TEACHING STRATEGIES IN UNDERGRADUATE NURSING COURSES: AN APPROACH TO NON-COMMUNICABLE CHRONIC DISEASES

Eleine Maestri*
Jussara Gue Martini**
Daniele Delacanal Lazzari***
Julia Valéria de Oliveira Vargas Bitencourt****
Julyane Felipette Lima*****
Jeane Barros de Souza Lima******
Heloisa Schatz Kwiatkowski*******

ABSTRACT

Objective: to identify the strategies used to teach chronic non-communicable diseases in an undergraduate nursing course. Methods: exploratory and documentary study with a qualitative approach developed from January to March 2016. The scenario was an undergraduate nursing course at a public university in the southern region of Brazil. Fifteen students and 11 teachers participated in the research through interviews. Documentary data were obtained from the Pedagogical Project of the Course and 11 teaching plans. The sequence and organization of the data followed the proposal of the content analysis technique. Results: two categories were identified: Priority to the use of traditional methodologies and Approximations with active learning methodologies. There are specific actions for the introduction of active methodologies in the classroom, but traditional methodologies are still prevalent. The teaching-learning approaches are still centered on the teacher, guided by content, with exposition and control of knowledge by teachers. Final considerations: the expected changes in undergraduate nursing courses are incipient with regard to the use of active teaching methodologies.

Keywords: Nursing; Teaching, Chronic disease. Curriculum. Nursing Education.

INTRODUCTION

With the implementation of the National Curriculum Guidelines (NCG), undergraduate nursing courses were adapted to the proposals with the launching of innovative Pedagogical Project of the Course (PPC). Thus, the following progress is expected: promotion of the learner autonomy; problematization of reality based on the anticipation of this reality in the professional practice scenario; preparation of the students for the proposition of new ways to solve health problems typical of daily care, addressing the health needs of users, in a wide range of care, with respect to the contradictions present in a health context; fostering of the development of skills and competencies of the future nurses committed to facing the health problems of our society, and raising awareness that to achieve this status, there are still limitations and weaknesses to be overcome[1].

Nevertheless, the impact of pedagogical processes on the professional practice and the role of educators and students emerge as themes of debate today. It is necessary to move from the individual and curative clinical model to a model based on the Unified Health System (SUS) in all its aspects. Thus, what is learned in the academy should be sufficient for graduates to commit themselves to building social projects, externalizing in their practices the new conceptions in health. Moreover, inspired by

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*Nurse. PhD in Nursing at the Federal University of Santa Catarina (UFSC). Adjunct professor of the undergraduate nursing course at the Federal University of Fronteira Sul (UFFS). Chapecó, Santa Catarina, Brazil. E-mail: eleine.maestri@uffs.edu.br ORCID ID: https://orcid.org/0000-0002-0499-5102

**Nurse. Post-doctor in Nursing from the Nursing School of Porto - Portugal. Professor and researcher of the Nursing Department at UFSC. Florianópolis, Santa Catarina, Brazil. Country. E-mail: jussaraque@gmail.com ORCID ID: http://orcid.org/0000-0003-2629-293X

***Nurse. PhD in Nursing from UFSC. Adjunct Professor of the Nursing Department at UFSC. Florianópolis, Santa Catarina, Brazil. E-mail: daniele.lazzarin@ufsc.br ORCID ID: https://orcid.org/0000-0003-1798-466X

****Nurse. PhD in Nursing from UFSC. Adjunct professor of the Undergraduate Nursing course at UFFS. Chapecó, Santa Catarina, Brazil. Country. E-mail: julia.bitencourt@uffs.edu.br ORCID ID: https://orcid.org/0000-0002-3686-2288

*****Nurse. PhD in Sciences from the Graduate Program in Nursing, Federal University of Pelotas (UFPEL). Adjunct professor of the Undergraduate Nursing course at UFFS. Chapecó, Santa Catarina, Brazil. E-mail: julyane.lima@uffs.edu.br ORCID ID: https://orcid.org/0000-0002-0715-9498

******Nurse. PhD in Sciences from the Federal University of São Paulo (UNIFESP). Adjunct professor of the undergraduate nursing course at UFFS. Chapecó, Santa Catarina, Brazil. E-mail: jeane.souza@uffs.edu.br ORCID ID: https://orcid.org/0000-0002-0612-9765

*******Undergraduate Nursing student at UFFS. Chapecó, Santa Catarina, Brazil. E-mail: heloisa.kwiarkowiski@estudante.uffs.edu.br ORCID ID: https://orcid.org/0000-0002-7499-3477
shared management for health education, there is the challenge to make nursing education responsible for encompassing other sectors, in addition to health and education, making it the articulation between theory and practice possible. This direction constitutes a fertile territory for the development of continuing health education\(^2\).

In this context of countless challenges before the new deliberations in the field of education and health, the implications that generalist training unleashes in the selection of content to be included in the curriculum matrix is discussed. Likewise, there are considerations about the existence of policies, plans and programs aimed at certain scenarios, especially those aimed at the training human resources for SUS, committed to public health and concerned with developing actions that aim to achieve the established national goals, that give clues as to the demand for content underlying these policies. Thus, it is considered that the approach of Chronic Non-communicable Diseases (NCDs), given their relevance as public health content, should be highlighted throughout undergraduate courses in the most diverse areas of health.

Therefore, it is understood that the learning situations offered by teachers must provide experiences that increase the motivation in students, so that the investigative attitude become a constant trait when determining nursing problems, health and education demands, or possibilities for intervention in reality\(^3\).

The stimulation of the students’ critical-creative capacity should be part of the teaching process, constituting a challenge to teachers. In this sense, problematization is essential to (re)signify reality and dialogue, indispensable to the construction of meaning in the relationship between the subjects that make up the training processes that aim to have a transforming effect. It is also needed to assign meaning to teaching, moving away from the concept of a teacher who transmits content and mediate the training of nurses, through activities that allow overcoming the emphasis given to the uncritical reproduction of knowledge and practices, analyzing the possibilities of these new pedagogical practices to produce space for reflection and the construction of a sense of reality to be transformed\(^4\).

In this context, authors consider that one of the tasks of teachers is to identify the needs of the students, but also to seek teaching methodologies that take into account the co-responsibility of the students in their learning process, as is the case of problematization. They also highlight that there are some challenges in this process, such as curricular restructuring and the transformation of students into active subjects in their learning\(^5\). Still, problematization is a methodology that requires training of teachers and students and its use and realization requires time. It requires the structuring of the course so that the contents are not disconnected. Therefore, it is a change in the form of teaching-learning that should be part of the curriculum, as it involves infrastructure, staff, literature, etc.

Thus, in view of the need to discuss chronic NCDs in Nursing curricula due to social demands, as well as the need to develop meaningful teaching models for students, this study aims to identify the strategies used in the teaching of chronic NCDs in an undergraduate nursing course.

**METHOD**

This is an exploratory and documentary study with a qualitative approach\(^6\).

The study scenario was the undergraduate nursing course at a public university located in southern Brazil. First, all 22 students regularly enrolled in the 10th semester of the course were invited to participate in the study; 15 came at the scheduled date and place and agreed to participate. They were identified with the letter S and numbered from 1 to 15. After the analysis of the Pedagogical Project of the Course and the teaching plans, 11 teachers who worked on curricular components that addressed chronic NCDs were selected to share in the study.

For teachers, the following inclusion criteria were used: teachers working in curricular components that addressed the theme of chronic NCDs; at least one representative teacher per component. Eleven teachers participated in the study. They are identified with the letter T and numbered from 1 to 11. The study proposal was
presented in detail for each teacher in a previously scheduled meeting, at the university, in their work rooms. Individual interviews were conducted with the teachers and lasted about 40 to 70 minutes each one.

In the case of students, the study proposal was presented and an invitation was made to participate during the meeting of the curricular component “Supervised Curricular Internship II” at the university. The group activity was scheduled and carried out later on, at the university, starting with the presentation of the study proposal, once again. The group interview developed with the students lasted 150 minutes and their perceptions about the teaching of chronic NCDs during the course, the teaching-learning strategies used, and the relevant bibliographic references were discussed.

Data collection took place from January to March 2016, and all collection moments were previously scheduled. The interviews were recorded, transcribed and later validated with the teachers and students interviewed.

The pedagogical project of the course and 11 teaching plans (TP, numbered from 1 to 12) of the curricular components of the course which addressed the theme of chronic diseases were used as source of documentary data for this study. The documents were made available to the researcher in digital format by the secretariat of the course, after permission from the head office to start data collection activities. For the analysis of the pedagogical project and the TP, the document was read in full length and based on the descriptions of the curricular components, 11 TP were selected for analysis. The inclusion criteria were TP of the year 2015 that included aspects related to health policies and programs; epidemiological monitoring; chronic NCDs; cardiovascular diseases; cancer; respiratory diseases; and Diabetes Mellitus in their description.

The Content Analysis technique was used for data analysis. This is a set of systematic and objective techniques used in the description of the content of the messages for the appreciation of interviews and consequent deduction of knowledge. According to this author, content analysis presents three stages as pillars: pre-analysis, material exploration and treatment of results, inference and interpretation.

This research followed the ethical precepts of Resolution 466/2012 of the National Health Council and was approved by the Ethics Committee on Research with Human Beings under nº 1.332.127, of November 22, 2015.

RESULTS

The results are presented in two categories: Predominance of the use of traditional methodologies and Approximations with active learning methodologies.

Predominance of the use of traditional methodologies

Although countless attempts to start new and varied teaching methodologies can be observed in the last decade, innovative strategies are still a problem for higher education teachers, which can be explained, in part, by the lack of training and background in previous experiences in terms of teaching:

I am traditional; I don’t know how to work with active methodologies. So better do it the way I know it and do it well. My concern is always that the content is not missed because of the way it is presented. (T6)

I am a traditional teacher; I don't see myself using active teaching methodologies. Not that I don’t appreciate some things, but the content I work on is very dense. (T11)

The lack of knowledge about diversified methodologies becomes a challenge. Using traditional strategies may be a consequence of the absence of a training process that guides or empowers the teacher. The prevailing perception is that traditional teaching is the one that really works out when it comes to transmitting knowledge:

We learnt through expository lectures and I consider myself to be well trained. (T10)

This issue of teaching methodology is a complex thing. Teacher training does not exist. I think it is very much related to life’s experiences. (T9)

Students understand that the lecture is an option to contemplate the large amount of content to be worked on in certain curricular components, but they perceive this process as limited with respect to learning in certain
situations, because it does not allow theoretical or reflective deepening. However, it is worth reflecting that active teaching strategies require a revision of the curriculum proposal:

The teaching was all of expository dialogued type; there was no other methodology that would instigate to settle the idea or increase interest. If stop to think, it is a lot to learn within a short time, everything is very much summarized. Expository classes are also tiring. (S7)

Having morning and afternoon classes is tiring. We are exhausted, because it is too much content in short time; all the same, slides and more slides. (S1)

We had a lot of content, but everything was too fast to learn all. (S12)

The class of the sixth semester was very deep, classes all day and tests every week. (S3)

The form of content organization, the lack of variability in teaching methods, the holding of seminars in which students are organized by themes and the routine proposed by the course in some semesters were considered exhausting.

The PPC describes in its ethical-political, epistemological, methodological and legal guidelines an alternative teaching proposal in relation to the traditional model aiming at critical and reflective training:

The educational process [...] presents transforming characteristics, that is, characteristics of overcoming of traditional, static, uncritical and mechanistic teaching, concerned only with the transmission of knowledge, ignoring the uniqueness and reality of each individual. Experiences of this nature launch the professors of the undergraduate nursing course into the challenge of implementing pedagogical strategies which support a meaningful, transformative and appropriate learning to social and professional demands. (PPC)

The methodological didactic resources used for the development of the discipline include didarged expository classes and group activities.

**Approximations with active learning methodologies**

Active learning methodologies, which allow other approaches, are present in the daily routine of only part of the teachers through films, reflections on the practice, articles, research in databases, and simulations:

I teach lectures. But there are also dialogue, examples, experiences. Sometimes I opt for a film to stimulate discussions and not just classes, classes, classes (T7)

We work with expository dialogue, we do seminars, case studies. There is also the discussion of articles, research in databases, we use DATASUS very often, to search for epidemiological information and simulations of the situation that students may face in practice. (T8)

I don’t like a class in which, from beginning to end, the teacher is at the front just talking; I always propose discussions and reading of articles. (T5)

The portfolio, as a strategy for evaluating or monitoring the students’ learning process, allows the idea that the test is a way of evaluating that can be replaced in some moments, as it allows the students to be more involved with the teaching proposal, in the perception of both teachers and students;

They create a portfolio. We have no test in that course. The return is good, they get involved. (T10)

I have to mention the portfolios, I hated to write, but in the end it was very good. (S10)

During theoretical-practical activities in health services, case studies were identified as the most effective teaching-learning strategy.

We know that case studies are good. The problem is time. (T2)

Most students say that when we carry out the case study, it makes them think a little more; they theorize and consequently expand the view. (T10)

The use of case studies is also perceived as a positive strategy, facilitating learning by students:
When we discussed the cases in the internship, we understood what was happening. (S1)

In the practice it is more striking, because you see the patient. You go home to study about it and the next day you discuss it. (S6)

The case studies stimulated a complete reasoning, from the pathology to the reason for the drip of the fluid therapy. I remember very clearly two teachers doing this. (S10)

The relationship expressed during the approach to care for patients in a critical situation is that the majority of hospitalizations result from complications of chronic NCDs:

At times I manage to make a connection between chronic diseases and the situation presented in the intensive care unit. But the training is fragmented. For example, here it is the medical clinic; if the patient who has hypertension has a heart attack in the clinic, he is no longer my problem. (P10)

Teachers and students who experienced active strategies stated that these teaching strategies are perceived as effective and offer possibilities for better learning of content, favoring the construction of skills and optimizing the use of time.

DISCUSSION

Since the year 2001, with the implementation of the NCG, the undergraduate Nursing courses started movements in favor of the proposed adaptations, implementing innovative Pedagogical Projects, with the possibility of adopting active learning methodologies, implementing integrated curricula, developing actions of integration of theory and practice, implementing supervised curricular internships, interdisciplinary activities and integration of teaching and service, among others.

In a study that analyzed the perception of teachers about the PPC, they problematized their involvement in this construction process, bringing that participation is necessary to have adherence to the proposal, and the continuum is fundamental. That is, to debate about what is working, what has already been integrated what has not, where the edges were left. Thus, the PPC becomes a reflection about daily routine and not only a document to be followed, as it requires continuity of actions, decentralization of power, democratization in decision-making and a continuous process of evaluation.
As the training of nurses who act in the teaching sector directly influences the construction of the profile of nursing graduates, these nurses need to develop pedagogical abilities and participate in permanent education actions\(^{(13)}\). The implementation of support or training centers for teachers in universities is recommended in order to promote constant modernization, boosting the refinement and innovation of teachers, and discussing different forms of performance that may enhance learning\(^{(14)}\).

Being a critical care nurse requires reflection on actions undertaken, and not only skills and knowledge. Thus, the diversity of active and innovative methodologies used as strategies in undergraduate nursing education by itself does not achieve the objective of making the students the protagonists of their learning, with a critical and reflective attitude, and it does not transform the teacher into a facilitator\(^{(15)}\). Therefore, reflection is a relevant aspect in the construction of this teaching process, and active learning methodologies can assist in this construction.

It is important to note that the active learning methodology alone does not transform the teaching process and or promote students’ autonomy. Both teachers and students need to assimilate and trust the pedagogical potential of the methodology and must be intellectually and emotionally engaged with the proposal. The empathy between teacher and student promotes personal identification, as well as enables the valorization of the activities and contents indicated and the internalization of demands\(^{(16)}\).

Thus, the sets of knowledge that are essential to the teaching practice in Nursing and the conditions to enhance the teaching action require the meeting of aims of the specialty and of pedagogy; the valorization of experiential knowledge in the constitution of a teaching identity; the expansion of notions of pedagogical practices; the nurturing of good relationships with students; and attention to initial and continuing training\(^{(17)}\).

A pedagogical relationship that follows the principle of comprehensiveness, connecting theory and practice and encouraging this reflection to transform the nursing actions to be developed is the goal. Thus, there is a distance from teaching guided by technical rationality and the possibility of training competent professionals to work in different situations in health services\(^{(18)}\).

During their training, students have experiences through services, universities and communities. This is an important factor to be appreciated. The relationships established in these effective learning scenarios have been limited to outreach actions, theoretical-practical activities and internships. However, this partnership between service, university and community must be constant in order to generate transformative actions and authentic comprehensiveness. Thus, teaching the learning to learn is transformed through these partnerships. This transformation can occur as the concepts of life, society, man, health, disease, education, culture, intersectoriality, integration, power, solidarity and democracy are reformulated\(^{(19)}\).

Although there are specific actions for the introduction of active learning methodologies in the classroom, in addition to the traditional methodology, the stance of a traditional teacher is still predominant. The results showed that the approaches were carried out with a concern focused on the content, with few moments of discussions, reflections and criticisms on nursing care for individuals with chronic diseases and their families.

**FINAL CONSIDERATIONS**

This study has as a limitation the fact that the theoretical-practical activities developed in the health services were not observed, considering that they were mentioned as an effective teaching strategy in carrying out case studies.

The objective of the study was to identify the teaching strategies used with the theme chronic NCDs in the undergraduate nursing course. It was found that, although there are specific actions for the introduction of active learning strategies in the classroom, the traditional methodology still prevails. The results showed that the approaches were carried out with a concern focused on the content, with few moments of discussions, reflections and criticisms on nursing care for individuals with chronic diseases and their families.
This fact generates concerns due to the emerging need for critical and reflective professionals to act effectively in containing chronic diseases and minimizing their complications. Thus, educational actions with this population are indispensable and we are concerned about how these educational actions are planned and carried out, since they tend to reproduce the way teachers received the teachings. In fact, the teachers’ character and personality traits significantly influence the attitudes and reactions of students.

For the construction of the Pedagogical Project, there must be group work collectively linked to the epidemiological reality of the region, to university faculty members, and to professionals of services. Critical-reflective thinking drives curiosity, participation and transformation towards democracy, allowing the project planning to become participatory. However, it is essential that the proposal is applied in practice and not left in the pages of a document.

### REFERENCES


Corresponding author: Eleine Maestri. Rua Guaporé, 72 E, Centro. CEP 89802300. Residencial Porto Seguro, apartamento 203. Chapecó, Santa Catarina, Brasil. 049-991730282 e eleine.maestri@uffs.edu.br.
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