

RESEARCH

Open Access



Health and social needs of older adults in slum communities in Ghana: a phenomenological approach used in 2021

Priscilla Yeye Adumoah Attafuah^{1,2*}, Irma HJ Everink², Christa Lohrmann³, Aaron Abuosi⁴ and Jos MGA Schols^{2,5}

Abstract

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. 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. It appeared that older adults believed that spiritual powers were causing illnesses and influenced their use of formal health services. Other factors such as expired insurance cards and the attitude of healthcare workers served as demotivators for using health services.

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 National Health Insurance Scheme (NHIS). Their social needs were mainly related to financial difficulties and help with some activities of daily living. 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.

*Correspondence:

Priscilla Yeye Adumoah Attafuah
pyaattafuah@ug.edu.gh

Full list of author information is available at the end of the article



© The Author(s) 2023. **Open Access** This article is licensed under a Creative Commons Attribution 4.0 International License, which permits use, sharing, adaptation, distribution and reproduction in any medium or format, as long as you give appropriate credit to the original author(s) and the source, provide a link to the Creative Commons licence, and indicate if changes were made. The images or other third party material in this article are included in the article's Creative Commons licence, unless indicated otherwise in a credit line to the material. If material is not included in the article's Creative Commons licence and your intended use is not permitted by statutory regulation or exceeds the permitted use, you will need to obtain permission directly from the copyright holder. To view a copy of this licence, visit <http://creativecommons.org/licenses/by/4.0/>. The Creative Commons Public Domain Dedication waiver (<http://creativecommons.org/publicdomain/zero/1.0/>) applies to the data made available in this article, unless otherwise stated in a credit line to the data.

Keywords Health needs, Old age and Social Care, Social needs, Social and Health Services, Quality-of-life, Urban slums, Ghana

What is known about the topic

- Health, participation, and security can ensure a positive QoL among older adults.
- Slum-dwellers lack many amenities which makes them vulnerable.
- The health and social needs of older adults are numerous.

What this paper adds

- The identified health and social needs from the view of the slum-dwelling older adult.
- Older adults place much more importance on perceived health-related needs than social needs.
- The social needs of older adults in slums in Ghana are few because the family system still exists. Yet the issue of mobility hinders the participation of slum-dwelling older adults in family activities. This creates a feeling of loneliness and neglect.
- Health education through religious bodies can help provide insight into some health needs of older adults.

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 [4–6] 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 [7, 8]. As the 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. Indeed, many parts of urban Ghana can also fall into the criteria for the classification of slums because of the level of resources available in Ghana as well as poor planning for putting up structures in most parts of Ghana. For this

reason, certain places have more slum characteristics than others. The slum concept for this study is based on the UN-Habitat classification of slums [5]. This states that any household with one or more of the following is classified as a slum: (1) Lack of access to an improved water source; (2) Lack of access to improved sanitation facilities; (3) Lack of sufficient living area; (4) Lack of housing durability; and (5) Lack of security of tenure. This could highly influence the quality of life (QoL) of these slum-dwellers as they age [2].

Quality of life (QoL) according to the World Health Organisation Quality of Life Group, [9] 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”. Therefore, in the context of living in slums, this study focused on older adults to explore their perception of their health and social needs as a necessary component of their entire QoL. Studies have suggested that active ageing is a major contributor to the QoL of individuals [10, 11].

Active ageing is defined by the World Health Organization (WHO) as “the process of optimizing opportunities for health, participation and security in order to enhance the quality of life as people age” [12]. In the concept of active ageing, “active” is not limited to physical activity but the ability to continue being involved in the social, cultural, civic, spiritual, and economic affairs of society. The WHO policy framework on Active Ageing (Figure 1) outlines three pillars that can ensure a positive QoL among older adults [12]: health, participation, and security. The first two pillars were used in the conceptualization of this study. The first pillar, health, refers to an individual’s physical, mental, and social well-being and includes access to healthcare services, nutritional needs and a healthy environment. The second pillar, participation, refers to an individual’s involvement 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” [13]. 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, 14–16]. Studies have stated that frequent health problems of

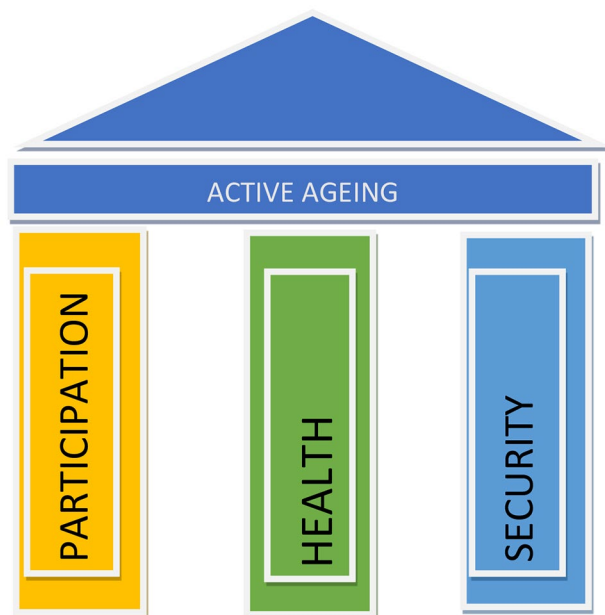


Figure 1 WHO policy framework on Active Ageing

older slum-dwellers include depression, physical injuries, malnutrition, chronic diseases, and substance abuse [17–19]. 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 [20] mainly because of overcrowding.

Even though these older adults suffer from severe health issues, they seem to make limited use of healthcare services [21, 22]. Their perception of health could be a likely influence on healthcare patronage [14, 18, 57, 63]. 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 [23–25]. Uneven walkways and decreased mobility of older adults, also limit access to healthcare services [21, 26, 27]. 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.

When looking at the second pillar, participation, the rationale for this pillar is that social connections are important in the QoL of older adults. The WHO advised to aim at the autonomy and independence of older adults while also highlighting that there may be frail, disabled older adults who may need care. In line with this, it appears that the social needs of older people are diverse [27, 28]. 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 [27, 28] and positively impacts their quality of life [27, 29]. 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 [29, 30]. Unmet social needs may lead to loneliness and social isolation, which may, in turn, cause psychological and physical health problems [29, 31]. 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 [32–34]. Additionally, studies focus on different settings, such as rural areas [35], and mostly on populations living in developed countries [36]. 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. [37] 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.

Materials and 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 [38] 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 we sought to understand the subjective reality

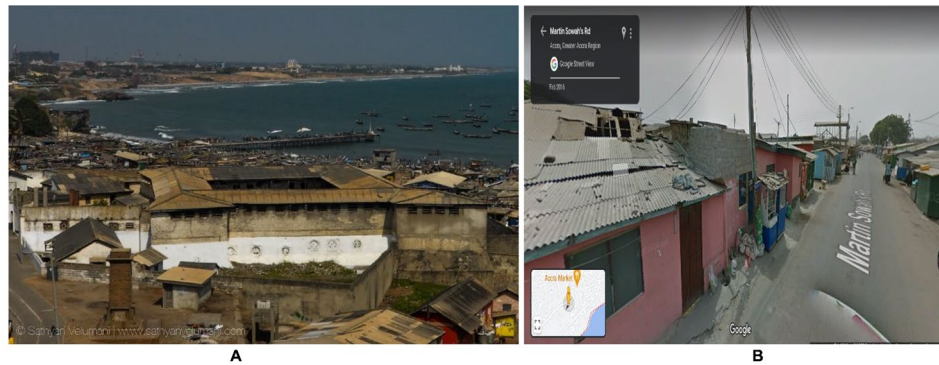


Figure 2 Aerial (A) and street (B) view of Teshie Maami, Ghana (a slum in the Teshie community). Taken in February 2016 and culled from Google images in February 2023

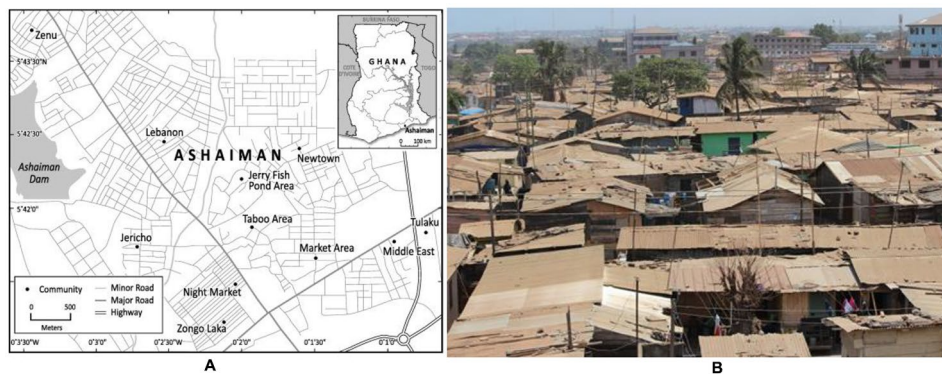


Figure 3 Geographic map (A) and aerial view (B) of Ashaiman-Ghana, participants from Zongo Laka, Night Market and Market Area. Images were taken in 2019 and culled from Google maps in February 2023

of what health and social care are and their influence on the quality of life from the view of older adults in slums.

and social needs. Figures 2 and 3 show the pictorial image of the study setting.

Study setting According to Dr Richard Bofah, the country coordinator for SDGs, who gave highlights of the National Development Planning Commission (NDPC), Ghana’s report at a regional dissemination workshop, a population of 8.8 million people live in slums. Of the 23 slums in Ghana; Accra, Tema-Ashaiman, Kumasi, Tamale and Takoradi are listed as the predominant urban areas with slums. 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 we wanted an overall view of the health

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 PYAA asked participants who had previously participated in a study that examined the quality of life of older adults in slums [37] 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 [39]. Additionally, it has been widely used in similar settings [40–42]. 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.

Research Questions.

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??

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 [34–36, 43, 44]. 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 has been added in [Appendix 1](#).

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 min and 1 h.

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 [45]. Based on Colaizzi's phenomenological approach seven steps were followed during the analysis [64]: (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

Table 1a Background Characteristics of participants from Ghana, taken 2021 (study on the health and social needs of older adults)

Characteristics of participants	Categories	Frequency(n)	Percentage %
AGE (YEARS)	60–65	12	48
	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	44
	Widowed	8	32
	Divorced	3	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

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
(De)motivators of health service use	Superstition
	Perceived cause of health condition
	Healthcare providers attitude
	Challenges with the National Health Insurance Scheme (NHIS)
	Effectiveness of medications
Challenges of older adults	Length of waiting time
	Proximity of major health facilities
	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

that the data were well represented, a series of meetings were held between (Blinded for review) 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 [46].

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. Details are given in Table 1b in the Supplementary file (Appendix 2).

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.

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 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 experienced difficulty 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 have to 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 are not well.

"...they (health workers) are selective in who 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 also 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 perceived his/her health condition also influenced 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 [47] and Malawi [48] 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 [49]. 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 Fayahun, et al. [50], and Cadmus, et al., [51] 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. [52] 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., [53] and Amiresmaili, et al., [54] which postulated that possession of health insurance cards influenced the utilization of healthcare services.

In this study, we 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. [55] 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) [60–62]. 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. [37] 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, [56] 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., [57]. According to Iriarte, & Jimenez [56], 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. [58], 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., [59], 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, [63]. 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.

Supplementary Information

The online version contains supplementary material available at <https://doi.org/10.1186/s13690-023-01056-9>.

Supplementary Material 1

Supplementary Material 2

Acknowledgements

The authors wish to express sincere thanks and gratitude to the people who have contributed to this research, most especially to the older adults in the visited slums for their genuine perspectives.

Author Contribution

PA, IE, CL, AA, and JS conceptualized the study. PA conducted the interviews. PA and IE analysed the data. All authors reviewed the Section's Introduction and Discussion and read through the final manuscript before submission. All authors contributed to the article and approved the submitted version.

Funding

There was no funding received.

Data Availability

Data is available from the corresponding author upon reasonable request.

Declarations

Ethics approval and consent to participate

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.

Consent for publication

Not applicable.

Competing interests

The authors declare no competing interests.

Author details

¹School of Nursing and Midwifery, University of Ghana, Legon, Ghana

²Department of Health Services Research and Care and Public Health Research Institute (CAPHRI), Maastricht University, Maastricht, the Netherlands

³Institute of Nursing Science, Medical University of Graz, Graz, Austria

⁴Health Services Management Department, University of Ghana Business School, Legon, Ghana

⁵Department of Family Medicine and Care and Public Health Research Institute (CAPHRI), Maastricht University, Maastricht, the Netherlands

Received: 15 November 2022 / Accepted: 8 March 2023

Published online: 27 April 2023

References

1. Abdi S, Wadugodapitiya A, Bedaf S, George CE, Norman G, Hawley M, de Witte L. Identification of priority health conditions for field-based screening in urban slums in Bangalore, India. *BMC Public Health*. 2018 Dec;18(1):1–1.
2. Mridha MK, Hossain MM, Khan MS, Hanif AA, Hasan M, Hossain M, Shamim AA, Ullah MA, Rahman SM, Sarker SK, Bulbul MM. Nutrition and health status of elderly people in Bangladesh: evidence from a nationwide survey. *Curr Developments Nutr*. 2021 Jun;5(Supplement2):39.
3. Malik S, Roosli R, Tariq F. Investigation of informal housing challenges and issues: experiences from slum and squatter of Lahore. *J Housing Built Environ*. 2020 Mar;35(1):143–70.
4. Otieno PO, Wambiya EO, Mohamed SM, Mutua MK, Kibe PM, Mwangi B, Donfouet HP. Access to primary healthcare services and associated factors in urban slums in Nairobi-Kenya. *BMC Public Health*. 2020 Dec;20(1):1–9.
5. United Nations Human Settlements Programme (UN-Habitat), Indicator 11.1.1: Proportion of urban population living in slums, informal settlements or inadequate housing, SDG Indicator Metadata Repository. 2021. Retrieved from <https://unstats.un.org/sdgs/metadata/files/Metadata-11-01-01.pdf>
6. Liu S, Zhang Y. Cities without slums? China's land regime and dual-track urbanization. *Cities*. 2020 Jun 1; 101:102652.
7. Cesta A, Cortellessa G, Fracasso F, Orlandini A, Turno M. User needs and preferences on AAL systems that support older adults and their carers. *Journal of Ambient Intelligence and Smart Environments*. 2018 Jan 1;10(1):49–70.
8. Dziechcizak M, Guty E, Wojtowicz A, Filip R. Social and health care needs of elderly people living in the countryside in Poland. *Annals of Agricultural and Environmental Medicine*. 2012;19(4).
9. Group TW. The World Health Organization quality of life assessment (WHO-QOL): development and general psychometric properties. *Soc Sci Med*. 1998 Jun 15;46(12):1569–85.
10. de Medeiros MMD, Carletti TM, Magno MB, Maia LC, Cavalcanti YW, Rodrigues-Garcia RCM. Does the institutionalization influence elderly's quality of life? A systematic review and meta-analysis. *BMC Geriatr*. 2020;20:1–25.
11. Rantanen T, Eronen J, Kauppinen M, Kokko K, Sanaslahti S, Kajan N, Portegijs E. Life-space mobility and active aging as factors underlying quality of life among older people before and during COVID-19 lockdown in Finland—a longitudinal study. *J Gerontol Ser A*. 2021 Mar;76(3):e60–7.
12. World Health Organization. Active ageing: a policy framework. World Health Organization; 2002.
13. Chisholm B. Organization for world health. *Mental Hygiene*. 1948 Jul;32(3):364–71.
14. D'cruz M, Banerjee D. 'An invisible human rights crisis': The marginalization of older adults during the COVID-19 pandemic—An advocacy review. *Psychiatry research*. 2020 Oct 1;292:113369.
15. Flaherty E, Bartels SJ. Addressing the community-based geriatric healthcare workforce shortage by leveraging the potential of interprofessional teams. *J Am Geriatr Soc*. 2019 May;67(5):400–8.
16. Talukdar D. Cost of being a slum dweller in Nairobi: Living under dismal conditions but still paying a housing rent premium. *World Development*. 2018 Sep1;109:42–56.
17. Friesen J, Friesen V, Dietrich I, Pelz PF. Slums, space, and state of health—a link between settlement morphology and health data. *Int J Environ Res Public Health*. 2020 Jan;17(6):2022.
18. Mannan MA. Burden of disease on the urban poor: a study of morbidity and utilisation of healthcare among slum dwellers in Dhaka City. 2018
19. Mendenhall E, Kohrt BA, Norris SA, Ndetei D, Prabhakaran D. Non-communicable disease syndemics: poverty, depression, and diabetes among low-income populations. *The Lancet*. 2017 Mar;389(4):951–63.
20. Auerbach AM, Thachil T. How does Covid-19 affect urban slums? Evidence from settlement leaders in India. *World Development*. 2021 Apr 1;140:105304.
21. Guimarães T, Lucas K, Timms P. Understanding how low-income communities gain access to healthcare services: A qualitative study in São Paulo, Brazil. *Journal of Transport & Health*. 2019 Dec 1;15:100658.
22. Kipo-Sunyehzi DD. Public-Private Organizations Behaviour: the Paradoxes in the implementation of Ghana's Health Insurance Scheme. *Public Organ Rev*. 2020 Sep;20(3):585–96.
23. Boro B, Saikia N. A qualitative study of the barriers to utilizing health-care services among the tribal population in Assam. *PLoS one*. 2020 Oct 8;15(10):e0240096.
24. Christmalls CD, Aidam K. Implementation of the national health insurance scheme (NHIS) in Ghana: lessons for South Africa and low-and middle-income countries. *Risk Manage Healthc Policy*. 2020;13:1879.
25. Das M, Angeli F, Krumeich AJ, van Schayck OC. The gendered experience with respect to health-seeking behaviour in an urban slum of Kolkata, India. *International journal for equity in health*. 2018 Dec;17(1):1–4.
26. Gallo HB, Marshall LW, Levy-Storms L, Wilber KH, Loukaitou-Sideris A. Voices of experience: what do low-income older adults tell us about mobility, technology, and social participation? *J Appl Gerontol*. 2021 May;19:07334648211012530.

27. Ten Bruggencate TI, Luijckx KG, Sturm J. Social needs of older people: a systematic literature review. *Ageing Soc.* 2018 Sep;38(9):1745–70.
28. Czaja SJ. The potential role of technology in supporting older adults. *Public Policy & Aging Report.* 2017 May 1;27(2):44–8.
29. Morrow-Howell N, Galucia N, Swinford E. Recovering from the COVID-19 pandemic: A focus on older adults. *Journal of aging & social policy.* 2020 Jul 3;32(4–5):526–35.
30. National Academies of Sciences, Engineering, and Medicine. Social isolation and loneliness in older adults: Opportunities for the health care system. National Academies Press; 2020 Jun. p. 14.
31. Taylor HO, Taylor RJ, Nguyen AW, Chatters L. Social isolation, depression, and psychological distress among older adults. *J Aging Health.* 2018 Feb;30(2):229–46.
32. Dell NA, Sasaki N, Stewart M, Murphy AM, Klier M. Service needs of older adults with serious mental illness. *Journal of Gerontological Social Work.* 2020 Oct 2;63(6–7):659–61.
33. Hermesen LA, Hoogendijk EO, van der Wouden JC, Smalbrugge M, Leone SS, van der Horst HE, Dekker J. Self-perceived care needs in older adults with joint pain and comorbidity. *Aging clinical and experimental research.* 2018 May;30(5):449–55.
34. Webkamigad S, Rowe R, Peltier S, Froehlich Chow A, McGilton KS, Walker JD. Identifying and understanding the health and social care needs of indigent older adults with multiple chronic conditions and their caregivers: a scoping review. *BMC Geriatr.* 2020 Dec;20(1):1–9.
35. Henning-Smith C. Meeting the social needs of older adults in rural areas. *In: JAMA Health Forum 2020 Nov 2 (Vol. 1, No. 11, pp.e201411–e201411).* American Medical Association.
36. Saravanakumar P, Garrett NK, Van Wissen K, Montayre J, McBride-Henry K. Social connectedness and self-perceived health of older adults in New Zealand. *Health & Social Care in the Community.* 2022 May;30(3):e647–56.
37. Attafuah PY, Everink I, Abuosi AA, Lohrmann C, Schols JM. Quality of life of older adults and associated factors in Ghanaian urban slums: a cross-sectional study. *BMJ open.* 2022 Feb 1;12(2):e057264.
38. Gray JR, Grove SK, Sutherland S. Burns and grove's the practice of nursing research-E-book: Appraisal, synthesis, and generation of evidence. Elsevier Health Sciences; 2016 Aug. p. 10.
39. Naderifar M, Goli H, Ghaljaie F. Snowball sampling: A purposeful method of sampling in qualitative research. *Strides in Development of Medical Education.* 2017 Sep 30;14(3).
40. Chowdhury A, Gupta A. Nutritional status in under five children and their associated risk factors in an urban slum of Mumbai. *Int J Res Med Sci Int J Res Med Sci.* 2021 Apr;9(4):1149–55.
41. McGranahan M, Bruno-McClung E, Nakyeyune J, Nsibirwa DA, Baguma C, Ogwang C, Serunjogi F, Nakalembe J, Kayaga M, Sekalala S, Oyebo O. Realising sexual and reproductive health and rights of adolescent girls and young women living in slums in Uganda: a qualitative study. *Reproductive health.* 2021 Dec;18(1):1–1.
42. Mendhe HG, David R, Singh D, Makade KG. Universal Health Insurance coverage and utilization among women in urban slum of Rajnandgaon, Chhattisgarh. *J Family Med Prim Care.* 2021 Mar;10(3):1313.
43. Pelcastre-Villafuerte BE, Cuecuecha Rugerio E, Treviño Siller SG, Rueda Neria CM, Ruelas - González MG. Health needs of indigenous Mayan older adults in Mexico and health services available. *Health & Social Care in the Community.* 2020 Sep;28(5):pp. 1688–97.
44. Ten Bruggencate T, Luijckx KG, Sturm J. To meet, to matter, and to have fun: the development, implementation, and evaluation of an intervention to fulfil the social needs of older people. *Int J Environ Res Public Health.* 2019 Jan;16(13):2307.
45. Braun V, Clarke V. Reflecting on reflexive thematic analysis. *Qualitative research in sport, exercise and health.* 2019 Aug;11(4):589–97.
46. Tong A, Sainsbury P, Craig J. Consolidated criteria for reporting qualitative research (COREQ): a 32-item checklist for interviews and focus groups. *International journal for quality in health care.* 2007 Dec 1;19(6):349–57.
47. Yeates K, Chard S, Eberle A, Lucchese A, Chelva M, Kaushal S, Mtema Z, Marandu PD, Smith G, Erwin E, Nswilla A. 'They say she is bewitched': A qualitative study of community and health provider perspectives regarding pre-eclampsia and eclampsia in rural Tanzania. *African Journal of Reproductive Health.* 2021 Oct 14;25(3s):92–104.
48. Svege S, Nkosi-Gondwe T, Lange S. "Satanism is witchcraft's younger sibling": Changing perceptions of natural and supernatural anaemia causality in Malawian children. *Plos one.* 2021 Apr 30;16(4):e0250661.
49. Barua K, Borah M, Deka C, Kakati R. Morbidity pattern and health-seeking behavior of elderly in urban slums: A cross-sectional study in Assam, India. *Journal of family medicine and primary care.* 2017 Apr;6(2):345.
50. Fayehun O, Ajisola M, Uthman O, Oyebo O, Oladejo A, Owoaje E, Taiwo O, Odubango O, Harris B, Lilford R, Omigbodun A. A contextual exploration of healthcare service use in urban slums in Nigeria. *PLoS ONE.* 2022 Feb;25(2):e0264725.
51. Cadmus EO, Adebosoye LA, Owoaje ET. Attitude towards ageing and perceived health status of community-dwelling older persons in a low resource setting: a rural-urban comparison. *BMC Geriatr.* 2021 Dec;21(1):1–1.
52. Agyemang-Duah W, Pehrah C, Pehrah P. Factors influencing the use of public and private health care facilities among poor older people in rural Ghana. *J Public Health.* 2020 Feb;28(1):53–63.
53. Awoke MA, Negin J, Moller J, Farell P, Yawson AE, Biritwum RB, Kowal P. Predictors of public and private healthcare utilization and associated health system responsiveness among older adults in Ghana. *Global health action.* 2017 Jan 1;10(1):1301723.
54. Amiresmaili M, Yazdi-Feyzabadi V, Heidarijamebozorgi M. Health services utilization among slum dwellers: An experience from Iran. *Journal of Education and Health Promotion.* 2019;8.
55. Naydenova E, Raghu A, Ernst J, Sahariah SA, Gandhi M, Murphy G. Healthcare choices in Mumbai slums: A cross-sectional study. *Wellcome Open Research.* 2017;2.
56. Iriarte ES, Jimenez DE. A Caregiver Must Be Healthy to Be Able to Care. *The American Journal of Geriatric Psychiatry.* 2021 May 1;29(5):473–5.
57. Tkatch R, Musich S, MacLeod S, Kraemer S, Hawkins K, Wicker ER, Armstrong DG. A qualitative study to examine older adults' perceptions of health: Keys to aging successfully. *Geriatric Nursing.* 2017 Nov 1;38(6):485–90.
58. Cash B, Hodgkin S, Warburton J. A transformative approach to systems theory in caregiving research. *Qualitative Social Work.* 2019 Jul;18(4):710–26.
59. Akinrolie O, Okoh AC, Kalu ME. Intergenerational support between older adults and adult children in Nigeria: the role of reciprocity. *J Gerontol Soc Work.* 2020 Jul;63(3):478–98.
60. Gyasi RM, Phillips DR, Amoah PA. Multidimensional social support and health services utilization among noninstitutionalized older persons in Ghana. *J Aging Health.* 2020;32(3–4):227–39.
61. Lu S, Wu Y, Mao Z, Liang X. Association of formal and informal social support with health-related quality of life among Chinese rural elders. *Int J Environ Res Public Health.* 2020;17(4):1351.
62. Kjellstrand J, Clark M, Caffery C, Smith J, Eddy JM. Reentering the community after prison: perspectives on the role and importance of social support. *Am J Criminal Justice.* 2022;47(2):176–201.
63. Ingrand I, Paccalin M, Liuu E, Gil R, Ingrand P. (2018). Positive perception of aging is a key predictor of quality-of-life in aging people. *PloS one*, 13(10), e0204044.
64. Abalos EE, Rivera RY, Locsin RC, Schoenhofer SO. Husserlian phenomenology and Colaizzi's method of data analysis: Exemplar in qualitative nursing inquiry using nursing as caring theory. *Int J Hum Caring.* 2016;20(1):19–23.

Publisher's Note

Springer Nature remains neutral with regard to jurisdictional claims in published maps and institutional affiliations.