought to objectify this hypothesis. However, due to differences in environmental factors, the author believed that the generic QoL scales usually used in studies performed in non-Western and/or non-slum settings were not appropriate to be used. Consequently, chapter two first assessed which QoL instruments were appropriate to be used among older adults in a slum setting. The challenge with the reviewed studies was that most of them did not provide details of the psychometric properties of the instruments used. This continues to be the case in studies recently reviewed [4-5]. Additionally, almost all instruments were interviewer administered due to the illiteracy of the population under consideration, and the time investment for completing the questionnaires was not described in many of these studies. Due to the lack of this information, no instrument was found to be appropriate for use among the slum-dwelling population. Although the EUROHIS-QOL 8 was used in many of the reviewed studies, the lack of information about its psychometric properties, as well as the unavailability of QoL research conducted among older adults in slums using this instrument, made us choose a different instrument to assess QoL among slum-dwelling older adults in Ghanaian slums which is the WHOQOL-BREF. Additional reasons for using the WHOQOL-BREF were that this instrument was shorter and previously used among slum communities (chapter 3). However, the scoping review was published in 2021 and more recently, studies are published in which the EUROHIS-QOL 8 (also often referred to as the WHOQOL-8) was used in studies among older adults in African countries. These studies report less time investment in administering the questionnaire [5, 6]. Therefore, in future studies, the WHOQOL-8 version could also be an option to use in Ghanaian slums after its feasibility and reliability have been assessed and validated.

The WHOQOL-BREF was administered in Chapter 3 to assess QoL and its associated factors among older adults in two slums. Ghanaian slums in “Teshie” and “Ashaiman” were visited and older adults who had lived in either slum for a year or more were recruited for the study.

Due to the previously described poor environmental factors exemplary for slums, the hypothesis was that our study population had a poor QoL. However, results revealed that although the scores were "poor" in the physical and psychological domains, scores were "moderate" in the social and environmental domains. When looking at total scores, the perceived QoL in our study population was neither poor nor good and participants were neither satisfied nor dissatisfied with their health. Shah et al. [7] who assessed the quality of life of older adults in Indian slums, also found the highest score for the social domain. This finding was also observed in a recent study by Karki et al. [8] among older adults in Nepal. A reason for these higher social domain scores could be that in the WHOQOL-BREF, the questions assessing social QoL were not exhaustive of what older adults perceived to be social QoL. Therefore, in those aspects they were satisfied. However, when allowed to elaborate on their needs (chapter 4) it appeared that there were concerns about social needs.

In the study by Shah et al. [7] the environmental domain had the lowest mean score while our study revealed the lowest scores in the physical domain. This variation could be a result of the differences in measurement instruments used (WHOQOL-OLD), and the population involved. Shah et al., [6] conducted their study in India and had a higher percentage of literate people compared to our study, which could account for the differences in findings.

In all domains of our study, it appeared male participants had a significantly higher mean QoL than their female counterparts. This difference was also seen in earlier studies by Shah et al. [7] in India and Van Nguyen, et al.,[8] in rural Vietnam. Lee et al. [9] who performed a study on the gender differences in quality of life among community-dwelling older adults in low- and middle-income countries also confirmed this using the SAGE data. They reported that across all the countries, male older adults generally, stated a better QoL than female older adults. This finding could be explained by the fact that men usually have better finances (income) and more opportunities for social cohesion than females [9-10]. Especially in low-middle-income countries (LMIC), some women rely heavily on men to cater for their needs [11-12]. Additionally, in the Ghanaian context, cultural influences, make males the domineering gender and will not permit males to exhibit weakness [13-15]. This could have influenced the answers provided by males in this study.

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Describing health and social care needs

Chapter 3 described that based on the assessment of the WHOQOL-BREF, particularly the physical QoL of slum-dwelling older adults appeared to be poor. To have a deeper understanding of the specific health and social care challenges participants encountered, a qualitative study was conducted among older adults in the two slums.

In line with other studies among older adults which were conducted in slums in Iran, India, Bangladesh and Asia, chapter 4 shows that most health problems of older slum dwellers were related not only to disease conditions (arthritis, diabetes, hypertension, vision /hearing challenges), but also with challenges related to health insurance, the negative behaviour of healthcare providers and long waiting times at healthcare facilities [16-22]. Additionally, the results from this study showed that our participants believed that spiritual powers were causing illnesses and therefore, healing should not be sought from formal health services. This confirms a study by Idriss et al. [23] regarding the health-seeking behaviours of older adults in Sierra Leon. This study showed that Sierra Leoneans have deep-rooted beliefs and associate the onset of disease with spiritual causes such as witchcraft or evil spirits [23].

Chapter 4 also focuses on the unmet social care needs of slum-dwelling older adults. With social care needs, it refers to both connections or interactions with family and friends as well as assistance with activities of daily living when the individual is not capable of doing for themselves [24-27]. Our study identified a sense of neglect by family (need for companionship), requiring assistance with activities of daily living, and the need for financial support. These are similar to findings by Mushtaq & Ali [28], Alam et.al [29] Alaazi et.al.[52] and Gupta et al. [53] from Pakistan, Bangladesh, Ghana, and Northern India respectively which found that neglect (family and friends) and economic dependency, not being able to maintain personal cleanliness, have negative effects on the lives of older adults. Recent studies have suggested that engaging these older adults in discussions and fun activities such as “oware”, and “ludo”, and telling stories to children in the communities; will reduce a decrease in quality of life [30-32]. As most participants complained of physical challenges (joint pains), hindering their performance of activities of daily living (ADLs) they, therefore, require assistance in some respects as postulated by Kumar et. al [31].

In Chapter 5, health professionals were asked about their views regarding the health and social care needs of older adults living in slums and the ways to meet these needs. Participants in our study emphasized that the negative attitudes exhibited by some health professionals were top of the list of barriers. This is similar to various studies, especially in Africa [33-35]. There have been suggestions to curb this however reporting perpetrators and implementing these sanctions seem to be a challenge as patients fear the consequences of reporting health professionals [36-37]. Furthermore, these studies also stressed barriers to healthcare utilization among older slum-dwellers due to distance to healthcare facilities as well as the cost of seeking treatment at formal health facilities. This finding agrees with Corburn, et al.,[54] who further suggested the use of mobile clinics within slums to decrease travel distances.

Perceptions of caring for older adults

As the population living in developing countries such as Ghana is ageing, it is expected that their use of healthcare services will also increase. Older adults will need to be cared for by nurses knowledgeable in the field of geriatrics and gerontology. The fifth objective of this dissertation focused on the perception of student nurses regarding ageing and their attitude toward caring for older adults (chapter 6). Students expressed that they saw the older adults as their grandparents, so they try to engage with them with respect and care. In a scoping review by Abudu-Birresborn, et al. [38] focused on preparing nurses and nursing students to care for older adults in lower and middle-income countries, it was stated that both populations had positive attitudes towards the care of older adults but also had reservations due to the burden of care. The student nurses in the study of Abudu-Birresborn et al. [38] also reported having a lower preference for caring for older adults because they had challenges communicating with the older adults and are not ready for the burden of care. Student nurses in our study also stated that older adults are not friendly to them which contributes to student nurses' reluctance to take care of older adults. A longitudinal study conducted by McCloskey, et al. [39] in Canada which looked at assessing changes in student nurses' knowledge, attitude, and interest in caring for older adults during each year of undergraduate nursing training, suggested that knowing how to care for "general" patients did not translate to positive attitudes towards the care of older adults. They suggested from their findings that, "work experience" and "courses in gerontology" were predictors of a significant positive influence on student nurses' attitudes to caring for older adults. Nurses often meet older people when they are

unwell most vulnerable and very dependent [40]. Nursing is a complex task, both physically but also mentally, and the mental component is often not considered by most senior nurses [41]. This could be why students in our study were always assigned to do the 'physical work' with no evaluation of their mental readiness for the task assigned. In chapter 6, the students stated that registered nurses often neglected the basic care of older adults such as diaper changes, bathing, and feeding, and would rather give these tasks to student nurses with little knowledge about holistic geriatric care.

Methodological Reflections

This chapter discusses some strengths and weaknesses in the methodologies applied in this dissertation. Given the complexity and multifarious nature of QoL, it is necessary to apply various research methods to have different perceptions and a deeper insight into such a phenomenon. Therefore, this dissertation included a scoping review, a cross-sectional study and three qualitative studies including both individual and group interviews.

Study Design

One of the strengths of this dissertation is the study designs used. The first study of this dissertation focused on QoL instruments used in African countries (chapter 2), and a scoping review was used. A systematic review did not seem appropriate for this cause as very few studies had been performed focused on assessing the QoL of older adults in slums, and therefore grey literature also had to be searched for example reviewing reference lists of some studies. Furthermore, as it was not known at the onset of the study which instrument will be appropriate for a largely illiterate population of older adults in slums, a scoping review was conducted, and the most appropriate tool was selected. The studies in the present dissertation are based on the available tools used to assess QoL at the time of the scoping review and therefore, tools used in slums or communities described in more recent studies were not included.

After the selection of a tool for assessing QoL, a quantitative cross-sectional study was conducted as it provided a broad overview of the QoL of a large study population. A qualitative study did not seem appropriate to start with as the study sought to answer the "what is" and not the "why is" question. In this cross-sectional study, a large sample size was

recruited, and a 100% response rate was achieved. This can be considered a major strength of the study.

Three studies (Chapters 4-6) used a qualitative research method. The qualitative design was most suitable as it helped to have a better expression of participant views in these studies. However, for the study in chapter 4 which included health professionals as participants, a Delphi study may have allowed involving both more, as well as other groups of health professionals and other health professionals from other health facilities within the Greater Accra region. As their ideas and recommendations may have been more varied, as opposed to the current sample. Additionally, consensus on, for example, sanctions for health professionals with negative attitudes will be reached and implementation of the given recommendations may have been easier across the region. Yet, financial and time restrictions resulted in choosing the current smaller study population working in facilities closer to the selected slums. The interfering COVID-19 pandemic did as well.

Study population

In the studies described in Chapters 3, 4 and 6 the response rate was 100%. A 100% response rate is rather unique and the reason that this happened in our studies is probably that participants are not often asked to participate in research and were therefore eager to be engaged by the researchers. Additionally, in Chapter 3 a breakfast package was given to participants after the completion of the questionnaires which could be a reason for the high participation rate. In Chapter 6, interviews were conducted at a time when students were not involved in academic studies which gave them more opportunities to participate. Only in Chapter 5, medical doctors did not participate. Nurses, however, who form the larger percentage of the healthcare workforce, were adequately represented. In Chapter 3, a sample size calculation was performed and was reached. Interviews in chapters 4, 5 and 6 were performed until the data saturation. Therefore, the authors believe the results of these studies are internally generalizable.

In the recruitment of participants in the slums (chapter 3), there may have been a selection bias because of the use of the snowballing technique to recruit people. This meant that current participants recommended new eligible participants. This could have resulted in the fact that some older adults were not referred to the researchers and were therefore missed out. The

author tried to reduce this by also asking if there were older adults in the houses in the participants' surroundings. Given the background characteristics of the study population, it is believed that the current group is a good representation of the older slum population and selection bias is minimal.

Health professionals also have a role to play in achieving good QoL among older adults hence they formed participants in one study (chapter 5). The challenge with health professionals' recruitment was that some professionals (community health nurses) declined as they did not want to speak English and no medical doctor participated as they said the timing of interviews was never favourable. The findings of this study could have been influenced by selection bias as it is difficult to know the views of the other health professionals who declined participation. More community health nurses in this study may have revealed other details as they have more interactions with these older adults during home visits. Also, the inclusion of more health professionals from other communities or facilities in the Greater Accra region may have provided more information on the health and social care needs of older adults in slums. In addition, it may have been easier to get recommendations implemented by these stakeholders in their various facilities.

Generalizability

The study was conducted in only two comparable slums in Ghana which has more than ten slums. In Ashaiman, one of the selected slums for example, although there is a mix of ethnic groups, its proximity to the industrial city could have influenced the responses of slum-dwelling older adults in chapters 3 and 4. If the study had been conducted in Old Fadama, which is another slum, not close to an industrial city, decreased proximity to health facilities, and is highly populated with people from the northern part of Ghana, the responses, especially in the physical domain, may have differed. This is because the culture of people from northern Ghana does not permit the exhibition of pain so participants may not confess any existing illnesses. Therefore, for internal generalizability, the findings of this study may not represent the whole country. Nonetheless, with the large sample sizes used, the findings give a good impression of the QoL of older adults living in slums.

The results of the qualitative studies though are views of a few people, but a look into the literature reveals similar findings from similar settings. However, findings may not be

generalizable to slums in other countries. Consideration must be given to the health policies and regulations in each country and setting especially regarding health insurance and services provided as they may be different in comparison with our studies. The health and social care needs of older adults from the perception of both professionals and older adults confirmed the unmet needs and provides a baseline for other slums in developing countries.

Implications for Policy and Practice

As the world faces an increasing life expectancy, the quality of these lives must be explored, and efforts made to improve them [41-44]. Slum dwellers especially, older slum-dwellers, are a neglected population and are hardly involved in studies and (inter)national issues [46-48]. Therefore, this dissertation is of great importance.

In Chapter 3, our analysis showed that although older adults recorded a moderate QoL generally, they have a poor physical QoL. Many older adults in the slums have chronic diseases such as hypertension and diabetes and some experience complications of these diseases such as cardiovascular accidents (stroke). Still, older slum-dwellers appear to associate their health with witchcraft and evil spirits. This may be because their knowledge of these disease conditions and their management is low. Therefore, it is recommended that more frequent health education is provided among this population to prevent complications. As older slum-dwelling adults do not often go to formal healthcare facilities, community nurses or people working in slums must provide this education.

The findings in chapters 4 and 5 of this dissertation contribute to the paucity of literature on the health and social care needs of slum-dwelling older adults as described by older adults and healthcare professionals. Recommendations towards meeting these health and social care needs included the creation of special consulting rooms for older adults or triaging at the outpatient department to avoid long queues, frequent home visits and mobile clinics in slum communities, to deliver healthcare services. Additionally, day-care centres may be established close to slums for social support. This requires policy reviews and the allocation of resources from both regional and community policymakers. In practice, health professionals should receive regular training and coaching support on the care of geriatrics and customer care to improve their attitude toward slum-dwelling older adults as well as the quality of care provided. Health professionals in their recommendations seem to agree with US Equal

Employment Chair, Janet Dhillon, who in a message delivered in May 2020, insisted that "we have to keep educating and enforcing in every way we can – including litigation as a last resort". Professionals and older adults who participated in the studies described in this dissertation advocated for the creation of centres in slum communities where older adults can interact and relieve boredom. They suggested a collaboration between government agencies and non-governmental organizations or private entities in the establishment of day-care centres close to slums for older adults. These could also serve as places where health professionals could provide health education to improve the lives of older adults in slums.

In Chapter 6, student nurses did not have an interest in geriatric care because they do not have enough exposure to older adults both in the hospitals and community. Intergenerational contact, gerontological education, as well as individual reflective writing have been suggested to improve students' attitudes toward older adults [48-50] Gerontology must be taught in more detail to make nursing students better equipped when they graduate to take care of older people. Therefore, policymakers and educational consultants in the health sector can include more geriatric care content in nursing courses at the bachelor's degree level to assist in how students relate to older adults. Gazaway et al. [51] advocate that the wellness of older adults is misplaced when a usual clinical visit by students is limited to diseases that are diagnosable in a disease-specific curriculum. They should, however, look at the totality of the older adult including their QoL. In nursing education, curriculum review in nursing may be necessary to introduce gerontology in the early years of training and make the course more attractive. Student nurses who participated in our study complained that most older patients do not cooperate with student nurses because they perceive student nurses as young and inexperienced. This is a challenge to render quality nursing care. Hence proper orientation of students to patients is very important. Furthermore, more contact between students and older people and their families during the educational trajectory is necessary to bridge the generational gap and assist in the acclimatization of both parties.

Implications for Future Research

From this dissertation, it appears there is no instrument available to assess QoL among slum-dwelling older adults of which the psychometric properties are researched. Therefore, it is recommended that future research assessing QoL can use the WHOQOL-BREF in older

adults in African slums. However, for researchers who wish to use the newer EQ-8 among illiterate older adults in slums, there should first be a focus on its feasibility, validity, and reliability in the preferred setting. Furthermore, there is a need for more in-depth research on the content and domains of instruments to assess QoL among older adults in African countries, and more specifically, in slum settings. Most authors of the studies reviewed did not describe their experiences using the scales they investigated.

As the physical and psychological QoL scores among the slum-dwelling older adults were the lowest, further research into what older adults need to improve their QoL in these domains is recommended. Subsequently, intervention studies among older adults in slums can be done where older adults in slums will receive adequate support to improve their QoL in these domains. Then an assessment of their QoL is done after the intervention to track their QoL in these domains. Additionally, studies about interventions to make healthcare professionals more educated and enthusiastic to take care of slum-dwelling older people are recommended. These may include the education of student health professionals as well as practising professionals to improve the quality of care given to older adults in slums.

Further studies using the Delphi may also be conducted to include slum-dwelling older adults, health professionals and other stakeholders to provide a consensus for improving the health and social care needs and ultimately the QoL of older adults living in slums.

Concluding Remarks

This dissertation reports on research into QoL of older adults living in two slums in Ghana. The studies included in this dissertation reviewed the quality of instruments available for assessing QoL in African countries and used one of these instruments (WHOQOL-BREF) to evaluate the QoL of older adults living in two Ghanaian slums. Results showed that the QoL of older adults in slums is moderate, that the physical domain showed the lowest scores and that males consistently showed higher QoL scores compared to females. Studies in this dissertation also investigated the health and social care needs of older slum-dwelling adults, from both the perspective of the older adult and from the perspective of the healthcare professional. Results showed various unmet needs, and that different factors influence these unmet needs, such as lack of healthcare insurance, long distances to facilities and negative attitudes of care professionals. Lastly, this dissertation gave insight into student nurses'

attitudes towards older adults as well as their interest in geriatric care. With less than 1% of student nurses with an interest in caring for older adults after graduation, a review of the nursing curriculum must be done to improve this finding with the expected further increase in life expectancy in Ghana. Based on these results, it is recommended to make health and social care services available, accessible, and affordable to older adults in slums as this can further improve their QoL.

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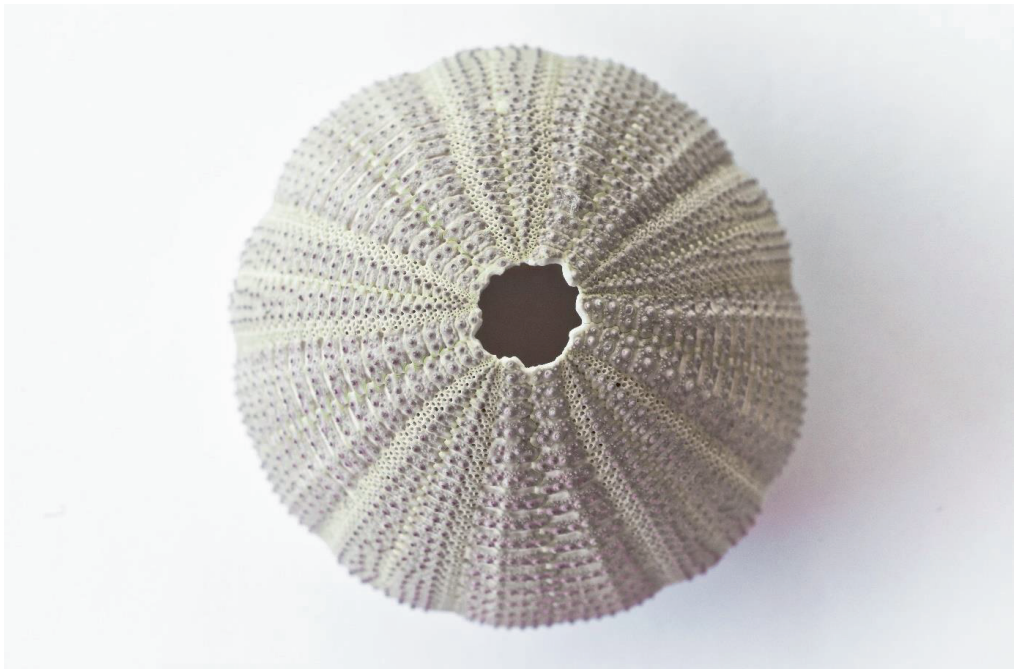
CHAPTER 7
GENERAL DISCUSSION



Summary

SUMMARY

In Ghana, communities can be categorized under two main umbrellas: urban and rural communities. The vibrant and highly resourced nature of urban communities causes the migration of people from rural communities to urban regions, in search of jobs and better standards of living. Consequently, large urban communities such as the capital city Accra, are overcrowded but with a limited number of affordable houses. This leads to the creation of informal settlements or slums. Slums are characterized by pollution, violence, poor drainage systems, improper disposal of waste, improper housing, and absence of easily accessible potable water.

The WHO (2015) states that an estimated 33% of people living in urban areas live in slums and informal settlements. Ghana has 23 slums, of which the majority (n=11) are situated in the capital city (Accra). People living in slums who are particularly vulnerable are older adults. The older adult population has increased in Africa, which is the case for Ghana as well. Because of an increasing life expectancy, the population of older adults living in slums is also increasing. With the rapid increase in the older adult population, most countries in sub-Saharan Africa, including Ghana are ill-prepared to meet the needs of their older population, especially in slums. Slums are not the most suitable place for older people. When comparing formal settlements with slums, people living in slums lack basic amenities like water, electricity and proper collection and disposal of solid waste. They are also exposed to health risks by noise pollution, poor sanitation and hygiene and violence, and face poor housing conditions and overcrowding. Therefore, although life expectancy in slums also increases, likely, these additional years will not be experienced as being of the same quality.

Even though there is a general hypothesis that the QoL of older slum-dwellers is poor, there is no evidence available on the QoL of older adults in slums in Ghana, and even very little research done on the QoL of slum-dwellers in Africa as a whole. Quality of life, according to the World Health Organization, is "an individual's perception of their position in life in the context of the culture and value systems in which they live and in relation to their goals, expectations, standards, and concerns. It is a broad-ranging concept, affected in a complex way by the person's physical health, psychological state, level of independence, social relationships, and their relationships to salient features of their environment". To help the older population age in place well, it is essential to gain more knowledge about the QoL of this population. This dissertation aims to get more insight into this topic.

SUMMARY

Chapter One introduces the topics of this dissertation. It provides an overview of the ageing of the population and the organization of healthcare in Ghana. Additionally, urbanization and the associated creation of slums are described together with evidence of what is known about ageing in slums. This chapter further introduces the concept of quality of life (QoL) and describes health and social care in slums. The chapter ends with the five objectives of this dissertation: 1) to identify which instrument is suitable for assessing the QoL of slum-dwelling older adults; 2) to assess the QoL of slum-dwelling older adults using the appropriate tool/instrument; 3) to explore the health and social care needs of older adults from their perspective; 4) to examine health professionals' views on the health and social care needs of older adults living in slums as well as practical recommendations for meeting these needs; and 5) to engage student nurses regarding their perception of ageing and their attitude toward caring for older adults.

Chapter Two focuses on identifying instruments, which can be used by researchers to assess the QoL of older adults living in African countries, especially those dwelling in slums. A scoping review of instruments used to assess QoL in African countries was done. A total of 18 studies were included in the review and 7 unique instruments from these studies were used to measure QoL (EUROHIS-QOL-8, SWLS, WHOQOL-OLD, the WHOQOL-BREF, SF-36, SF-12, and RAND-38). All instruments could be interviewer-administered and had 5–36 items. It proved to be difficult to identify the psychometric properties of the tools (validity and reliability), as well as information on time investment and cultural sensitivity of the domains included in the instruments.

Chapter Three presents' findings from a cross-sectional study to assess QoL and its associated factors among older adults in two Ghanaian slums, using the WHOQoL-Bref. Slums in Teshie and Ashaiman were visited and older adults who were living in either slum for at least one year were eligible to participate in this study. The results revealed that the QoL scores were poor in the physical and psychological domains, but moderate in the social and environmental domains. The overall perceived QoL of older adults in slums appeared to be "moderate" and in all domains, male participants have a significantly higher mean QoL than their female counterparts.

In Chapter Four, a qualitative study was performed to gain a deeper understanding of the QoL findings in the cross-sectional study of Chapter 3. In this study, the health and social care needs

of the older slum-dwelling adult were explored using individual face-to-face interviews. The results from this study showed that older adults believed that witchcraft or evil spirits were causing illnesses, which negatively influenced their use of formal healthcare services. Other barriers to using formal healthcare services were issues such as distances and long queues at healthcare facilities, lack of insurance and negative attitudes of healthcare workers. Concerning the social domain, this study identified feelings of neglect by family members, a need for companionship, requiring assistance with activities of daily living, and the need for financial support. Participants had more health needs than social needs. The older adults also perceived that healthcare providers do not prioritize the care of slum-dwelling older adults.

Chapter Five describes the results of a qualitative study performed among healthcare providers focusing on the health and social care needs of slum-dwelling older adults. Healthcare providers mentioned rather similar hindering factors in healthcare service use among slum-dwelling older adults as older adults themselves. Factors mentioned were financial difficulties, queueing issues, distances to healthcare facilities, health illiteracy among the population and negative attitudes of healthcare professionals. Social care services were described by healthcare providers as non-existent, not structured, and as having limited resources to cater for older adults. The healthcare professionals also provided recommendations for improving these needs including the withdrawal of licenses of nurses who exhibit negative attitudes.

Chapter Six involved student nurses in focus group discussions regarding their attitude toward caring for older adults and their interest in geriatric practice. Students expressed that they regarded the older adults they had to care for, as their grandparents. Therefore, they tried to treat them with respect and care. The students also stated that registered nurses delegated basic care tasks such as changing incontinence materials, bathing, and feeding, to the student nurses. However, the older adults were usually not positive towards students taking care of them. Students generally were not enthusiastic about future geriatric nursing practice as most of them saw it as a huge responsibility. Most of the students advocated for special training to enable nurses to take better care of older adults.

Chapter Seven discusses the main findings of the studies included in this dissertation, followed by empirical and methodological considerations. It describes implications for practice, policy, and future research, following the results of this dissertation. The main conclusion of this study

is that the older adults in the slums, that have been studied for this PhD thesis, appeared to have a moderate QoL and a variety of health and social care needs. The studies in this dissertation, therefore, advocate for more and better health care and social services for these older slum-dwelling adults, which must be supported by tailored national policies. A partnership of both the government and non-governmental organisations and the right attitude and performance of health care professionals may help change the misfortunes of slum-dwelling older adults and improve their QoL.

Samenvatting

SAMENVATTING

Gebieden in Ghana kunnen grofweg worden verdeeld in stedelijke en landelijke gebieden. De infrastructuur, voorzieningen en levendigheid in de steden zorgen ervoor dat bewoners uit landelijke gebieden migreren naar de steden. Deze mensen zijn doorgaans op zoek naar werkgelegenheid en een betere levensstandaard. Als gevolg hiervan zijn grote stedelijke gebieden, zoals de hoofdstad Accra, overbevolkt. Betaalbare huizen zijn niet beschikbaar voor alle inwoners, wat leidt tot het ontstaan van nederzettingen of sloppenwijken. Sloppenwijken worden gekenmerkt door vervuiling, geweld, gebrek aan sanitaire voorzieningen, slechte afvoersystemen, veel afval, onveilige huisvesting en de afwezigheid van toegankelijk drinkwater.

De WHO (2015) schat dat 33% van stedelijke bevolking in sloppenwijken woont. Ghana heeft 23 sloppenwijken, waarvan de meeste (n=11) in de hoofdstad Accra liggen. Een van de groepen mensen die in sloppenwijken woont en in het bijzonder kwetsbaar is, zijn ouderen. De bevolking in Afrika vergrijst, net als in de rest van de wereld. Door de stijgende levensverwachting neemt daarmee ook het aantal ouderen in sloppenwijken toe. De meeste Afrikaanse landen ten zuiden van de Sahara, inclusief Ghana, zijn slecht voorbereid om te voorzien in de behoeften van de oudere bevolking. Dit is met name het geval in de sloppenwijken. Sloppenwijken zijn dan ook niet de meest geschikte plek voor ouderen: het ontbreekt ze aan basisvoorzieningen zoals water, elektriciteit en afvalverwerking. Ook worden ze blootgesteld aan gezondheidsrisico's zoals slechte sanitaire voorzieningen, slechte huisvesting, geluidsoverlast en geweld.

Hoewel de levensverwachting in de sloppenwijken ook toeneemt, zullen de extra jaren waarschijnlijk niet worden ervaren als jaren van goede levenskwaliteit. De vigerende hypothese is dan ook dat de kwaliteit van leven van oudere sloppenwijkbewoners slecht is. Er zijn echter weinig wetenschappelijke gegevens over de kwaliteit van leven van oudere sloppenwijkbewoners in Afrika, en al helemaal niet over de kwaliteit van leven van ouderen in sloppenwijken in Ghana.

Kwaliteit van leven wordt door de Wereldgezondheidsorganisatie (WHO) als volgt gedefinieerd: "de perceptie van een individu over zijn positie in het leven in de context van de cultuur en waardesystemen waarin hij leeft en in relatie tot zijn doelen, verwachtingen, normen en zorgen". Het is een veelomvattend concept, dat op een complexe manier wordt beïnvloed door iemands fysieke gezondheid, psychologische toestand, mate van onafhankelijkheid, sociale relaties en omgeving. Om de oudere bevolking in sloppenwijken op een goede manier oud te laten worden, is het essentieel om meer kennis te vergaren over de kwaliteit van leven van deze bevolkingsgroep. In dit proefschrift wordt beoogd meer inzicht te krijgen in dit onderwerp.

Hoofdstuk 1 introduceert het onderwerp van dit proefschrift. Dit hoofdstuk gaat in op de vergrijzing van de bevolking en de organisatie van de gezondheidszorg in Ghana. De verstedelijking en het daarmee gepaard gaande ontstaan van sloppenwijken worden beschreven, samen met literatuur over wat al bekend is over veroudering in sloppenwijken. Verder introduceert dit hoofdstuk het concept 'kwaliteit van leven' en beschrijft het de gezondheidszorg en sociale voorzieningen in sloppenwijken. Het hoofdstuk eindigt met de vijf doelstellingen van dit proefschrift: 1) vaststellen welk instrument geschikt is om de

kwaliteit van leven van ouderen in sloppenwijken in kaart te brengen; 2) de kwaliteit van leven van ouderen in sloppenwijken in Ghana evalueren met behulp van dit instrument; 3) de behoeften aan zorg en sociale voorzieningen van ouderen in sloppenwijken vanuit hun eigen perspectief in kaart brengen; 4) de behoeften aan zorg en sociale voorzieningen van ouderen in sloppenwijken vanuit het perspectief van zorgverleners in kaart brengen, evenals praktische aanbevelingen om aan deze behoeften te voldoen; en 5) meer inzicht krijgen in de percepties van studenten verpleegkunde over veroudering en hun houding ten opzichte van de zorg voor ouderen.

Hoofdstuk 2 beschrijft een scoping review gericht op de vraag welke instrumenten beschikbaar zijn om de kwaliteit van leven van oudere sloppenwijkbewoners in Afrikaanse landen te meten. In totaal werden 18 studies opgenomen in de scoping review, waaruit 7 unieke instrumenten naar voren kwamen om kwaliteit van leven te meten (EUROHIS-QoL-8, SWLS, WHOQoL-OLD, de WHOQoL-BREF, SF-36, SF-12 en RAND-38). De range in items die de instrumenten bevatten was 5-36, en alle instrumenten werden door een interviewer afgenomen. Er was weinig informatie beschikbaar over de psychometrische eigenschappen (validiteit en betrouwbaarheid) en tijdsinvestering van het afnemen van de instrumenten. Ook was het onduidelijk in hoeverre de opgenomen domeinen cultureel sensitief waren.

In hoofdstuk 3 worden de bevindingen van een cross-sectioneel onderzoek gepresenteerd naar de kwaliteit van leven van ouderen woonachtig in twee Ghanese sloppenwijken (Teshie en Ashaiman). De kwaliteit van leven werd gemeten met behulp van de WHOQoL-Bref. Daarnaast wordt weergegeven welke factoren van invloed zijn op de kwaliteit van leven. Deelnemers waren ouderen (≥60 jaar) die minstens een jaar in een van beide sloppenwijken woonden. De resultaten lieten zien dat de algemene kwaliteit van leven werd gescoord als 'matig'. De gemiddelde score op het fysieke en psychologische domein was 'slecht' en op het sociale en omgevingsdomein 'matig'. Op alle domeinen scoorden deelnemers van het mannelijk geslacht significant beter dan deelnemers van het vrouwelijk geslacht.

In hoofdstuk 4 worden de bevindingen uit hoofdstuk 3 nader onderzocht met kwalitatief onderzoek. In deze studie werden interviews met ouderen woonachtig in de 2 sloppenwijken in Ghana gehouden. Tijdens de interviews werd ingegaan op (onbevredigde) behoeften van ouderen op het gebied van zorg en sociale voorzieningen. De resultaten lieten zien dat veel ouderen geloofden dat ziekten werden veroorzaakt door hekserij of boze geesten. Dit leidde ertoe dat weinig gebruik werd gemaakt van formele gezondheidszorgvoorzieningen. Andere factoren die het gebruik van zorg negatief beïnvloedden, waren de lange afstanden tot zorgvoorzieningen, lange wachtrijen bij zorgvoorzieningen, hoge kosten van gezondheidszorg doordat ouderen vaak geen verzekering hadden, en een vaker voorkomende negatieve houding van zorgverleners ten opzichte van ouderen. Wanneer werd gekeken naar (onbevredigde) behoeften op het gebied van sociale voorzieningen werd door deelnemers aangegeven dat ze zich verwaarloosd voelden door hun familieleden, dat ze behoeften hadden aan gezelschap, behoefte aan hulp bij ADL ondersteuning, en ook aan meer financiële steun. Uit de interviews kwam ook naar voren dat ouderen meer behoeften hadden op het gebied van zorg dan op het gebied van sociale voorzieningen. Tenslotte hadden ouderen het gevoel dat zorgverleners de zorg in sloppenwijken niet prioriteerden.

Hoofdstuk 5 heeft ook een kwalitatief design en beschrijft de resultaten van interviews uitgevoerd onder zorgverleners. In deze interviews werd ingegaan op wat zorgverleners ervaarden als (onbevredigde) behoeften van ouderen in sloppenwijken aan zorg en sociale voorzieningen. Zorgverleners noemden min of meer vergelijkbare factoren die het gebruik van de gezondheidszorg belemmerden als de ouderen zelf (hoofdstuk 4): de financiële situatie van ouderen die toegang tot zorg belemmert, problemen met wachtrijen in de zorgvoorzieningen, de afstand tot de zorgvoorzieningen, het gebrek aan gezondheidsvaardigheden onder ouderen (health literacy), en een negatieve houding van zorgprofessionals. Wanneer werd ingegaan op sociale voorzieningen gaven zorgverleners aan dat deze weinig tot niet bestonden en indien wel aanwezig, dat ze beperkte middelen hadden. Zorgverleners gaven ten slotte aanbevelingen om beter tegemoet te komen aan de behoeften van ouderen met betrekking tot zorg- en sociale voorzieningen, waaronder in het bijzonder het intrekken van de licentie van verpleegkundigen die zich onprofessioneel en negatief gedragen ten opzichte van ouderen.

In hoofdstuk 6 werden focusgroep interviews gehouden met Ghanese studenten verpleegkunde over hun interesse in en houding ten opzichte van de zorg voor ouderen. Studenten gaven aan dat ze de ouderen voor wie ze moesten zorgen vergeleken met hun grootouders en daarom probeerden ze hen met waardigheid en respect te behandelen. De studenten gaven ook aan dat gediplomeerde verpleegkundigen veel basiszorgtaken, zoals incontinentiematerialen verwisselen, wassen en eten geven, delegeerden aan studenten. Ouderen waren echter doorgaans niet zo positief wanneer studenten voor hen zorgden en daarom waren de studenten over het algemeen niet zo enthousiast over het leveren van zorg aan ouderen in de toekomst; vooral ook omdat de meesten dit als een enorme verantwoordelijkheid zagen. De meeste studenten pleitten voor een gespecialiseerde opleiding om verpleegkundigen in staat te stellen beter voor ouderen te zorgen.

In hoofdstuk 7 worden de belangrijkste bevindingen van de onderzoeken die in dit proefschrift zijn opgenomen besproken, gevolgd door een kritische reflectie en methodologische discussie. Het hoofdstuk beschrijft tevens de implicaties voor de praktijk, het beleid en toekomstig onderzoek. De belangrijkste conclusies zijn dat de ouderen uit sloppenwijken, die voor dit proefschrift zijn onderzocht, een matige kwaliteit van leven ervaren en een verscheidenheid aan behoeften aan zorg en sociale voorzieningen lijken te hebben. De studies in dit proefschrift pleiten daarom voor meer en betere zorg- en sociale voorzieningen voor ouderen in sloppenwijken. Dit zou moeten worden ondersteund door nationaal beleid op maat. Samenwerkingsverbanden tussen overheid en Ngo's, een positieve houding van zorgverleners en een hoge kwaliteit van de geleverde zorg kunnen helpen om de kwaliteit van leven van ouderen in sloppenwijken te verbeteren.

Impact

IMPACT OF THE DISSERTATION

This dissertation is the first one to give insight into the Quality of Life (QoL) of slum-dwelling older adults in two Ghanaian slums, together with their health and social care needs. The studies in this dissertation aimed to 1) give an overview of various instruments that can be used to assess the QoL of older adults living in African countries, including their psychometric properties and feasibility features; 2) assess the QoL of older adults living in slums in Ghana; 3) explore the health and social care needs of older adults from the perception of both older adults and health professionals; and 4) describe the attitudes of student nurses toward caring for older adults. This chapter reflects on the relevance of the studies of this dissertation for society, practice, and education in Ghana. Furthermore, activities that will be performed to disseminate the study results are discussed.

Societal Relevance

Ghana is a low-middle-income country with a population of 32.83 million. The Greater Accra Region, which is one of the sixteen regions in Ghana, has a population of approximately 5.5 million people followed by the Ashanti Region, which has approximately 5.4 million inhabitants. The other regions are all a lot less densely populated, which gives a picture of the massive migration of the population from rural to specific urban regions where more resources are available. This is especially the case for the Greater Accra Region, where the capital city Accra, is located. The region is known for its economic activities where people migrate to, with the hope of work and better livelihoods. However, expenditures for daily living activities are high and more expensive than many people can afford. Also, accommodation, which is a basic need for all individuals, is not easily available and affordable in the region due to the high population and lack of affordable houses. This has resulted in the gradual eruption of several slums in the city of Accra.

As the population in Ghana is ageing, slum populations are ageing as well. The population of older adults (aged 60 years and above) was recorded to be 976.000 in Ghana in 2020 and is estimated to reach 2.5 million by 2025 [1]. It is questionable if life expectancy increases with similar QoL, especially among older adults living in slums. Therefore, it is essential to get more insight into the QoL of older adults living in slums, which was the aim of this dissertation. Studies in this dissertation provide evidence that the overall QoL of slum-dwelling older adults was not poor, as hypothesized, but moderate. However, it appears that various domains, such as the physical, social, and psychological domains of QoL, need improvement. Besides that,

females participating in this study had a lower QoL than men. These findings advocate for strategies focused on improving QoL in slums for older adults in general, and females.

Besides giving insight into the QoL of older adults living in slums, this dissertation also provides information on the health and social needs of older adults in slums. Most older adults in slums not only mentioned that inability to pay for services at formal health facilities was a barrier to the utilization of these facilities, but also the way some health professionals related with them (not always with the right attitude), large distances to healthcare facilities and lack of social care services were mentioned as factors leading to unmet needs. Findings in this dissertation should be input for discussion on a governmental level, for instance for the Health Ministry or the Ministry of Gender, Children and Social Protection, and as input when creating the Ageing Bill. Additionally, the government can engage cooperate organizations to take up projects to improve the QoL of older adults in slums, as part of their social responsibilities.

Practical relevance

Although improving the lives of slum dwellers is a target of the United Nations Sustainable Development Goals (SDGs), their living conditions are still harsh; overcrowding; poor quality housing; insecure residential status; and inadequate access to safe water, sanitation, and other infrastructure. It is not surprising that our findings reveal that slum-dwelling older adults have poor physical and psychological QoL and moderate social and environmental QoL. As suggested earlier, these findings should be of interest to governmental bodies, NGOs, healthcare organizations, and healthcare professionals working with older adults and slum populations, such as the Ministry of Gender, Children and Social Protection Republic of Ghana and the currently available healthcare services. It is recommended that the Ministry of Gender, Children and Social Protection use the finding of poor physical and psychological QoL as input to advocate assistance for older adults in slums. Examples of aiding are engaging social workers and community volunteers to organise and facilitate meeting places for older people in slums, as well as women empowerment programs to improve the QoL of older females in slums.

Furthermore, when registered nurses receive adequate training in how to take care of older slum-dwelling adults, including a focus on having the right attitude, they can provide quality care in their health facilities.

IMPACT OF THE DISSERTATION

The findings of this dissertation also urge community nurses to frequently visit older adults in slums to assist them with their health needs. Additionally, findings on their health and social needs especially stress the already mentioned need for meeting places within slums where older adults can sit and interact with their peers and receive health attention from community health nurses and social care workers.

Lastly, results from this dissertation can be used by the Ghana Health Service in the allocation of health professionals and health facilities close to slums. Other Non-Governmental Organisations such as HelpAge International and Good Old Age Golden Foundation Ghana, could also take up the needs of the aged to augment the efforts of the government.

Educational relevance

Our findings regarding the QoL of older slum-dwelling adults, their health and social care needs as well as students' intention to practice in geriatric care, were in line with earlier findings from various national and international research groups. The study concludes that efforts must be made by the government and health professionals to understand and learn about slum-dwelling older adults. This can be done by improving the educational training of health professionals, especially nurses and providing on-the-job training for licensed health professionals.

The findings of our study in Chapter 6, where student nurses were not interested in the care of older adults, are particularly useful to the Nursing and Midwifery Council(the regulatory body for all nurses and nursing training institutions), the Ministry of Health (who also oversee all health training institutions) and the Ministry of Education (which is responsible for ensuring quality education is provided to meet the needs of the population). The authors recommend including more 1) topics related to gerontology/geriatrics in nursing studies; 2) topics related to taking care of slum-dwelling people; and 3) emphasis on motivating students, and current nurses, in caring for older adults in slums. Therefore, a call for a review and modification of the nursing curriculum regarding gerontology and geriatrics is needed. Furthermore, universities and diploma-training nursing institutions can use the findings as a basis for curriculum review in gerontology and especially, in taking care of people in deprived areas (slums) in Ghana. In addition, it is recommended that the Ministry of Health organizes in-service training on geriatrics and gerontological care of slum-dwellers for registered nurses. It has been stressed in the general discussion the relevance of more awareness of and future

research on older adults in Ghanaian slums including intervention studies on improving their health and social care needs.

In the studies, several methodological issues that complicated the research and which are relevant for future research have been exposed. The most striking issue concerned the number and categories of health professionals (for example, the lack of physicians represented) that were involved in the 4th study. This must be dealt with in future research to enable the creation of more definite evidence to promote the wider implementation of recommendations to improve the general QoL of slum-dwelling older adults.

To transfer knowledge, the results of this dissertation were disseminated through the publication of articles in high-impact scientific journals. In addition, findings were communicated through presentations at national conferences, webinars, and training of student nurses (e.g., Centre for Ageing Studies, 5th Annual International Research Conference. 29th-30th September 2021). The author of this dissertation is working as a nursing lecturer at the University of Ghana and is also involved in the development of the nursing curriculum, where she will advocate for adjusting the current curriculum to incorporate findings found in the studies of this dissertation. Continuous dissemination of research findings will continue in the relevant institutions with an interest in issues of older adults.

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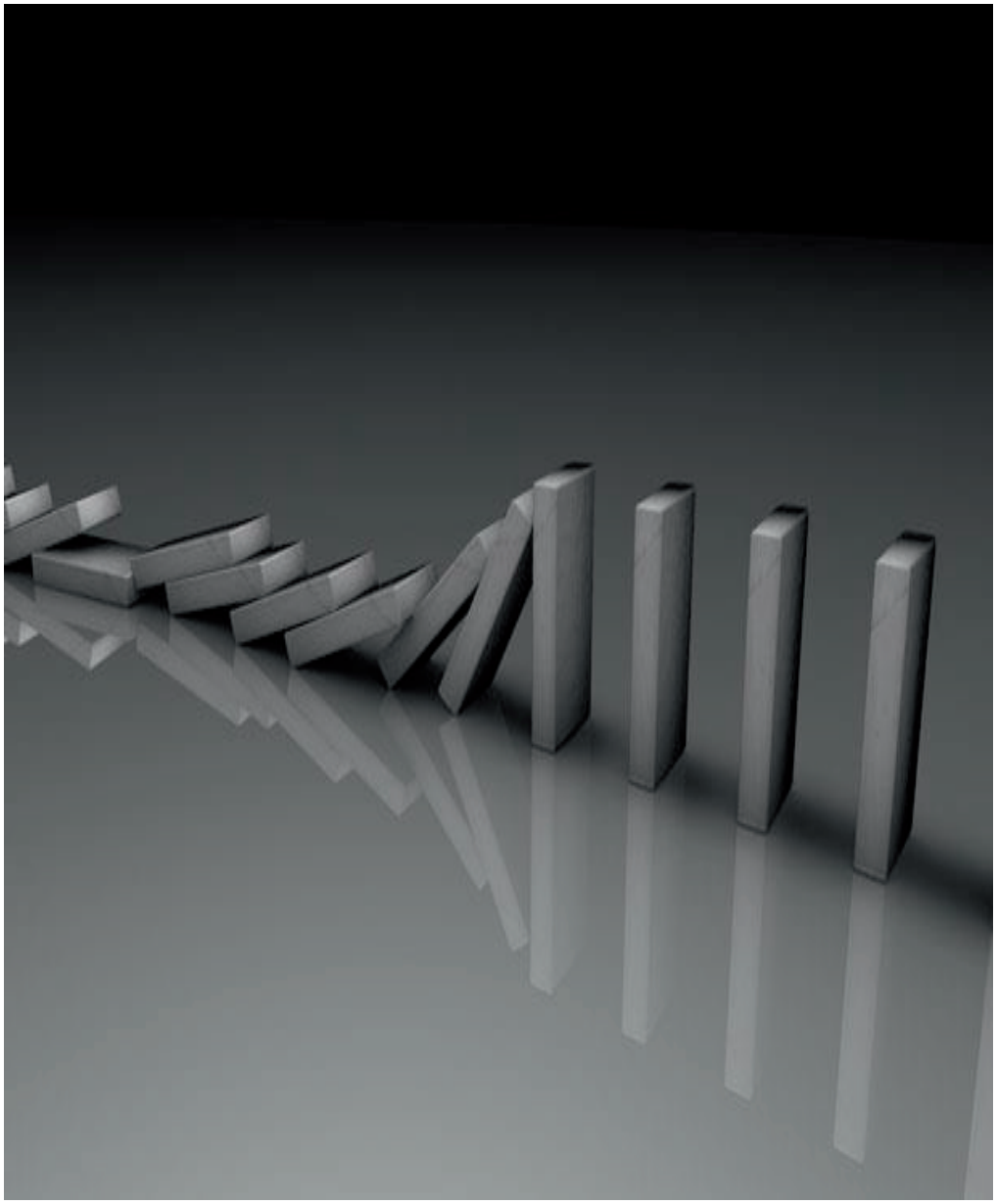

Acknowledgements

The Bible cautions us to give thanks in all things. I believe it is on this basis that John F. Kennedy admonished that *"We must find time to stop and thank the people who make a difference in our lives"*. When it is all said and done, I lift my eyes to the Heavens and say indeed Ebenezer, grace brought me here. I thank the Almighty God for blessing me with this day. I dare say I could not have made it without a team of coaches, mentors, and supporters.

I am indebted to my promoter, Prof. Jos M.G.A Schols, for accepting to supervise a young lady from Ghana who loves older adults. You led in providing support towards my trips to the Netherlands, I cannot thank you enough. Jos, I have learnt a lot under your guidance and your promptness in communication is unmatched. As Roy T. Bennett put it, *"Always remember people who have helped you along the way and don't forget to lift someone"*. I will apply the skills you demonstrated to me in the supervision of my students also.

To my co-promotor Prof. Christa Lohrmann, I am very grateful for your attention to detail. Your encouragement and corrections have been beneficial. Indeed, I have gained a wealth of experience through our interactions. My daily supervisor, Dr Irma H.J. Everink, your tremendous support is not taken for granted. Always ready to listen to my explanations and assist me to express them on paper. Your writing experience and directions received are acknowledged. I will always remember dinner at your house with your family and the drive back to my apartment. I am truly grateful for your support. Prof. Aaron A. Abuosi, my local supervisor, I appreciate your encouragement to write. When academic and work life got tough you reached out and inspired me. You helped me improve my strength of multitasking as you included me in your projects so I can learn from experienced academics. To Ruud Halfens, who had to leave the team because of retirement, I appreciate your love and sense of humour. Your smiles will always be remembered and of course "no milk" in your tea!

My support team is a tall list, but I heed the advice of Ralph Waldo Emerson who wrote *"Cultivate the habit of being grateful for every good thing that comes to you, and to give thanks continuously. And because all things have contributed to your advancement, you should include all things in your gratitude"*.

ACKNOWLEDGEMENTS

I appreciate Dr Ninon P. Amertil, Dean of the School of Nursing and Midwifery at Valley View University, my cheerleader for encouraging me to complete my PhD. I further acknowledge the assistance of Dr Charles A. Adjei in the inception of this journey as he carried my proposal from Ghana to the Netherlands to search for Prof Schols. God bless you; I do not take it lightly. To my former Dean Prof. Lydia Aziato, now the Vice Chancellor of the University of Health and Allied Health Sciences, Ho, Ghana, I say thank you. Indeed "Push and Pressure" worked. To the current Dean of the School of Nursing and Midwifery, Prof. Florence Naab, I am grateful for the time given to finish up my work. To my Head of Department, Dr Lillian Akorfa Ohene, and senior colleagues in the Public Health Nursing Department, I am very grateful for the support and urging me on. To my mentor, Prof. Irene Kretchy, (assigned to me by CEGENSA for 1 year) your pep talks have done me well and I believe I will excel in my career path because I have you by my side. God bless you. To my colleagues at the Schools of Nursing and Midwifery both at the University of Ghana and Valley View University, I appreciate you all especially, Dr. Mary Ani-Amponsah, Collins Atta Poku, Merri Iddrisu, Dr David Deegbe, Dr. Tenkorang-Twum, Joyce Pwavra, Paarima Yennutin, Dr Kennedy Dodam Konlan, Dr Samuel Adjorlolo, and Dr Fidelis Atibila.

To the entire team at HSR Maastricht University, especially, Brigitte Caenen, for making me feel welcome, and Suzanne Rijcken, I can't thank you enough. To all my friends in Ghana (CAC-Madina Central) and the Netherlands (CAC- Bethel Family, Vivienne, and Simone) God bless you all.

To my supportive husband, Ivan, who managed the children whenever I needed to be away during school sessions, thank you and more blessings. To my children Ruth-Anne, Joshua-Caleb, and Jonathan-David, we made it! After a year of entering academia, my dad asked me, won't you pursue a PhD? I told him I will though not yet! To my parents, Charles, and Adelaide, who took care of my children so I could make trips to the Netherlands during school holidays; my siblings, Patience, Nathaniel and Andrew, God bless you and be gracious to you for my sake.

I would also like to thank the assessment committee, Prof. dr. M. Pavlova (Chair), Prof. dr. R. Ruiter, Prof. dr. N.K. de Vries, Prof. dr. A.E. Yawson, University of Ghana, Accra, Ghana, Prof. dr M.J.M. Kardol, Vrije Universiteit Brussel, België for taking the time and interest to assess this dissertation.

About the Author

Priscilla Yeye Adumoah Attafuah was born on the 4th of March 1985 to Mr Charles Mensah Adumoah and the late Sophia Tawiah. She completed her Basic and Secondary education at the Tema Parents Association School and Wesley Girls' High School respectively. She proceeded to the Kwame Nkrumah University of Science and Technology (KNUST) to pursue her Bachelor of Science in Nursing. With a Second class upper at the end of the 4-year training (2008), she continued to the University of Nottingham, United Kingdom for a master's degree in advanced nursing (2011). She returned to Ghana and was employed as a Lecturer at the Valley View University, Oyibi from 2013 till 2019 when she received an appointment from the University of Ghana, Legon as an Assistant Lecturer. She is married to Ivan Afram Attafuah and blessed with three children Aseda (2016), Ayeyi (2018) and Nhyira (2020).

She began the PhD program at the University of Maastricht in 2018. She was selected to participate in the Erasmus+ program at Dicle University in Turkey in May 2023. She has a great interest in ageing, caring for older adults, and improving the lives of the older population in Ghana. Additionally, in 2022, Priscilla was selected to visit Queens University in Ontario Canada as part of the Queen Elizabeth Scholars – West Africa program. However, due to visa issues with the team, the program was rescheduled for the summer of 2023. She engaged in Community-Based Participatory Research training organized by Queens University, Ontario-Canada, at the Queen's International Centre for the Advancement of Community-Based Rehabilitation from July to August 2023.

ABOUT THE AUTHOR

Publications

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1. **Attafuah, P. Y. A.,** Everink, I. H., Lohrmann, C., Abuosi, A., & Schols, J. M. (2023). Health and social needs of older adults in slum communities in Ghana: a phenomenological approach used in 2021. *Archives of Public Health*, *81*(1), 1-15.
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1. **Attafuah, P. Y.**, Iddrisu, M., Amertil, N., Sarfo, J. O., Nyonator, D. E., Adjei, C. A., ... & Abuosi, A. A. (2022). Attitudes of Nurses Towards Patients at the End of their Life: Using FATCOD-B in the Ghanaian Context. *European Researcher. Series A*, *13*(1), p4-10. 7p.
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5. Nachinab, G. T. E., Adjei, C. A., Ziba, F. A., Asamoah, R., & **Attafuah, P. A.** (2019). Exploring the determinants of antenatal care services uptake: a qualitative study among women in a rural community in northern Ghana. *Journal of pregnancy*, *2019*.
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BOOK CHAPTER

7. Aziato, L., Iddrisu, M., **Attafuah, P. Y**., Pwavra, J. B., & Ohene, L. A. (2020). African Women in Academia Breaking the Glass Ceiling: Towards Attainment of the Sustainable Development Goals. In *Empowering African Women for Sustainable Development* (pp. 107-119). Palgrave Macmillan, Cham.

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RESEARCH GRANTS (FUNDED RESEARCH)

9. Jan. 2021-Feb. 2023 ORID Research Funds; Amount: GHS 119,805
   Project: Assessing the Relationship between Patient Safety Culture and Adverse Events in Ghanaian Hospitals
   Principal Investigator: Prof. Aaron Abuosi
   Co-investigators: Prof. Edward Nketiah-Amponsah**, Priscilla Yeye Adumoah Attafuah,** Dr. Patience Abor

LIVING LAB IN AGEING AND LONG-TERM CARE

This thesis is part of the Living Lab in Ageing and Long-Term Care, a formal and structural multidisciplinary network consisting of Maastricht University, nine long-term care organizations (MeanderGroep Zuid-Limburg, Sevagram, Envida, Cicero Zorggroep, Zuyderland, Vivantes, De Zorggroep, Land van Horne & Proteion), Intermediate Vocational Training Institutes Gilde and VISTA college and Zuyd University of Applied Sciences, all located in the southern part of the Netherlands. In the Living Lab, we aim to improve the quality of care and life for older people and the quality of work for staff employed in long-term care via a structural multidisciplinary collaboration between research, policy, education, and practice. Practitioners (such as nurses, physicians, psychologists, physio- and occupational therapists), work together with managers, researchers, students, teachers, and older people themselves to develop and test innovations in long-term care.

PHD-THESES LIVING LAB IN AGEING AND LONG-TERM CARE/ PROEFSCHRIFTEN ACADEMISCHE WERKPLAATS OUDERENZORG LIMBURG

Priscilla Y.A. Attafuah. Quality of life, health, and social needs of slum-dwelling older adults in Ghana. 2023

Ron Warnier. Frailty screening in older hospitalized patients. 2023

Megan Davies. Tri-national ethnographic multi-case study of person-centred care and quality of life in long-term residential care. 2023

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