The home care teaching and learning process in undergraduate health care degree courses

Abstract  Home care, one of the services provided by the health system, requires health practitioners who are capable of understanding its specificities. This study aimed to build a substantive theory that describes experiences of home care teaching and learning during undergraduate degree courses in nursing, pharmacy, medicine, nutrition, dentistry and occupational therapy. A qualitative analysis was performed using the grounded theory approach based on the results of 63 semi-structured interviews conducted with final year students, professors who taught subjects related to home care, and recent graduates working with home care, all participants in the above courses. The data was analyzed in three stages - open coding, axial coding and selective coding – resulting in the phenomenon Experiences of home care teaching and learning during the undergraduate health care degree courses. Its causes were described in the category Articulating knowledge of home care, strategies in the category Experiencing the unique nature of home care, intervening conditions in the category Understanding the multidimensional characteristics of home care, consequences in the category Changing thinking about home care training, and context in the category Understanding home care in the health system. Home care contributes towards the decentralization of hospital care.

Key words  Home nursing, Health, Higher education, Staff development
Introduction

The disjunction and disintegration of knowledge has for a long time hindered human beings from knowing himself/herself, the world and knowledge itself. Philosophic reflection does not impart scientific advances, which increasingly culminate in disciplines that are closed upon themselves, separate knowledge, and ultimately result in the mutilation of knowledge1.

There is therefore an urgent need to change the education system, since, for some time now, teachers have been considered active agents in the teaching and learning process and detained the exclusive right to define topics and the manner in which students learn, including the number of credits assigned to each subject, lesson planning, and assessment and evaluation2.

This situation is typical of the undergraduate health care degree courses that resulted from a major expansion in higher education in Brazil and other Latin American countries between the 1960s and 1970s. This period also witnessed the Brazilian university reform, which resulted from a long process of discussion about the need to reshape the higher education system to improve efficiency and increase productivity by expanding the number of people entering higher education3.

In the 1980s, health professionals called for the promotion of learning in primary care centers and hospitals, new subject areas were created and a distinction was made between practitioners working in the community and those who worked in hospitals4.

In the 1990s, calls were made for training reforms involving a close coordination of activities between teaching institutions, health services and the community5. However, the following approach continued to dominate in higher education institutions: “The human body is regarded a machine that can be analyzed in terms of its parts. Disease is seen as the malfunctioning of biological mechanisms which are studied from the point of view of cellular and molecular biology, so that the doctor’s role is to intervene, either physically or chemically, to correct the malfunctioning of a specific mechanism”6.

A number of efforts have been made to overcome the fragmentation of health care education. One of the main endeavors is the complex thinking approach, which incorporates human sciences into courses, including psychology and sociology, and captures the complexity of human nature, placing the human being within the living nature of the cosmos and overcoming specialization-linked separation and compartmentalization7.

Apart from complex thinking, certain education and health policies also advocate new approaches to health care training that differ from the dominant biomedical model, such as the National Curriculum Frameworks (Diretrizes Curriculares Nacionais - DCNs) of the nursing, pharmacy, medicine, nutrition, odontology and occupational therapy courses published between 2001 and 2002. According to the DCNs, training should encompass the current health care system, teamwork, comprehensive health care, and different professional practice scenarios, and enable students to gain first-hand professional experience in the different types of health and social care facilities, health promotion, maintenance, prevention, protection and recovery programs, and at all levels of care8-12.

Therefore, to meet the requirements set out in the DCNs, undergraduate degree courses should encompass home care, the demand for which is growing substantially, which in turn should lead to the development of new training courses and lato sensu post-graduate courses13. Health care training should therefore be contextualized and linked theory and practice in order to prepare health practitioners to deliver comprehensive care14.

However, it is clear that in most undergraduate degree courses “training for health practitioners places little emphasis on the issues of home care, its prospects, peculiarities and professional requirements for working in this specialist field”15.

Based on the above, the aim of this study is to build a substantive theory that describes experiences of home care teaching and learning during the courses mentioned above.

Method

This study consists of a qualitative analysis using the grounded theory approach. In this method, data collection, analysis, and eventual theory stand in close relationship to one another16.

Semi-structured interviews were conducted with 63 participants in a place of their choice (home, hospital, clinic, health center, classroom, and libraries) by the PhD student assisted by undergraduate research fellows, who received appropriate training.

The semi-structured interviews were conducted with an initial sample group based on
the use of an initial interview guide with questions that addressed the home care teaching and learning process and highlighting the interviewees’ experiences in this area during the course. In accordance with the grounded theory approach, the guide was reformulated after each interview – including question order and the inclusion of new questions – based on data analysis.

The initial sample group was made up of 37 students undertaking nursing, pharmacy, medicine, nutrition, odontology and occupational therapy undergraduate courses at a public higher education institution in the south of the country. Final year students were chosen since the likelihood of them having experienced home care during the course was greater.

The second sample group was made up of 16 teaching staff mentioned by the students interviewed above as having addressed topics related to home care in the classroom or during placements.

The third group was made up of 10 recent graduates from the undergraduate degree courses mentioned above who worked with public or private home care and who were selected by the PhD student based on her own knowledge of their work activities or suggestions by teaching staff, students or other staff from the courses. Since the PhD student neither taught on these courses nor had any professional ties with these individuals, there was no relationship of dependence between her and the participants.

Data analysis was carried out in three stages: open coding, axial coding and selective coding. During open coding, line-by-line analysis is carried out and data is examined and compared to identify similarities and differences to define categories. Axial coding consists of coding the data into subcategories to generate more precise and complete explanations about the phenomenon, their properties and relationships. Selective coding is the process of integrating and refining the theory and organizing categories around a central explanatory concept16.

The study was funded by the Fundação Araucária and approved by the Research Ethics Committee.

Results

Data collection and analysis resulted in the phenomenon Experiences of home care teaching and learning on the undergraduate health care degree courses, which was made up of the categories and subcategories described below. Figure 1 shows the phenomenon and relationships.

The cause of the phenomenon is detailed in the category Articulating knowledge of home care, which is made up of three subcategories. This category explains the beginning of the phenomenon; it is from where the other relationships arise.

The subcategory Juxtaposing the multidisciplinary content of home care shows that the home care teaching and learning process is not restricted to one subject area; it permeates various subjects, some of which address only theoretical aspects, and others that link theory and practice.

The subcategory Experiencing extracurricular activities related to home care shows that some students have the opportunity of experiencing home care outside the regular course program; for example, in home care research groups, extracurricular work placements, optional subjects, courses taken outside of university, scientific initiation and outreach projects.

During the last two years of the course, there exists the possibility of doing courses outside the university, so I decided to do that […] a training course with family doctors, which is a specialization in itself […] where I learned to carry out a home visit, what to do with the medication, what you need to organize, what you have to take on the visit. (medicine participant)

The subcategory Gaining training in home care after graduating shows that post graduate training - for example, a specialization in family health - is one of the routes taken by graduates who intend to work with home care. However, since such courses do not specifically focus on home care, a number of gaps in training may remain.

It is important to highlight that the causal condition of the phenomenon suggests that the home care teaching and learning process begins with theory classes and is thus the same for all participants. The fact that the phenomenon originates in the classroom is a reflection of the traditional model of teaching adopted by higher education institutions (HEIs), which is restricted to traditional lecture methods that at the most promote dialogue, but do not incorporate active methodologies and different practice scenarios.

The category Experiencing the unique nature of home care represents the phenomenon strategy and is made up of two subcategories. This category is fundamental for materializing the phenomenon, since it integrates teaching and learning into practice and allows students to experience the particularities inherent to home
settings. The phenomenon strategy reflects how actions are organized.

The subcategory *Being aware of the context* shows that to deliver effective home care it is necessary to observe the unique features of home settings, such as structural aspects, patient health and his/her care needs, and family dynamics.

*There is the advantage of being in the patient’s house, in his/her reality, seeing how things are placed into a routine; so it all becomes much clearer. But, depending on the work that you are going to develop, there is also the question of limitations. That’s where the question of physical space, material issues, and the patient’s environment comes in; it’s not a therapeutic environment, you have to deal with the house rules, try to work with all of these things together.* (occupational therapy participant)

The subcategory *The plurality of care* stems from these perceptions and shows that health care can be delivered in multiple forms: diagnosing the problem and acting on the needs raised by the patients and their family; health education; and caring for the caregiver.

The intervening conditions that bear upon the phenomenon are represented by the category *Understanding the multidimensional characteristics of home care* and its four subcategories that reflect possible interventions during the home care teaching and learning process.

This category shows the particularities of professional conduct in the patient’s home: a
unique space under the domain of the residents with the presence of family members and carers who interact with social support networks, and which is therefore very different to institutional care environments.

The subcategory Elucidating differences between home care and institutional care highlighted the differences between care delivered at home and care provided by hospitals, health centers, clinics and pharmacies.

Contact with the patient at home allows the carer to get to know the patient, understand how the family organizes itself, create bonds and deliver comprehensive and humanized care to the patient and his/her families.

When I go on a home visit, I perceive the reality, the relationship difficulties within the family and how this influences patient care; how social and economic issues influence the patient. Apart from this, I observe his/her environment, the health of that person who is on that diet, hygiene. These are perceptions that you don't get over the telephone. (nutrition participant)

The subcategory Entering the patient’s personal space shows that the home is a personal and intimate place; a person’s living space, where he/she establishes interpersonal relationships with other residents, be they family members or not. It is where a person usually feels comfortable and in his/her own the environment.

The subcategory Being aware of the presence of the carer and of the family shows that, in contrast to other care environments, home care settings allows practitioners to be aware of the fundamental role played by the carer, without whom home care would not exist. In general, the carer is a family member, but can also be a person from the community who is usually important to the family.

The family interacts directly with the carer. This interaction is not always positive, since many families face difficulties related to existing conflicts, financial problems, and a rigid or fragile structure, in which case professional help may be necessary.

[...] it was important to realize that there was a difficult family situation and that this conflict hindered care a lot. (nursing participant)

In the subcategory Interacting with social support networks, it is evident that the evolution of home care and patient health is subject to positive and negative external influences from relatives, friends and neighbors. Attention from the community, neighbors, social support networks, and proximity to a health center are important factors to ensuring effective home care that meets the patient’s and family’s needs.

The phenomenon is located within a context detailed in the category Understanding home care within the health system, which is made up of two subcategories. This context influences and is influenced by the phenomenon, as shown in Figure 1.

The growing demand for both public and private home care requires qualified professionals, justifying the creation of new opportunities for health practitioners to acquire concrete experience in real-life home care situations, as well increased funding and policies directed at the training and effective functioning of multidisciplinary home care health teams.

The subcategory Understanding how home care works within the health system shows that the public health system is not fully prepared to provide home care, leading to inadequate care in certain situations. On the other hand, not all private health plans provide for continued treatment through home care and many have numerous limitations in relation to patient needs.

The subcategory Multi-professional dialogue concerning home care highlights that a multi-professional team is essential to home care, since it increases the likelihood of meeting the family’s needs.

[...] we make visits together with the community health agent or the oral health technician or the health assistant - whoever is available - or even the preceptor; and, sometimes, when the nursing students are able to go, we try to show them (the students) so they can get a notion of how to make a visit together with the health center team. (dentistry participant)

The importance of multi-professional discussions during the course was raised: however, these discussions were not regular enough and when they did occur were not comprehensive. There are discussions of cases between different health practitioners, but not between practitioners who had worked together in the same home.

The consequence of the phenomenon is reflected in the category Changing thinking about home care training, which is made up of three subcategories. These consequences represent the results of the participants’ experiences with the phenomenon.

This category shows that the participants recognize that home care is an important and growing field that requires specific competencies, and therefore sought and suggested ways of acquiring the necessary skills and training.
The subcategory **Detailing the necessary attributes for home care** highlighted the following essential knowledge and personal characteristics needed for effective home care: scientific knowledge, empathy, charisma, communication and observation skills, patience, ethics, and creativity.

The subcategory **Identifying ways of acquiring the necessary skills for home care** shows that health practitioners who work or intend to work with home care can acquire the necessary skills and competencies through: study (articles, case studies, post-graduation and update courses); sharing experiences with and observing professionals who have experience in the area; and participating in courses and activities promoted by local government health departments. It is important to highlight that the development of these skills and competencies and a better understanding of the specificities of home care requires effort and dedication.

*In the beginning, I went on visits to listen; I didn’t give any advice. I went together with the team to listen. Little by little I got to the stage where I could give advice [...] when you start you don’t have any baggage whatsoever, you don’t know how to give advice, what to look for in the patient’s house, what to ask; you only learn these things over time. I think I still have so much to learn, to observe.* (pharmacy participant)

The subcategory **Diversifying home care training** outlines the need for: more subject areas that address family/community health and home care; the inclusion of home care in different subject areas from the beginning of the course and a specific course load destined to this area; an increase in the course load of subjects such as anthropology and sociology; integration of clinical home care course content with activities that show the linkage between hospital and home care; adequate number of hours dedicated to the development of specific skills; “expert” teaching staff; increase in the number of outreach projects; partnerships with health centers that deliver home care and the Better at Home Program (*Programa Melhor em Casa*) team, including placements with an adequate number of contact hours for small groups of students.

*It is evident therefore that participants’ way of thinking of home care changed during the teaching and learning process, as they became aware of the specific nature of home care and realized that the fragmentation of knowledge into separate disciplines is below expectations, even going so far as to suggest that home care should be included in different subject areas and that the course should involve different health practitioners and that more time should be dedicated to placements to create bonds. The consequences of the phenomenon ultimately suggest the need for change in the current home care training process to acknowledge and address the particularities of this field.*

**Discussion**

The category **Articulating knowledge of home care** shows that students’ contact with home care begins with theory classes and placements. Both situations require environments that proffer quality relationships between teaching staff and students and respond positively to the challenges, “since where the atmosphere is good, learning is also good”.

Home settings offer learning opportunities, which are as yet little explored. Offering students a range of different experiences allows them to integrate different types of learning and adopt a critical posture towards the home care contexts they come across, which may encompass a range of other situations apart from caring for older persons, including dealing with patients with physical disabilities and/or mental disorders.

It is essential that the home care teaching and learning process overcome the isolation of subjects, which hampers understanding of vital problems and veils the complexity of and linkages between human beings. The health field tends to disregard multidimensionality and fragment human beings into systems and organs.

The category **Experiencing the unique nature of home care** shows that home care involves innumerable particularities that should be observed by health practitioners, who possess unique skills that allow them to assess the home setting and subsequently orient patients and families about a range of situations, including safety issues.

Structural aspects are also assessed, since a home that is suitable for living and home care should protect it residents from the weather, be well ventilated, promote privacy and safety, and have quality public services such as piped water, sewage and electricity.

Apart from the above observations, special care should be taken in the following circumstances: when patients and/or family members are coping with loss, death and mourning; resolution of ethical dilemmas; identification of spiritual needs; and stressful situations. Home carers can also often face challenges associated with pets and messy and dirty houses.
Although university teaching usually fails to show the multidimensional nature of the human being, the category *Understanding the multidimensional characteristics of home care* details the specificities of this aspect of care.

Procedures in health institutions tend to be standardized; however, the logic of care changes once the practitioner enters the patient’s home, because it is likely that he/she will have to cope with conflicts and private family dynamics, and often come across poverty due to the relatively poor socioeconomic status of the majority of the Brazilian population.

Home care addresses aspects that are often overlooked by health institutions, such as the privacy of patients, carers, and family members, and delivers “innovative and unique health care”, making “continuity of care as an element for achieving comprehensiveness” possible.

Home care requires joint responsibility between the patient and health team, where, it should be highlighted, the patient takes an active role in his/her own health care: the patient and family should actively participate in “the process of planning, organizing, implementing and controlling necessary care”, with a view to comprehensiveness.

The family physician who delivers home care differs from doctors who treat patients in clinics and hospitals, isolated from their domestic and social environment, family members and loved ones: he/she is part of the household, knows the family and the parents’ personality, and places the patient within his/her human context.

With respect to the multidimensional characteristics of home care, the subcategory *Entering the patient’s personal space* reveals that the home is the patient’s private space, which has “subjective dimensions and cultural differences that may vary considerably between different countries and social classes”.

The practitioner needs to deal with the discomfort felt by the patient of having strangers in his/her house and personal space. Practitioners should therefore seek to create an atmosphere that brings himself/herself closer to the patient and makes him/her feel more secure.

In health institutions, care services are provided through an ordered, complex and hierarchical division of labor, while home care is provided by a single carer, who often has to care for the patient and the house on a 24-hour basis.

Care in the Brazilian health system is predominantly fragmented, which undermines the comprehensiveness of services so sought after by home care. Home care provided under the Family Health Strategy (Estratégia Saúde da Família - ESF) is influenced by organizational and care-based conflicts. For example, practitioners are responsible for care delivery in both health centers and the community. Demands are therefore high and health teams lack the resources and facilities needed to provide quality care that fulfills the “function of the ESF and meets spontaneous demand”.

It is important to highlight that certain activities are neglected to carry out other activities, and home care tends to remain a low priority in order to meet spontaneous demand. This impedes practitioners from acting “directly in the community and getting to know the territory where the subjects’ being healthy and becoming ill processes, their affections, meaning of life, relationships, culture, and way of life are produced”. Prioritizing bureaucracy impedes the perception of subjective and relational issues.

The lack of home care delivered through the ESF is a major contradiction, since, in principle, the strategy targets patients that are unable to access health centers, that is: “Those in most need are unable to access (health facilities) due to physical limitations, and the need is kept hidden by the service”. Based on the above, there is a clear need to create a homecare network and review “and propose strategies for overcoming existing gaps, so that home care can display significant advances in the development of services and practices that come closer to comprehensiveness”; in an attempt to overcome fragmentation in health care provision.

It is essential to understand the context in which situations occur: partial views are reductionist, given that situations consist of mutual and reciprocal relationships and inter-retroactions.

Nurses, pharmacists and other health practitioners interact with patients and their families through home care. The multidisciplinary home care team – made up mainly of nurses in different specialties (clinical, public health, psychiatric), doctors, nutritionists, speech therapists and physiotherapists - often has a different composition to health teams in other health care settings.

In order for the nuances mentioned to be noticed and considered in the CD, the category *Changing thinking about home care training* is essential in which the need of caring to be taken is stressed, since many academics feel uncomfortable and anxious to perform care in an environment where they are unfamiliar.
Communication skills are important to overcome problems and help promote critical thinking: active listening, giving effective feedback and clearly putting across ideas are essential components of effective communication\(^{17,24,25}\). Furthermore, it is fundamental to anticipate patients' needs, know how to deal with family members, understand the daily routine of people involved in home care, and help patients to keep themselves occupied and encourage social interaction\(^{17}\).

Practitioners should take a multidimensional approach to dealing with patients and their families and the following attributes are essential components of effective home care: conflict resolution; flexibility to adapt daily routines and care practices considering the preferences of household residents; ability to identify and overcome obstacles to care delivery; leadership skills; clinical problem solving; and the ability to share decision making, planning and problem solving with the other members of the health team\(^{25}\).

Learning scenarios should be capable of promoting changes in ways of thinking that involve the reconnection of knowledge, whereby practitioners are able to conceive that global issues manifest themselves in local issues and vice versa, go beyond mutilated knowledge - understanding the complexities, linkages, interactions and mutual implications of phenomena -, and contextualize, globalize and multidimensionalize, ultimately relearning how to think\(^6\).

In addition to diversifying scenarios and methodological strategies, it is necessary to teach civilization, complexity and human sciences, combining technical knowledge with sociology\(^6\).

**Final considerations**

The number of patients needing home care is growing, leading the government to increase provision of these types of services and regulate their delivery. Professional councils are moving in the same direction by regulating the activities that their members can perform in home care settings.

Health care training has not managed to keep up with advances in the home care field. Little research has been carried out into the nature of the home care training provided by HEIs. This study shows that, although most students have the opportunity to participate in home care visits, they are not assured adequate grounding to deliver care in home care settings.

Given the complex nature of home care, training institutions should be open to new teaching and learning approaches that capture the diverse and constantly changing challenges faced by the health system, schools and universities.

Furthermore, order, disorder and chaos are all part of home settings, and health practitioners must be sensitive to these nuances. However, it is evident that both the perception of the complexity of home settings and the home care training process are still limited. Many academics and HEIs are yet to understand these aspects and the potential role of complex thinking in health care training. Further research is therefore recommended involving other health care courses in different HEIs to gain a deeper understanding of this phenomenon.
Collaborations

AP Hermann worked on the design and design of the study, analysis and interpretation of the data and writing of the article. ALSF Mello, E Bernardino and MA Maftum worked on critical review of the article. MR Lacerda worked on the design and design of the study, analysis and interpretation of the data, critical review and approval of the version to be published.
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