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A qualitative exploration of gaps in undergraduate gerontological nursing courses and recommendations for change

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Abstract

Background The present study intended to gain insight into curricula gaps and explore recommendations for change to improve undergraduate nursing students' knowledge, attitudes and skills in gerontological nursing in Ghana.

Methods A qualitative exploratory design was selected for this study. This study was conducted in two phases. In phase 1, semi-structured interviews were conducted with Ghanaian gerontological nursing experts to identify existing gaps in Ghanaian gerontological nursing courses. In phase 2, gerontological nursing experts in Ghana and Australia were interviewed to put forward recommendations to address the current gaps in Ghanaian gerontological nursing courses identified in phase 1. Data were recorded, transcribed verbatim and analysed using a content analysis process.

Results Five themes were generated from the data. Two of the themes represented gaps in Ghanaian gerontological nursing courses: (1) Gaps in Ghanaian gerontological nursing curriculum impact care of older adults. (2) Aspects of Ghanaian culture perpetuate misconceptions about ageing among undergraduate nursing students. Three themes represented recommendations to address gaps in Ghanaian gerontological nursing courses: (1) Specialised gerontology content is required to dispel myths about ageing. (2) Authentic learning can improve attitudes toward care of older adults. (3) Qualification and skills of preceptors influence knowledge and skills of undergraduate nursing students in gerontological nursing.

Conclusion The inclusion of content such as spiritual needs and preventive healthcare services in undergraduate nursing curriculum is important in developing graduates that provide quality nursing care for older adults in Ghana. Additionally, the use of teaching approaches such as stand-alone courses, and clinical simulations can contribute significantly towards dispelling misconceptions about ageing and provide a deeper understanding of the care needs of older adults among nursing graduates in Ghana. It is anticipated that when these changes are made by the Nursing Registration Board and nursing schools in Ghana, it will lead to improvement in knowledge and skills specific to the care of older adults and ultimately enhance health outcomes of older adults in Ghana.

Keywords Gerontology, Curriculum, Ghana, Nursing education, Older adults, Undergraduate students

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Background

By 2050, the world's population of people over 60 years will nearly double from 12% in 2015 to 22% [1]. Several studies show older adults experience various health problems such as chronic health conditions, injuries related to falls, depression, malnutrition, visual problems, hearing loss, and complex dental problems, more frequently than people under the age of 60 years [2, 3]. Consequently, older adults tend to use the healthcare system more than other age groups [4]. Global workforce planning needs to meet identified health challenges to ensure healthcare professionals, such as nurses, are competent to provide quality nursing care to older adults with complex health needs [5].

Many older Ghanaians live with co-morbid conditions such as hypertension, diabetes, renal disease or disability [6, 7]. Even though older Ghanaians frequently report to hospitals with co-morbid conditions [6, 8, 9], a World Health Organisation report has indicated several challenges to healthcare delivery for older adults in Ghana [10]. Consequently, older adults who are admitted to the hospital for non-life-threatening conditions often experience hospital-related adverse events such as pressure injuries, aspiration pneumonia, and bacteriuria [10], which contribute to preventable suffering and premature death. The current life expectancy in Ghana is 62 for men and 64 for women with only 1% of older adults attaining the age of 85 to 94 years [11]. The low life expectancy in Ghana is attributed to inadequate social support systems and lack of quality healthcare for older adults in the Ghanaian health system [12, 13]. In recent qualitative studies, older Ghanaians indicated that they received inadequate health information and care from nurses in Ghanaian hospitals [14, 15]. The inability to provide adequate health information and nursing care to older adults in Ghana was associated with insufficient knowledge and skills of nurses in gerontological nursing [16]. Also, worth reiterating is the fact that there is an increase in the breakdown in the traditional system of social protection and care for older Ghanaians due to urbanization, socio-economic development, and globalization [13]. This has implications for the well-being of older adults in Ghana [13].

Many nursing schools do not include gerontology courses in their programs [16]. Ghanaian gerontological nursing courses are predominantly combined with courses such as traditional medicine, palliative care nursing, national health program, end of life care, and rehabilitative nursing [16]. The description of curricula content for the other areas, such as traditional medicine or national health program, were mostly described in greater detail than the gerontological nursing content [16]. It is difficult to identify how many credit hours the gerontological nursing course is taught as it is integrated

into other courses such as traditional medicine [16]. Gerontological nursing is also taught by teachers who have not specialised in gerontology [16].

It is imperative to provide nurses, who form the largest clinical discipline in Ghana, with the requisite education that can enable them to provide quality nursing care to older adults, who constitute the majority of the patient population in the Ghanaian health system [17]. Without changes in Ghanaian gerontological nursing education practices, the current healthcare challenges and poor health outcomes of older Ghanaians may continue for many years.

Objectives of the study

The study set out to gain deeper insight into:

1. Gaps in Ghanaian undergraduate gerontological nursing courses.
2. How Ghanaian undergraduate gerontological nursing education can be improved to contribute to the provision of quality nursing care for older adults in Ghana.

Methods

Design

Explorative designs utilising qualitative data were used in this study and are appropriate for gaining an in-depth understanding of people's experiences, views, or perceptions about an event or issue [18–20]. This study was conducted in two phases. In phase 1, Ghanaian gerontological nursing experts were interviewed via Zoom to identify existing gaps in Ghanaian gerontological nursing courses. In phase 2, Ghanaian experts and experts in National Hartford Centre of Gerontological Nursing Excellence (NHCGNE) member schools in Australia were interviewed to provide insight to address the current gaps in Ghanaian gerontological nursing courses identified in phase 1. Prior to the phase 2 interviews, the Australian experts were provided with phase 1 results showing the gaps in the Ghanaian gerontological nursing courses to help them understand the Ghanaian context. Participants in Australia were invited to support the Ghanaian experts because the Australia is a leading country in the development of gerontological nursing curricula content and the level of Ghanaian expertise in gerontological nursing is not as mature as in developed countries such as Australia.

Study setting

Data were collected from gerontological nursing experts in Ghanaian and Australian accredited Bachelor of Nursing (BSN) programs. The Ghanaian experts were selected from the University of Health and Allied Sciences,

Christian Service University, Kwame Nkrumah University of Science and Technology and the University of Cape Coast. The Australian experts were selected from in the Monash university, University of Canberra, The University of Melbourne and Edith Cowan University.

Inclusion and exclusion criteria

Persons employed as nurse academics in Ghana and in NHCNE member schools in Australia with at least master's level preparation, and teaching experience in gerontological nursing at the undergraduate level for three years or more, were included. These criteria ensured the participants had relevant experience to contribute as experts. Nurse academics who were research-intensive only or did not agree to their interview being recorded via Zoom were excluded.

Recruitment strategy

Ghanaian gerontological nursing experts were identified by the research student and initially contacted using existing networks. A formal invitation letter was emailed to the Ghanaian experts after this initial contact to request their participation in interviews. Experts in Australian universities using NHCNE recommended curricula content in their nursing programs were contacted through the network of supervisors. Initial contact with known NHCNE member schools was made via email by the principal supervisor. This initial contact with NHCNE schools was followed by a formal letter from the investigator explaining the scope of the study and requesting the participation of experts in interviews. Participant information sheets and informed consent forms were attached to invitation letters to all potential participants. Experts from Ghana and NHCNE member schools in Australia who signed and returned the informed consent forms were included in 1:1 Zoom interviews.

Table 1 Participant characteristics

Demographic characteristics	Ghanaian participants (n = 18)	Australian participants (n = 4)	All participants (n = 22)
Age (years)			
Median	37	54	40
Range (Max-Min)	19 (31–50)	(40–61)	30 (31–61)
Gender			
Male	8 (44.4%)	0 (0%)	8 (36.4%)
Female	10 (55.6%)	4 (100%)	14 (63.6%)
Duration of teaching employment (years)			
Mean (SD)	7 (3.0)	21 (13.1)	11 (9.5)
Range (Min-Max)	10 (4–14)	29 (11–40)	36 (4–40)
Educational status			
Masters	17 (94.4%)	0 (0%)	17 (77.3%)
PhD	1 (5.6%)	4 (100%)	5 (22.7%)

Sampling procedures

Purposive sampling techniques were used in selecting participants for interviews. Purposive sampling techniques were used because the researcher was interested in including only academics who were experts in gerontological nursing. Only academic who have taught gerontological nursing courses for three years or more were invited. Using previously determined standards of sample sizes in qualitative research [21–25], 28 gerontological nursing experts (Ghana; n=20, Australia; n=8) were selected and invited for interviews. A total of twenty-two experts (Ghana; 18, Australia; 4) agreed to participate in the study. Nine Ghanaian experts agreed to participate in phase (1) Nine Ghanaian experts and four experts in NHCNE member schools in Australia agreed to participate in phase (2) The majority of participants were sampled from Ghana because recommendations for changes to Ghanaian gerontology nursing courses were intended to match the Ghanaian context. Experts from the NHCNE member schools in Australia were included in the study because Australia is a leading country in the development of gerontological nursing courses and the level of Ghanaian expertise in gerontological nursing is not as mature as in developed countries such as Australia. The inclusion of Ghanaian experts and experts from the NHCNE member schools therefore broadened the depth of recommendations regarding gerontological nursing content and pedagogy for undergraduate nursing programmes in Ghana. This approach is similar to a collaborative approach between Ghanaian experts and experts from a developed nation previously used to improve gerontology curricula content in medical programs in Ghana [26].

As shown in Table 1, all 22 participants were teaching gerontological nursing courses in their respective nursing programs. Most of the participants (n=14, 63.6%) were female. The median age was 40 years (range: 31–61 years). The demographic information showed the Australian experts from NHCNE member schools had higher education and experience in gerontological nursing when compared with their Ghanaian counterparts. While all Australia experts from NHCNE member schools researched gerontology topics in their PhDs, only one Ghanaian participant researched a gerontology topic in his master's program. The experts from NHCNE member schools in Australia had a longer duration of employment in teaching roles (average duration of 21 years) when compared with their Ghanaian counterparts (average duration of 7 years).

Interview guide

An interview guide (see Appendix 1) was used. The scope of the interview questions was determined based on content and pedagogy areas covered in NHCNE

evidence-based practice guideline [27] and in previous studies identified via a literature review. The interview guide was piloted with three gerontological nursing experts not involved in the main data collection. The pilot interviews led to the identification of ambiguous questions in the interview guide and four questions were modified for clarity based on feedback (see Appendix 1 questions 19, 21, 22 and 24).

Data collection procedures

Interviews were conducted by the first author between June and August 2021. Interviews lasted averagely 47 min. The interview guide was emailed to participants prior to help them prepare. Semi-structured Zoom interviews were conducted due to travel restrictions imposed by the COVID-19 pandemic. Interviews were conducted at times convenient for participants. Saturation was reached after interviewing nine participants in Phase 1 and 13 participants in Phase 2. Saturation occurred when new data confirmed previous data without adding new insights [28]. Only audio recordings of Zoom interviews were retained for analysis to protect the privacy of participants. Transcription occurred following data collection.

Table 2 Sample of theme formation using Graneheim and Lundman criterion

Meaning Units (Quotes)	Description close to text	Codes (interpretation of underlying meaning)	Categories	Theme
Spiritual needs are not part of our content. If nursing students do not know how to care for the spiritual needs of an older Ghanaian, they may be giving their Western medicines, and the persons may not be taking it or will not be psychologically following them and therefore their care is not going to be complete [Ghanaian Expert 7].	Important topic areas that relate to care of older people in Ghana such as spiritual needs are omitted in the Ghanaian undergraduate gerontological nursing courses resulting in less quality care being provided to older adults in the Ghanaian health system.	Inadequacy of curricula content specific to the care of the older Ghanaian results in less-than-optimal care of the older Ghanaian.	Lack of curricula content on specific needs of older Ghanaians. Lack of gerontology curricula content leads to inadequate knowledge on care of older Ghanaians. Inadequate gerontological knowledge negatively impacts the nursing care of older Ghanaians.	Gaps in Ghanaian gerontological nursing courses impact the care of older adults.

Data analysis

Data were analysed using a content analysis process recommended by Graneheim and Lundman [29]: transcribing, coding, categorising and formation of themes (see sample theme formation in Table 2). Ghanaian interviews were transcribed verbatim using a transcriber from Ghana whilst the Australian interviews were transcribed by an Australian transcription service. The Ghanaian transcriber was more likely to understand the Ghanaian pronunciations. Transcripts were read several times by the research team with lead author taking the lead in the analysis. Two members of the research team met to code the qualitative data. Individual interviews were colour-coded using the interview questions as a guide. Where there was a disagreement, a third member of the research team as consulted. Similar codes were compiled into categories. A process of discussions and reflections by the research team resulted in the development of themes from the categories.

Trustworthiness

Trustworthiness was ensured using criteria recommended by Guba and Lincoln: credibility, dependability, confirmability, and transferability criteria [30].

Credibility was achieved through pilot interviews and prolonged interviews with participants (average length of 47 min). The prolonged interactions with experts during interviews allowed an in-depth exploration of concepts during 1:1 interviews. Feedback from peers also helped the researcher to improve the quality of the findings.

Dependability was achieved through the use of a team approach in the data analysis to reduce potential biases and to have a broader view of the data. Transcripts from the transcribers were checked by the research team for correctness.

Confirmability was ensured by keeping a reflexive journal to examine the researcher conducting the interviews' judgments, practices, and beliefs during the data collection process and to ensure these do not negatively impact the research.

To ensure that the results of this qualitative study can be transferred to other contexts or settings, efforts were made to achieve data saturation in the study. Saturation was achieved in Phase 1 after interviewing nine experts. Saturation was achieved in Phase 2 after interviewing 13 experts. Additionally, transferability was achieved through purposive sampling, and thick and rich descriptions of data in the form of quotes from participants to support the themes developed.

Results

Themes

Five themes were generated from the data (see Table 3). The themes will be discussed in line with the aims of the

Table 3 Themes

Themes representing gaps in Ghanaian gerontological nursing courses	Themes representing recommendations to address gaps in Ghanaian gerontological nursing courses
Theme 1: Gaps in Ghanaian gerontological nursing courses impact the care of older adults.	Theme 1: Specialised gerontology content is required to dispel myths about ageing.
Theme 2: Aspects of Ghanaian culture perpetuate misconceptions about ageing among undergraduate nursing students.	Theme 2: Authentic learning can improve attitudes toward care of the older adult.
	Theme 3: Qualification and skills of preceptors influence knowledge and skills of undergraduate nursing students in gerontological nursing.

study, that is, gaps in Ghanaian undergraduate gerontological nursing courses; and how Ghanaian undergraduate gerontological nursing education can be improved to contribute to the provision of quality nursing care for older adults in Ghana.

Themes representing gaps in Ghanaian gerontological nursing courses

Gaps in Ghanaian gerontological nursing courses impact the care of older adults

A strong theme was that the care of older adults was not taught as a stand-alone course in Ghanaian nursing schools. Rather it was covered in combination with other courses such as traditional medicine, national health system, palliative care, and rehabilitative nursing which were mostly described in much more detail than the gerontological nursing content. As a result, it was believed that important curricula content about the care of older adults was missed which could impact nursing care provision for older adults in Ghana:

Combining our (Ghanaian) undergraduate gerontological nursing courses with other curricula contents such as traditional medicine or palliative care results in less focus on content that relates to the care and welfare of older adults in Ghana [Ghanaian Expert 1].

Furthermore, there was agreement that the exclusion of curriculum content such as the spiritual needs of older adults contributes to the challenges associated with providing holistic nursing care to older Ghanaians:

Spiritual needs are not part of our content. If nursing students do not know how to care for the spiritual needs of an older Ghanaian, they may be giving their Western medicines, and the persons may not be taking it or will not be psychologically following

them and therefore their care is not going to be complete [Ghanaian Expert 7].

Participants were also of the view that concentration on curative aspects of care for older adults in Ghanaian gerontological nursing courses results in inadequate knowledge of students regarding preventive healthcare services and programs for older adults:

Our (Ghanaian) gerontological nursing courses train nurses for the treatment of diseases but not for the preventive side of caring for older adults. Our older adults therefore miss out on needed age-related programs that ensure health promotion and prevention of diseases [Ghanaian Expert 8].

Aspects of Ghanaian culture perpetuate misconceptions about ageing among undergraduate nursing students

Cultural beliefs such as people who have a long life, and people with dementia are 'witches' and 'wizards' have persisted for many years in Ghanaian society. Participants were of the view that these negative cultural beliefs were perpetuating misconceptions about ageing among undergraduate nursing students:

Due to long-standing ageist beliefs in our (Ghanaian) communities, some of our students turn to believe some older adults with age-related diseases are wizards or witches [Ghanaian Expert 5].

There is this belief in Ghana that older people who have dementia and other health problems are witches or wizards. This is concerning because these misconceptions cause undue problems and issues for many older people in Ghana [Ghanaian Expert 7].

The gerontological nursing experts agreed that providing gerontological nursing education that addressed myths about older adults in Ghana was an important change:

We (Ghanaian undergraduate nursing programs) really have the responsibility to bring a change about this issue of older adults being wizards and witches and explain to students that these older adults may just be having dementia or other ageing-associated problems [Ghanaian Expert 9].

Themes representing recommendations to address gaps in Ghanaian gerontological nursing courses

Specialised gerontology course is required to dispel myths about ageing

Participants agreed that the current Ghanaian gerontological nursing courses are unable to effectively correct

misconceptions about ageing among Ghanaian nursing students.

Our courses (Ghanaian undergraduate gerontological nursing courses) only provide foundational knowledge about the care of older adults. We do not have enough curricula content to provide knowledge beyond the foundational knowledge and to dispel myths about ageing [Ghanaian Expert 12].

Participants were, therefore, of the view that gerontological nursing should be treated as a specialty area to help provide deeper knowledge about ageing and how to provide quality nursing care services to older adults:

Gerontology should be treated as a unique discipline or specialised area in nursing schools, where nurses are taught to appropriately assess and care for older adults. I think that is the surest way older people can have the quality of nursing care they deserve [Ghanaian Expert 14].

In the opinion of the experts, stand-alone gerontological nursing courses were better options than integrated courses and promote deeper learning in gerontological nursing, helping develop knowledge and skills needed for the care of older adults:

Stand-alone gerontological nursing course is what the students remember. It focuses intensively on all the essential topics or content that relate to the care of older adults [NHCGNE Expert 3].

When we integrate it (gerontological nursing curricula content) into other courses, it becomes more about general care and not centred on the peculiar needs of older adults. I am sure everyone will agree that stand-alone provides more value about gerontological nursing and students learn better about the care of older adults [Ghanaian Expert 16].

Authentic learning can improve attitudes toward care of the older person

Participants agreed that Ghanaian undergraduate nursing programs need to improve gerontological nursing competencies in nursing students by using pedagogy such as clinical simulations. According to the experts, nursing students may not develop appropriate attitudes for the care of older adults if they are not taught using such authentic approaches.

I cannot see how our students can learn or develop the right attitudes for gerontological nursing without the necessary simulation activities. It is critical

that we introduce the concepts of simulation in our gerontology nursing courses to improve the way our students view the care of our older adults [Ghanaian Expert 10].

I think genuine teaching approaches such as simulations can help provide real-life learning experiences for nursing students for the care of older adults. Without a genuine teaching approach, students may not see the value in gerontological nursing and may not have the right attitude to care for older adults [NHCGNE Expert 4].

The experts were of the view that the Ghanaian gerontological nursing courses need to be updated to provide these authentic hands-on learning experiences for undergraduate nursing students in gerontological nursing:

There may be a need to revise or amend our current Ghanaian courses to use simulations to help students have the hands-on experience to truly influence positive attitudes about how to care for older adults here in Ghana [Ghanaian Expert 13].

I think there is a need to take a second look in terms of revising the content being used in teaching nursing students about the care of older people. A well revised content is more likely to provide the needed skills for care of older people [NHCGNE expert 2].

Qualifications and skills of preceptors influence knowledge and skills of undergraduate nursing students in gerontological nursing

There was consensus that the qualification level and expertise of those staff supervising undergraduate nursing students in hospitals influences the knowledge and skills they attain from their clinical placements in aged care:

They (undergraduate nursing students) are usually buddied with care workers like health assistants in nursing who are not working at the level of registered nurses and do not have adequate qualifications in gerontological nursing. Nursing students are therefore unable to appreciate and learn the complex cognitive processes and skills needed to care for older adults [NHCGNE Expert 2].

Moreover, participants held that preceptors who were not experts in gerontological nursing may lack the necessary skills to provide students with opportunities to critically examine the complexities in gerontological nursing:

Many preceptors are not experts in gerontological nursing and aren't experienced or competent in interrogating some of the important aspects of gerontological nursing and so nursing students miss out on those skills of critical thinking and clinical

judgement needed for the care of older adults [Ghanaian Expert 11].

The experts therefore highlighted the importance of ensuring preceptors are well-trained in gerontological nursing:

We (undergraduate nursing schools) should be thinking about training our preceptors so they can have a more positive impact on skills developed by nursing students for the care of older adults. Without this, it will be hard to see the change we want to see in our students [Ghanaian Expert 16].

Discussion

A key finding was that Ghanaian gerontological nursing courses were integrated into other courses such as traditional medicine and national health programs which were mostly described in much more detail than the gerontological nursing content. Gerontological nursing courses tend to be integrated into many undergraduate nursing programs around the globe [31–34]. Combining gerontology courses with other courses erodes the emphasis on the care of older adults and dilutes the time students spend learning about gerontological nursing [33] which is likely to reduce related learning outcomes. Nursing curricula that integrate gerontology are often inadequate in gerontological nursing content compared with stand-alone courses [34, 35]. Integrating gerontology content within broader topic areas often results in the loss of gerontology content in undergraduate nursing programs [33, 34].

Integrating courses on the care of older adults across undergraduate nursing programs also means it could be taught by academics who have little interest or no expertise to teach gerontological nursing courses further eroding learning outcomes [33, 34]. Some teachers may prefer other topics to gerontological nursing topics [33, 35]. The low preference for gerontology content leads to limited positive teacher role modelling towards gerontological nursing [35]. Consequently, this inadequate positive teacher role modelling reduces the importance undergraduate nursing students place on gerontological nursing leading to less interest in learning about the care of older adults [35].

The reason for the lack of content on gerontology in the Ghanaian nursing educational system is that the care of the older adults in Ghana is less valued, and this is underpinned by ingrained ageism as a social phenomenon. Ageism is a phenomenon where people are treated differently because of their age [36]. The Ghanaian gerontological nursing experts in this study were of the opinion that aspects of Ghanaian culture perpetuate ageist beliefs

among undergraduate nursing students. Ageist attitudes among Ghanaian nursing students may have emanated from widespread cultural beliefs in some Ghanaian communities that older adults have destructive magical powers with the ability to cause misfortunes and deaths in their communities [37–42]. Ageist beliefs are a widespread phenomenon and constitute a significant threat to older adults' well-being in many countries around the world and there are no definite solutions yet [43–45]. Yet, combating ageism and its impact on gerontology education and improving care provision for older adults is achievable [36, 46]. To address the issue of ageism in Ghanaian nursing education and society, it is necessary to create awareness and recognition of the problem.

In order to create awareness about ageism and demonstrate the importance of gerontological nursing in Ghanaian nursing schools, it may be necessary to separate the Ghanaian gerontology courses from other courses and teach it as a stand-alone course to provide deeper insight and knowledge about the care of older adults in Ghana. Some lessons could be learnt from Australian nursing schools using recommended NHCGNE stand-alone courses to improve gerontological nursing education [27]. The Ghana College of Nursing and Midwifery can include gerontological nursing as a specialty course to improve the individual competency of those who undertake this study and also lead to an increase in the number of gerontological nursing experts in Ghana. Such strategies are currently being used to increase expertise in paediatric and oncology nursing in Ghana [47] and therefore may be useful in the upskilling of gerontological nursing expertise in Ghana. An increase in the number of gerontology experts will mean more teachers will have a deeper understanding of gerontological nursing and may choose to teach gerontology content in more detail. What is clear is that the recommendations put forward in this study may not be successfully implemented if there are no experts to teach gerontological nursing courses in Ghana, thus supporting nursing expertise in this area is a priority.

This study has also shown a need for teachers to use clinical simulation to deliver Ghanaian gerontological nursing courses to improve knowledge and skills in the care of older adults. Nursing students in Ghana have associated their lack of competence in gerontological nursing with limited gerontological practical skills development [16]. Lack of competence in gerontological nursing among undergraduate nursing students was also reported in qualitative studies conducted in other low and middle-income countries including Iran [48] and the Philippines [49]. Even though there is evidence for the use of high-fidelity simulation in teaching gerontological nursing in undergraduate nursing programs [50], the value proposition of using such technology and expertise

to provide simulations in a low and middle-income country such as Ghana should be considered carefully as these may be lower compared to developed countries.

Low-fidelity simulation with active learning activities could be considered in Ghana since most nursing schools have manikins for low-fidelity simulations. Simulation activities in Ghanaian undergraduate nursing programs should include case studies with elements that highlight the challenges of Ghanaian older adults such as marginalisation in acute care settings [14, 15]. Highlighting the challenges experienced by older Ghanaians through simulations can help students reflect on nursing care that meets the individual needs of older adults and develop their awareness of challenges. Teachers should also demonstrate positive attitudes towards gerontological nursing to facilitate the development of similar positive attitudes in nursing students. This is because adequate positive teacher role modelling increases the importance undergraduate nursing students place on gerontological nursing [35]. Nursing students who have positive attitudes towards ageing may be more likely to develop interest and willingness to learn and work with older adults [51].

It must be noted that curricula content updates alone may not address all issues of ageism in Ghanaian nursing education and society. This is because before people attend university to study nursing, they may have already developed negative preconceptions towards older adults related to the dominant cultural and societal beliefs they have been brought up with [46, 52]. Therefore, additional measures such as mass educational programs are needed to address these cultural preconceptions and their impact on the care of older adults in Ghana. Mass educational strategies and public campaigns targeting various groups such as the general public, youth, different ethnic groups, health care professionals, teachers and politicians as well as media talks by experts may contribute to reducing ageist beliefs in Ghanaian society and its impact on aged care and aged care education. Such mass educational programs were effectively used in reducing mental health stigma in South Africa and the United States [53, 54] and therefore similar models may be useful in changing ageist attitudes and behaviours in the Ghanaian society. Unless changes such as the ones suggested in this study are made to improve nurses' attitudes, knowledge and skills in gerontological nursing, the current marginalisation and poor health outcomes of older Ghanaians may continue for many years.

Strengths and limitations of the study

To the best of our knowledge, this is the first study to explore recommendations for change to improve gerontological nursing education in Ghanaian undergraduate nursing programs. This study provided an in-depth insight into Ghanaian gerontological nursing curricula

gaps and put forward recommendations to improve undergraduate nursing students' knowledge, attitudes and skills in gerontological nursing in Ghana. Moreover, the inclusion of Ghanaian experts and experts from NHCNE member schools in Australia was instrumental in broadening recommendations for improving gerontological nursing education courses particular to Ghana. The large amount of data as well as thick and rich descriptions of participants perceptions is a strength in this study.

Several limitations are acknowledged. Potential bias arises from the inclusion of Australian experts to recommend gerontological nursing curricula content and pedagogy for Ghana. Experts who have not visited, lived or worked in Ghana, particularly in a Ghanaian school of nursing, are not of Ghanaian descent and have no or limited connections with the expatriate Ghanaian community in Australia, or have limited knowledge of the Ghanaian context, probably found it difficult to recommend specific approaches appropriate for the Ghanaian nursing education system. This limitation was addressed by furnishing the Australian experts with phase 1 results showing the gaps in the Ghanaian gerontological nursing courses. This summary provided the experts with an understanding of the Ghanaian context. However not knowing if this action was adequate to inform the experts is an acknowledged limitation.

Furthermore, there were impacts of COVID-19 on qualitative interviews in the study. To comply with COVID-19 social distancing protocols, an online platform (Zoom) was used for interviews. The researcher therefore missed observation of body language and non-verbal cues that could have enhanced data interpretation in the study. Subtleties of ageism may have been understated due to the Zoom mode of the interview.

Recommendations

Four specific recommendations are proposed in light of this study's findings.

1. Gerontological nursing content should be separated from other courses and taught in more detail to dispel ageist beliefs about older adults in Ghanaian nursing schools. Also, similar to specialty stand-alone courses such as paediatric and oncology nursing in Ghana, the Ghana College of Nursing and Midwifery should consider including gerontological nursing as a specialty course to improve competency and increase the number of gerontological nursing experts in Ghana.
2. Focus group discussions and consultations with key stakeholders such as policy makers of Ghana's Ministry of Health, nurse academics, older adults, and members of Ghana's nursing registration council

are recommended to identify local solutions to fund gerontological nursing education, research and development of expertise for gerontological nursing education in Ghana. Local solutions to fund gerontology research and develop expertise in gerontological nursing are important to implementing evidence-informed gerontological nursing courses in the Ghanaian context.

3. Thirdly, nurse academic leaders, policy makers, and nursing registration council members in Ghana should connect with international bodies such as the NHCNE consortium and leverage their experience and expertise to implement change to gerontological nursing education in Ghana. Partnerships between local and international experts can support the evaluation of the impacts of the recommended content and pedagogy and upskilling of gerontological nursing expertise in Ghana.
4. Considering the unique population distribution of Ghana whereby 54.1% of older Ghanaians live in rural areas [55], future research should consider exploring educational practices that could be used to educate Ghanaian undergraduate nursing students about the special care requirements of older adults in rural settings.

Conclusion

It has been recommended in this study that gerontology learning content should be treated as a specialty course and taught using clinical simulation activities and stand-alone courses to dispel misconceptions and biases about older adults. Additional measures such as mass educational programs are needed to address the cultural preconceptions and their impact on the care of older adults in Ghana. This study contributes significantly to the call to improve gerontological nursing education and practice especially in under-developed and middle-income countries. It is anticipated that when these changes are made, it will lead to improvement in knowledge and skills specific to care of older adults in Ghana and help Ghana make progress toward achieving the UN Sustainable Development Goal (SDG) 3: providing equal and quality healthcare to all age groups by 2030.

Supplementary Information

The online version contains supplementary material available at <https://doi.org/10.1186/s12877-024-05315-4>.

Supplementary Material 1

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Author contributions

CAA conceived and designed the research; CAA, MM, JR and EB designed the research, analyzed the data and wrote the paper. EB Analyzed data, revised methods, and revised the paper.

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Data availability

The datasets generated and/or analysed during the current study are not publicly available due to privacy / ethical requirements but are available from the corresponding author on reasonable request.

Declarations

Ethics approval and consent to participate

Data collection occurred after ethics approval was received from relevant institutions. The study was approved by an Australian university [approval number 2021000006], a Ghanaian university [approval number CHRPE/AP/150/21] and a Ghanaian nursing registration board (approval number N&MCIRC000022). Informed consent was obtained from the participants after explaining the purpose of study and procedures and the participants' rights and after assuring the participants that all collected data would be kept confidential. Data was coded on a password-protected computer in the first author's office. All methods were carried in line with Declaration of Helsinki.

Consent for publication

Not applicable.

Competing interests

The authors declare no competing interests.

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