



Research article



Nursing students' experiences of a home visiting programme for older adults with multimorbidity (VISITAME project): A phenomenological study

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ABSTRACT

Introduction: Nursing students should acquire competence in promoting self-care in older adults with chronic multimorbidity, but opportunities for clinical practice are limited. The implementation of a home visiting programme to community-dwelling older adults with chronic multimorbidity could contribute to nursing students' acquisition of this competence.

Objective: The aim of our study was to understand the experience of nursing students participating in a home visiting programme to community-dwelling older adults with chronic multimorbidity.

Design: Qualitative study based on Gadamer's hermeneutic phenomenology.

Method: Twenty-two in-depth interviews were conducted with nursing students participating in a home visiting programme. Data were recorded, transcribed and analysed following the procedure developed by Fleming.

Results: Three main themes were extracted in the data analysis process: (1) 'living the theory. Experience as a catalyst for learning', (2) 'the home visiting programme as a tool for promoting competence in caring for older adults', and (3) 'when learning sparks interest in working with older adults'.

Conclusion: The home visiting programme to community-dwelling older adults has an important impact on the personal and professional development of nursing students. The experience of the home visiting programme leads to deep learning that sparks interest in caring for older adults. The implementation of a home visiting programme could be a beneficial strategy for the acquisition of competence to promote health and self-care.

1. Introduction

Multimorbidity is the most frequent health problem in older adults (people aged 65 years and older) (Makovski et al., 2019; Vetrano et al., 2019). The prevalence of multimorbidity in older adults ranges from 55 to 98 % worldwide (Makovski et al., 2019; Vetrano et al., 2019). Chronic multimorbidity has a negative impact on older adults' autonomy and is also associated with functional impairment and increased healthcare expenditure (Brijoux et al., 2021; Makovski et al., 2019). Nurses are responsible for the care of older adults and should implement strategies that promote autonomy and self-care in community-dwelling older adults with chronic multimorbidity (O'Connor et al., 2018). Advocating for such strategies, the World Health Organization (WHO) recommends

the implementation of home visiting programmes (WHO, 2018). Available evidence suggest that home visits have positive effects on the self-care behaviours and biopsychosocial health of chronically ill older adults (Yang et al., 2020). However, home visits are a complex intervention that requires practice for their correct implementation and should be included in undergraduate nursing education programmes (Walton and Blossom, 2013).

Chronic multimorbidity is the coexistence of 2 or more chronic conditions of long duration and slow progression (WHO, 2016) and it negatively affects the biopsychosocial health of community-dwelling older adults (Makovski et al., 2019). Home visit (HV) is defined as a service in which trained healthcare professionals visit individuals in their own home (Konlan et al., 2021). HVs allow nurses to do tailored

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health promotion (Konlan et al., 2021; Liimatta et al., 2020), improve knowledge of the condition and therapeutic regimen (Rusli et al., 2021) and provide individualised guidance regarding the healthcare system (Liimatta et al., 2020; Rico-Blázquez et al., 2021). Available evidence suggests that participation in home visiting programmes is beneficial not only for service users, but also for competence acquisition in nursing students (Livsey et al., 2020). However, opportunities for clinical practice during undergraduate education are limited and nursing students may have difficulties to acquire the competence to conduct effective HVs to older adults (Iwasaki et al., 2019).

Consequently, faculties worldwide are making efforts to implement teaching interventions that consist of practical experiences with older adults (Iwasaki et al., 2019; Walton and Blossom, 2013). These interventions are associated with changes in students' perceptions and attitudes towards older adults, strengthened practical skills (Iwasaki et al., 2019; Walton and Blossom, 2013) and improved health and satisfaction of older adults (Livsey et al., 2020). However, no home visiting programmes have been found in which students carry out health promotion activities amongst community-dwelling older adults with chronic multimorbidity. The aim of our study was to understand the experience of nursing students participating in a home visiting programme to community-dwelling older adults with chronic multimorbidity.

2. Methodology

2.1. Design

This is a qualitative study based on Gadamer's hermeneutic philosophy. Understanding the meaning of a phenomenon involves the continuous questioning of our preconceptions (Gadamer, 2013). The hermeneutic circle involves a dialogue between the pre-understanding of the interpreter and the account of the experiencer in a fusion of horizons (Gadamer, 2013). For methodological consistency with Gadamer's philosophy, this study was conducted following the method developed by Fleming et al. (2003). In the first step, the researchers reflected on the research question's relevance and agreed that understanding the nursing students' experiences of a home visiting programme to community-dwelling older adults with chronic multimorbidity is a lifeworld phenomenon whose understanding may provide valuable insights for the discipline. Secondly, the researchers' pre-understanding of the study phenomenon was identified. The researchers' preconceptions were derived from their teaching and academic experience, as well as their clinical experience with community-dwelling older adults with chronic multimorbidity. The COREQ guidelines were followed when writing the research report (Tong et al., 2007).

2.2. Participants and context

The study was conducted at a university in southeastern Spain. Inclusion criteria for participation were: (1) being enrolled in the 'Geriatric Nursing' module of the Nursing Degree; (2) having completed a home visiting programme for community-dwelling older adults; (3) having voluntarily provided their email address to be contacted for participating in a qualitative evaluation of the experience. Participants were recruited through purposive sampling. The fifty students who provided their contact details were invited to participate, 15 of whom declined due to lack of time or scheduling problems. When 22 interviews had been conducted, the researchers considered that data saturation had been reached and data collection was stopped.

The home visiting programme was embedded in the 'Geriatric Nursing' module in the third year of an undergraduate Nursing Degree programme in a southern Spanish university. The home visiting programme was linked to two specific competencies included in the 'Geriatric Nursing' module; it was considered a mandatory assignment and it contributed to the students' summative assessment. The nursing students

implementing the home visits had to submit a weekly report describing and providing evidence of the activities they planned to carry out with the participants. In addition, all of the home visits had to be either audio or video recorded and uploaded to the study's cloud. The nursing students' weekly reports and recordings were supervised and marked by a team of community and elderly care nurses. If a student planned or carried out activities that were not evidence-based or did not comply with the study protocol, the nurse supervisor would intervene and the interruption protocol would be activated. This protocol included an assessment and follow-up of the older adult receiving the visits as well as a mentoring programme for the student, who would be required to do a specific assessment to pass the module. The home visits were conducted in the older adults' homes once a week for 12 weeks. The visits lasted between 30 and 45 min and they aimed to promote health and self-care amongst community-dwelling older adults with chronic multimorbidity. All nursing students had successfully completed the 'Community Nursing' and 'Community Clinical Placement' modules before enrolling in the programme, meaning that they should have acquired the competency to conduct preventive home visits. Nevertheless, the nursing students participating in the study also received 40 h of specific training on the following topics before they commenced the home visiting programme: [1] evidence-based strategies to promote self-care and medication adherence amongst older adults (10h); [2] motivational interviewing to promote healthy eating and physical activity (10 h); [3] strategies for active signposting and care navigation support (10 h); [4] patient empowerment for autonomous decision-making and advanced directives (10 h). As part of this educational programme, the nursing students participated in 12 h of face-to-face clinical simulation sessions and completed a competence assessment that they had to pass before commencing the home visits. The nursing students carrying out the home visits were only allowed to work on the topics they had been trained in and assessed on:

- 1) Self-care for chronic conditions and medication management/adherence.
- 2) Healthy habits: physical activity and healthy eating.
- 3) Use of social support services and care navigation.
- 4) Users' rights, decision-making autonomy and advanced directives

The four topics mentioned above were covered in three different visits. In the first visit allocated to a specific topic, the nursing students assessed the older adult's needs regarding this topic and provided generic health-promotion information about it. In the second visit allocated to a specific topic, the nursing students presented the evidence-based information they had selected specifically for the participant. They then used the most appropriate strategies to foster behavioural change in the participants, taking into account their needs and preferences. The third visit allocated to a specific topic was planned to have a 4-week gap with the second one. In this visit, the nursing students assessed the effects of the two previous visits and carried out activities to foster self-care and autonomous health-promoting behaviour in the older adults. As part of the intervention protocol, all nursing students participating in the home visiting programme attended a monthly tutorial session with their nurse supervisor, whom they could contact at any point during the 12-week programme in case they needed guidance or support to complete their home visits.

The home visiting programme was designed and registered as a controlled randomised trial. Further information about the home visiting programme can be found in the trial registry and the study protocol [<https://clinicaltrials.gov/ct2/show/NCT05264207>].

2.3. Data collection

Data collection was conducted between January and April 2022 through in-depth interviews. Interviews ranged in length from 40 to 65 min. Participants were invited by one of the researchers and those who

expressed willingness to participate were contacted again to arrange an appointment. The interviews were audio-recorded and conducted face-to-face on the university premises. An interview script was designed to allow participants to recount their experience in depth (Table 1). The interview protocol was pre-rehearsed and the interviewer made the interviews resemble a conversation.

2.4. Data analysis

All field notes and individual interviews were transcribed for further analysis using ATLAS.ti software. Data analysis was carried out according to the procedure described by Fleming et al. (2003): [1] During data collection and transcription, the researchers gained spontaneous understanding through what the participants were discussing. The researcher who conducted the interviews made notes that included intuitions and pre-analytical reflections; [2] Subsequently, a dialogue between the researchers and the participants was conducted through the text. To integrate the whole text with the reader, an open reading was conducted to develop an overall impression of the experiences. Coding was carried out individually by three researchers. Understanding could then be extracted through the merging of the participants' and the researchers' horizons. During coding, the most relevant quotes were selected and units of meaning, sub-themes and themes were developed.

2.5. Ethical considerations

The research was conducted in accordance with the ethical principles of the Declaration of Helsinki. All participants were informed of the purpose of the study, the voluntary nature of their participation, and the commitment to confidentiality and anonymity. Informed consent was obtained from participants before starting the data collection. The study was approved by the relevant Ethics Committee. (EFM89/2020).

2.6. Rigour

The final stage of Fleming et al.'s (2003) method is to ensure the rigour of the study, for which Guba and Lincoln's (1994) quality criteria were adopted. To ensure credibility, the data collection process was detailed, data interpretation was supported by researcher triangulation and the analysis process was reviewed by two independent reviewers. For transferability, a detailed description of the setting, participants, context and method was provided. Dependability was ensured by having two independent researchers to review the findings. To ensure confirmability, each transcript was reviewed by the participants, who

Table 1
Interview guide.

Phase	Topic	Content/example questions
Introduction	Purpose	Express the belief that their experiences are a vital and necessary insight
	Objectives	Carry out research to understand these experiences
Opening	Introductory question	What was your experience with the home visiting programme like?
Development	Specific questions	What challenges did you face when carrying out the home visiting programme?
		What do you think the home visiting programme has brought you on a personal and professional level?
		What is your perspective on older adults after having carried out the home visiting programme?
Closing	Last question	Would you like to add anything else that you consider important?
	Thanks	We would like to thank you for your willingness to participate. We would like to remind you again that your statement is of great value to us.

verified the content and results.

3. Results

The main demographic characteristics of the 22 participants are summarised in Table 2. The mean age of the participants was 23.37 years (SD = 4.44) and the majority were female. Three main themes were extracted in the data analysis (Table 3). These results provide an insight into the experience of nursing students with a home visiting programme for community-dwelling older adults with chronic multimorbidity.

3.1. Living the theory. Experience as a catalyst for learning

This theme details how nursing students immerse themselves in a process of "living the theory". Students start from an initial position of scepticism, reinforced by feeling overwhelmed. Students have an experience that leads them to establish trusting relationships with the older adults. This encourages them to feel the need to research in order to be able to do health promotion. In addition, students report that they have to adapt content and individualise interventions. All this converges to allow them to process and consolidate the theory.

3.1.1. When inspiration connects you to learning

The students described how they were sceptical when they received information about the home visiting programme. At the beginning, the students admit to having been unenthusiastic about the assignment, which was reinforced by feeling overwhelmed and experiencing the subjective sensation of not having enough time to do what was expected of them.

"...I thought, when I read the document they sent me, I was like 'oh my God, we have to do so much, this subject is going to take up all of my time and then it's not going to be useful for anything'." (P8)

However, as the home visiting programme advanced, the participants built a trusting relationship with the older adults, which they perceived as a source of motivation. The implementation of the home visiting programme allowed the students to explore the biological, psychological and social spheres of an older adult's life, and they felt that they were providing real holistic care. The students perceived that their visits had benefits for the older adults, which they found rewarding and reinforced their learning.

"...it's no longer just at a professional, educational or institutional experience. On a societal level, it is a very nice role because it is direct social work. What you are doing is making these people feel more appreciated, less lonely and more cared for a few months." (P10)

3.1.2. How perceiving patient needs advances the development of clinical reasoning

Exposure to the real world allowed students to autonomously perceive that the people they visited had unmet health needs. Although the students' work was closely supervised by an expert nurse, the nursing students were not accompanied when conducting the home visits. This contributed to making students feel responsible for planning interventions that would enable older people to improve their health. The students mentioned that they felt a moral and professional obligation to learn after becoming aware that the health of the older people they visited was declining.

"Not having someone to fall back on was hard [the nurse supervisor was not in situ], the autonomy of being on your own and deciding what you have to do... This really pushes you to study and make the right decision."

Table 2
Sociodemographic data.

Participant	Age	Gender	Nationality	Access qualification	Clinical experience in a primary healthcare centre	Clinical experience in a nursing/residential home
P1	21	Female	Spanish	High school	Yes	Yes
P2	23	Female	Spanish	University degree	Yes	No
P3	21	Female	Spanish	High school	Yes	No
P4	21	Female	Spanish	High school	Yes	No
P5	20	Female	Spanish	High school	Yes	No
P6	36	Female	Spanish	Vocational qualification	Yes	Yes
P7	21	Female	Spanish	High school	Yes	Yes
P8	21	Female	Spanish	High school	Yes	No
P9	22	Male	Spanish	High school	Yes	No
P10	25	Male	Spanish	Vocational qualification	Yes	Yes
P11	20	Female	Spanish	High school	Yes	Yes
P12	22	Female	Spanish	High school	Yes	Yes
P13	21	Male	Spanish	High school	Yes	No
P14	21	Male	Spanish	High school	Yes	Yes
P15	32	Female	Spanish	University degree	Yes	No
P16	27	Male	Spanish	Vocational qualification	Yes	Yes
P17	21	Female	Spanish	High school	Yes	No
P18	21	Female	Spanish	High school	Yes	No
P19	26	Female	Spanish	Vocational qualification	Yes	Yes
P20	22	Female	Spanish	High school	Yes	Yes
P21	22	Man	Spanish	High school	Yes	No
P22	21	Male	Spanish	High school	Yes	Yes

Table 3
Themes, subthemes y units of meaning.

Themes	Subthemes	Units of meaning
Living the theory. Experience as a catalyst for learning	When inspiration connects you to learning.	Scepticism; overwhelmed; waste of time; job satisfaction; enjoyment of the activity; trusting relationship; transcending professionalism.
	How perceiving patient needs advances the development of clinical reasoning.	Perceiving needs; perceiving responsibility; facing reality; reasoning.
	Learning through doing health promotion.	Research to teach; processing, consolidation; learning by teaching; individualising interventions; adapting content.
The home visiting programme as a tool for promoting competence in caring for older adults	Learning how to manage complex situations.	Exacerbation; hospitalisation; death; taboos; shame; intimacy; existentiality; crying; worries.
	The opportunity to work holistically with the patient.	Listening; respect; how to treat the older adult; motivating the patient; learning holistic care; communication; interviewing; empathy; letting people talk; respect; evidence-based care; connecting clinical care, medication; illness; nutrition; exercise.
When learning sparks interest in working with older adults	Becoming a nurse: integrating competence into the being.	Deep learning; internalising content.
	Changing one's personal perspective on the older adult.	Change of opinion; seeing differently; stereotypes.
	Growing interest in caring for older adults.	Satisfaction with the improvement; liking the subject; interest in older adults; feeling useful.

(P10)

The nursing students were aware of the responsibility they assumed with the home visits, and that their interventions had consequences for the older adult's health. They also understood that making a health promotion plan for an older adult with whom a trusting relationship is established requires dedication and clinical reasoning.

It is not the same to study to make them [care plans] on paper. You need to be more involved... you have to treat a person.

(P1)

3.1.3. Learning through doing health promotion

The students believe that the health promotion activities conducted had benefits for the older adults and for themselves. The home visiting programme encouraged the students to do research to compensate for the lack of knowledge associated with clinical inexperience. The students stated how they had to apply the principles of evidence-based nursing in order to teach issues related to the disease process or prescribed medication.

“I had to explain all the indications, all the side effects, the commercial name and the generic name of all his medications... so for me that was the most difficult visit, so to speak, because I had to look for a lot of information because I didn't have that knowledge.”

(P9)

The home visiting programme was useful for reinforcing the theoretical content included in the module. The moment the student had to make use of clinical reasoning, they felt that they moved away from the use of memorisation as a strategy for acquiring knowledge. This change in learning strategy was motivated by direct practical experience and made it easier for the student to process and consolidate information. In fact, students believe that they needed less time to prepare for the final assessment test of the module.

“First of all, because it is a very graphic and wonderful way to understand the syllabus, and in terms of exams, it helps you one hundred percent to retain concepts, to understand them much better, because you are putting them into practice.”

(P5)

The need to adapt the contents was another challenge that the nursing students faced in carrying out the home visiting programme. This made the nursing students more creative, which became the main

tool to promote health amongst older adults. The students sometimes had to modify the course of a visit after detecting that it did not meet the needs or did not spark the interest of the older adult. They considered that these adaptations were key to achieving the objectives of the home visiting programme.

“...even if you plan something and you have something in mind, everything can be derailed because you might notice a shortcoming or other issues of interest related to that, and not in line with what you have planned, and you have to find a solution and know how to sort it out...”

(P10)

3.2. The home visiting programme as a tool for promoting competence in caring for older adults

This theme describes how students perceive they acquire competence in health promotion through the home visiting programme. The students were faced with unforeseen and complex situations that they had to learn to handle. The home visiting programme offered the nursing students the opportunity to work with the patient in a holistic way, allowing for in-depth acquisition of knowledge, skills and attitudes.

3.2.1. Learning how to manage complex situations

The home visiting programme was organised in such a way that the students had to address the topic of advance directives. The students found it uncomfortable to conduct these visits and they felt that it was an inappropriate topic to discuss. Death is still considered a taboo subject for students, so there is a barrier to discussing this topic with patients. In fact, most students agreed that having to address advanced directives was the most complex experience of the home visiting programme.

“If a patient doesn't ask you, then the easiest thing is not to bring up that subject, even if you know that in certain vital circumstances of that person, maybe they should know. It's very, very complicated, but because we still hadn't broken down the barrier of talking about it in a natural way.”

(P10)

The way the home visiting programme was set up in terms of number of visits ($n = 12$) and duration (30–45 min) allowed the older adult to see the visits as an opportunity to let off steam. As a result, the nursing students had to accompany older adults who were emotional. The participants felt that they did not have the tools to act appropriately in such situations. When confronted with situations like these, the students felt obliged to research how to act so that they could offer support in subsequent visits. This allowed them to acquire skills for emotional support.

“Because that has always seemed very complicated to me, when a person starts crying and I used to say “what do I do now? Do I touch her or don't I touch her?”. Now I feel confident on how to act.”

(P6)

Some students had to delay the home visits due to acute conditions that required hospitalisation of the older adult. This generated feelings of fear and anxiety when preparing for and carrying out the subsequent visits. These feelings were further heightened when they had to address the topic of advanced directives with a recently hospitalised person. According to the students, this situation was difficult to deal with because not only did they have to deal with the subject of death with a person in the last stage of life, but they also had to do so with someone who had a worsening health condition.

“It was difficult for me to say how I was going to talk to my patient about advanced directives when she just came back from hospital and is in a terrible state, and it is true that it was quite difficult for me to do so.”

(P14)

The death of the older adult was also another scenario that some of the students had to deal with. The students felt unprepared to be confronted with the death of the person they visited. The students were grief-stricken because of the relationship they had established with their patients. Other students did the home visiting programme with older adults who were grieving the death of a partner or close family member. This made them very fearful, they felt too forward and inappropriate when they had to broach the subject and many of them were even hesitant to carry out the visit. However, most of the students were grateful for the opportunity to learn from these experiences.

“Her husband had passed away a long time ago and my patient still hadn't got over it. It was like, ‘I don't know whether to make this visit or what to do, because I don't know if I'm going to upset her even more’. But I am glad I experienced it and learnt how to manage it.”

(P7)

3.2.2. The opportunity to work holistically with the patient

The content of the home visiting programme enabled the student nurses to approach the patient from a holistic perspective. The students feel this allowed them to gain knowledge, skills and attitudes that contributed to the success of the home visiting programme. The students perceived they acquired a wide range of technical skills in relation to the promotion of self-care, healthy habits and medication adherence.

“So I think I've learned so much, especially about how to promote a healthy diet, exercise, how educate patients about self-care and medication management... and the most important... I think I've learnt that the important thing is to make it relevant for them.”

(P6)

During the home visiting programme, the students acquired and reinforced various attitudes and communication skills, such as respect, empathy and active listening. The students say that the home visiting programme taught them to be empathetic and this was the basis for forging a symbiotic relationship in which the patient felt supported and the student learned to focus their interventions on the patient's individual needs.

“It forces you to put yourself in that person's shoes, think about how they are feeling about the fact that they have to get up to take four pills, then at noon two and then at night another three... And it helps you to know what they really need.”

(P14)

The home visiting programme also provided students with the opportunity for personal growth, which was related to the opportunity to listen to the experiences that older adults had lived. This led the nursing students to self-reflect and see life from a different perspective, learning to be more compassionate.

“Well, it has taught me to value what we have and, in short, to be more compassionate in treating potential patients.”

(P13)

The home visiting programme allowed the students to see that caring for older adults goes beyond performing technical tasks. During the home visits, the nursing students became aware of the importance of knowing how to communicate with older people and they perceived how providing psychosocial support is important when promoting health amongst this population.

“Well, they can be very fragile people and anything can mean a before and after in their lives. The presence, being with them, I think that helps them much more than taking four pills. They really engage when you are there for them.”

(P14)

3.3. When learning sparks interest in working with older adults

This theme describes how student nurses' experiences with the home visiting programme lead to deep learning that is associated with a change in the perception of the nurse's role in the care of the community-dwelling older adults with chronic multimorbidity. This experience also changes the student nurses' personal perspective on the older adult and makes them more interested in caring for them.

3.3.1. *Becoming a nurse: integrating competence into the being*

Nursing students perceived that when faced with real patients in real settings they began to integrate the nursing role into their own being. This allows for clinical reasoning based on the knowledge acquired through previous practical experience or through the study of the module's theoretical content.

"All of this has given me a lot and has also made me get more involved in nursing and reflect on what I do."

(P1)

At other times, the integration of the nursing role into the student's own being encourages students to question the quality of care provided to older adults with multimorbidity.

"Let's see, there is not only wound healing or INR [coagulation test]. They might need to be listened to, to tell us what is happening to them, to tell us about their life, what they do, what they are going to do... This is not really done."

(P7)

The home visiting programme helped the nursing students to feel like qualified nurses. The students had to carry out health promotion interventions without the direct supervision of a nurse tutor, which allowed them to integrate competence into their being-a-nurse. This immersed them in a process of deep learning and internalisation of the knowledge, skills and attitudes needed to promote health in older adults.

"At the end of the day, making so many home visits, you do certain things unconsciously and when you are doing them you feel you are the nurse."

(P1)

3.3.2. *Changing one's personal perspective on the older adult*

The participants felt that they had stereotypical views of older people. The home visiting programme gave the students the opportunity to work directly with older adults, which allowed for a change in their perception of this population. After their participation in the home visiting programme, the nursing students perceived the older adult as a person with autonomy potential and willingness to learn.

"...it made me realise that yes, older people can also learn about the medication they take, they can learn about their conditions, they can learn about new things..."

(P15)

The home visiting programme enabled the students to become aware of the needs and the situation of social vulnerability in which the older adults are immersed. During the implementation of the home visiting programme, the nursing students gave the older adults' problems credibility and felt a moral and professional obligation to support them instrumentally and emotionally.

"Well, I have learned that older people feel more alone than we might think. Yes, we have to give them tools to be more independent but we also need to listen to them, to be there for them"

(P5)

3.3.3. Growing interest in caring for older adults

Although interest in caring for older adults was not innate for most participants, the home visiting programme shaped the students' pre-conceptions as it provided them with the opportunity to work closely with older adults and monitor their progression. The older adults' improvement in knowledge and self-care gave the nursing students a sense of satisfaction with their work, which sparked their interest in caring for older adults.

"I have loved the experience, the progress that you see... You feel you've done it. The older person has evolved and improved with to your work, week after week, you have made a different."

(P9)

The home visiting programme made the nursing students see themselves with future perspectives of working with older adults. For this to happen, the nursing students need to have the experience first-hand so that they can understand it and, in turn, care for the older adult.

"The truth is that the elderly care module has surprised me. In fact, I had never thought about saying "hey, geriatrics, geriatric nursing interests me", so... I never thought about it before. In fact, I was more interested in paediatrics, but now it's quite the opposite."

(P8)

4. Discussion

The aim of our study was to understand the experience of nursing students participating in a home visiting programme to community-dwelling older adults with chronic multimorbidity. The results of the study suggest that the experience of participating in a home visiting programme with community-dwelling older adults fosters deep learning, which stems from feeling obliged to use clinical reasoning in order to implement an effective health promotion plan. In addition, the home visiting programme leads to students having to learn how to handle difficult situations and to acquire the necessary competence to treat older adults from a holistic perspective. Furthermore, participation in the home visiting programme leads students to change the way they see older adults, breaking down stereotypes and contributing to sparking interest in the subject. However, prior to the start of the home visiting programme, student nurses were initially sceptical. This is also the case in [Walton and Blossom's \(2013\)](#) study, where the negative feelings beforehand are resolved when the student lives the experience and establishes a trusting relationship. Emotional intelligence plays a key role in educating nursing students ([Cleary et al., 2018](#)). The emotion derived from direct patient experiences enables one to establish therapeutic relationships and can thus enhance learning ([Sharon and Grinberg, 2018](#)). Our results suggest that the home visiting programme requires nursing students to make use of clinical reasoning. According to the study by [Kucukkelepce et al. \(2020\)](#), working with real patients compared to case analysis in class enables the nursing student to develop clinical reasoning. Working in real settings with real people requires the student to be able to perceive real health needs and think critically, taking responsibility for their interventions and avoiding compromising patient safety ([McPherson and Wendler, 2020](#)). We also agree with [Walton and Blossom \(2013\)](#) that home visiting programmes allow nursing students to consolidate theoretical content. Furthermore, implementing health promotion in these programmes is a learning opportunity for the student nurse ([Zeydani et al., 2021](#)). Our results highlight the need for nursing students to develop creativity in adapting content. As mentioned by [Alsayed et al. \(2020\)](#), creative learning environments enable deep learning to be achieved.

Most nursing students recall home visits related to advanced directives as the most difficult and unpleasant aspect to deal with. This may be due to the nursing students' attitude towards the concept of death and knowledge about death. As mentioned in several studies

(Bilgiç, 2021; Petrongolo and Toothaker, 2021), the greater the exposure to death, the greater the awareness and ability to deal with it. Due to the Covid-19 pandemic, student participants had limited opportunities for contact with real people and environments (Dewart et al., 2020). This is compounded by the limited hours devoted to advanced directives training in undergraduate curricula (Miller, 2018). The hospitalisation and even death of some older adults emotionally affected nursing students, who felt anxiety and sadness. According to a previous study, nursing students are not prepared for having to deal with these situations (Edo-Gual et al., 2014).

The home visiting programme enabled students to acquire competence in health promotion for community-dwelling older adults with chronic multimorbidity. Longitudinal educational interventions involving interactions between nursing students and older adults with chronic multimorbidity (Olson et al., 2018; Walton and Blossom, 2013) lead to the nursing student having a greater understanding of the disease process and health determinants in older adults with chronic multimorbidity. Furthermore, we agree with Brown and Bright (2017) that this type of interaction allows the acquisition of certain non-technical skills, attitudes and values, such as empathy, listening skills and respect. These non-technical skills are essential elements to be able to provide person-centred care (Kwame and Petrucka, 2021). According to a similar study, the home visiting programme elicits personal and professional growth in student nurses (Walton and Blossom, 2013).

The home visiting programme led the nursing students to integrate nursing competence into their being. In addition, the home visiting programme brought about a radical change in the nursing students' perception and attitudes towards older adults. This stems from an understanding of the ageing process, distinguishing between physiological and non-physiological ageing, thus avoiding negative stereotypes (Koehler et al., 2016). Furthermore, attitudes towards older adults also seem to be influenced by the type of previous experience students have had (Dahlke et al., 2021). Working with institutionalised patients tends to increase negative attitudes (King et al., 2013), while experiences with community-dwelling older adults tend to improve attitudes towards older adults (Dahlke et al., 2021). This attitude change is also mediated by the skills and attitudes of teachers in the classroom (Garbrah et al., 2020). The perception of the older adult as a person with potential leads the nursing student to develop a liking for the subject as well as an interest in caring for older adults. Furthermore, Zhang et al. (2016) argue that certain skills and values such as empathy and gratitude play a mediating role in the willingness to care and the ability to promote the health and self-care amongst older adults.

It is widely accepted that the opportunities for clinical practice during undergraduate nursing education are scarce. Our results suggest that exposing nursing students to the responsibility of providing direct care to an older adult could contribute to improving their knowledge and competence, breaking stereotypes, and sparking their interest in caring for older adults. These results show that practical experiences can also be embedded within theoretically-oriented modules of undergraduate nursing degrees. Nursing educators and faculties should collaborate with clinical nursing leaders and stakeholders to develop programmes in which nursing students can implement health-promoting interventions that contribute to consolidating their competence whilst improving older adults' health-related outcomes. Organising such programmes may be challenging and their ethical implications must be carefully considered (particularly if the programme does not include in situ synchronous supervision). However, the interventions can be adapted to each specific context and can vary in complexity. We would recommend designing, implementing and evaluating more practical experiences in which nursing students assume the responsibility of providing direct care to an older adult. In order to safeguard nursing students and older adults, these practical experiences should be linked to specific competencies in the module within which they are embedded, match the nursing students' level of competence, include a well-structured supervision system, and be underpinned by a favourable risk-benefit analysis.

4.1. Limitations

This study has some limitations. The sample is homogeneous and although it is representative of the socio-demographic characteristics of the population, all the students were white Spaniards. Recruiting students from ethnic minorities, other nationalities or a more heterogeneous sample might have yielded different results. Other limitations relate to data collection. The programme consisted of 12 home visits and interviews were only conducted at the end of the programme. Multiple interviews at various points in the home visiting programme could have provided information on experiences at different points throughout the home visiting programme. Future research should include the experiences of students and older adults from the start of the home visiting programmes and should be carried out in other cultural and geographical contexts.

5. Conclusion

Home visiting programmes could have a positive impact on the personal and professional development of nursing students. Although students are sceptical initially, the experience of home visits leads nursing students to develop an interest in caring for the older adult. This interest stems from being immersed in emotionally charged, deep learning. Students experience that the home visiting programme enables them to acquire the competence in health promotion for community-dwelling older adults with chronic multimorbidity. Understanding the experiences of nursing students participating in the home visiting programme could guide the development of new teaching strategies as well as the restructuring of curricula with the aim of improving their competence in health promotion amongst community-dwelling older adults with chronic multimorbidity.

CRedit authorship contribution statement

All authors have made substantial contributions to all of the following: (1) the conception and design of the study, acquisition of data, or analysis and interpretation of data; (2) drafting the article or revising it critically for important intellectual content; and (3) final approval of the version to be submitted.

Declaration of competing interest

The authors declare no conflict of interest.

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