Development of a Course to Prepare Nurses to Train Expert Patients

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Article

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Manacés Dos Santos-Becerril [1], Francisca Sánchez-Ayllón [2], Isabel Morales-Moreno [2,*], Flavia Barreto-Tavares-Chiavone [1], Isabelle Campos-de Acevedo [1], Ana Luisa Petersen-Cogo [3], Marcos Antônio Ferreira-Junior [4] and Viviane Euzebia Pereira Santos [5]

[1] Department of Nursing, Federal University of Rio Grande do Norte, Natal, Rio Grande do Norte, Brazil
[2] Faculty of Nursing, Catholic University of Murcia, Murcia, Region of Murcia, Spain
[3] Federal University of Rio Grande del Sur, Brazil
[4] Department of Nursing, Federal University of Mato Grosso do Sul, Cuiabá, Mato Grosso do Sul, Brazil
[5] Federal University of Rio Grande do Norte, Brazil
* Correspondence: imorales@ucam.edu

Abstract

Introduction: With the emergence of the expert patient and the expansion of health literacy, the importance of planning and building health technologies aimed at teaching and training health professionals becomes evident, in order to meet the real and constant demands of the expert patient. **Methods**: Methodological study with a quantitative approach. The course was constructed based on a scope review, scientific reference, and observational visits during the months of September 2021 and August 2022. For validation, an organized electronic form was used with general information about the research and items of the course constructed for later evaluation by the judges with the three-point Likert scale and with the application of the Delphi Technique between the months of September and October 2022, for the agreement of the judges, the Content Validation Coefficient >0.8 was considered. **Results**: Based on the content selected in the scope review, the reference contribution, and the observational visits, the course was constructed. Nine judges participated in the validation stage in Delphi I with a total Content Validation Coefficient above 0.90, and with some suggestions for modifications and improvements pointed out by them. In Delphi II, six judges evaluated the course and resulted in a total Content Validation Coefficient of 0.99. **Conclusions**: The course developed was considered valid to support the training of Primary Health Care nurses in the formation of the expert patient.

Keywords: hedging; transaction costs; dynamic programming; risk management; post-decision state variable

1. Introduction

Expert patients are increasingly common, and their appearance and understanding are directly associated with the increased health literacy of this new group of health service users. These individuals are active in the self-management of their care, understand their own clinical conditions, and are more capable of solving simple daily issues associated with their health-disease process [1–4].

More and more, we find patients who acquire information from several sources, including television programs, the Internet, and mobile applications. They tend to share these findings with others who are in similar situations, building a network of support, coexistence, and solidarity to help one another [2,3,5].

Thus, it is important for health workers to be prepared to deal with these patients and work with them as well as possible, extracting and encouraging their positive characteristics, encouraging

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partnerships with the activities of the service that involve the community, and helping optimize the process of acquisition and analysis of new reports [1,6].

As a result, sessions to train health care centers workers and bring them up to date have been common. In these sessions, they develop abilities to identify, recruit, and train expert patients to improve the care provided, standardizing user-related activities, systematizing educational practices, and proposing plans to improve the health system [4,7–9].

It is worth noting that most professionals involved in these activities are nurses, seeing as this class comprises most of the work force and continuously provides several direct care activities to their patients. They have increasingly become the main actors in this context, being autonomous and increasingly valued, and working in many sectors and complexity levels [6,10,11].

Nursing also stands out due to its pedagogical side, which is proposed and encouraged in the training of these professionals and especially in the context of Primary Health Care (PHC), given that this level of care is considered to be the entryway to other services. The PHC receives a large number of people with chronic diseases, and provides individual and collective educational activities to its users, being an extension of the social equipment in the community and the most accessible environment to deal with simple daily issues, related to population health [6,8,9,12,13].

Thus, it is clear that one needs to plan, encourage, and build technologies for health professional training and education. This can reduce the shortcomings of their previous educational processes, bring their knowledge up-to-date with the fast and constant changes in many different contexts, strengthen health care practices, and support the elaboration or revision of public policies, so they can be in line with the specificities of present time.

As a consequence, this study was made with the following guiding questions in mind: What should be the contents of a course to train PHC nurses to educate expert patients? Which elements should make up the structure of the course? Which theoretical, philosophical, and methodological aspects should be considered and/or be a part of the elaboration of the course? Our objective was to build and validate a course to train nurses in PHC so they can educate expert patients.

2. Method

This is a methodological, quantitative study, following Pasquali's psychometric model [14]. This type of study is useful to produce and validate appropriate and reliable materials, that can be used by other individuals [14].

The course was created according to three domains: literature review; theoretical, philosophical, and methodological framework; and observational visits. Based on this information, the course was elaborated and organized with the following elements: characteristics, syllabus, objectives, content, methodology, evaluation, schedule, references, appendices (Appendix I).

The literature review was, more specifically, a Scoping Review (ScR), and its research protocol was elaborated to guide the process of search and evaluation of studies. It was registered in the Open Science Framework (OSF) platform (DOI 10.17605/OSF.IO/YPUVM) [15].

The following databases were consulted in January 2022: PubMed, CINAHL, SCOPUS, Cochrane CENTRAL, Web of Science, PsycINFO, Latin American and Caribbean Health Sciences Literature (LILACS) and Educational Resources Information Center (ERIC). In regard to gray literature, we used the CAPES Thesis and Dissertations Portal, the National Library of Australia's Trobe (Trove), the Academic Archive Online (DIVA), the DART-Europe E-Theses Portal, the Electronic Theses Online Service (EThOS), the Open Access Scientific Repository of Portugal (RCAAP), the National ETD Portal, Theses Canada, and Theses and dissertations from Latin America.

All materials about the study object that had been published on-line in full were included. We excluded editorials, books, opinion articles and theoretical essays. There was no limitation in regard to time or language. The following variables were extracted from the works found: year of publication/defense; country of origin of the research; level of evidence; population/sample and profile of the study subjects; chronic disease; self-care actions; and main results.

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Our philosophical, theoretical, and methodological references included the concept of Andragogy by Roque Luiz Ludojoski [16], David Paul Ausubel's Theory of Meaningful Learning (TML) [17] and Albert Bandura's Self-Efficacy Theory [18], respectively.

These authors were chosen because, albeit their reflections are different, their principles complement one another, as they allude and are compatible with the work of health professionals, since these individuals have needs, goals, experiences, and previous knowledge that are different to those of people who are still being formed as professionals.

In regard to the observational visits, they made it possible for us to observe the daily work in the institutions that develop activities involving expert patients. They were carried out in person and via remote meetings in Expert Patient Schools of Spanish autonomous regions and communities from September 2021 to May 2022, and in health units in the same regions that carried out initiatives and health care, educational, and managerial practices targeted at this new profile of service users. The observations also included meetings and discussions with professionals and/or patients of some of these centers; access to the materials produced there, such as videos and booklets; and others.

These moments helped us better understand the concept of expert patient, how the professionals involved in their formation are trained, what are the educational methods used, what are the difficulties and potential for improvements, and the positive results in the quality of life of users and for the health care services.

The content was validated using an electronic form produced in Google Forms® (https://forms.gle/E84XmdUZpbHeutRp6), organized in the following topics: general presentation of the research, instructions for completing the questionnaire, virtual agreement to participate in the study, sociodemographic and labor characterization. It also included the eight sessions that comprise the course, which were evaluated using a three-point Likert scale created according to an adapted version of the criteria proposed by Pasquali [14]. For each criterion in each session, a score of 3 indicated it was "adequate"; a score of 2, partially adequate; and a score of 1, adequate [19].

Content evaluation was carried out by specialists with some level of knowledge, contact, or professional experience in PHC. These participants were tracked using criteria adapted from Fehhring [20] in March 2022 in the Lattes Platform, hosted by the National Council for Scientific and Technological Development (CNPq). Participants who had a minimum score of 10 were selected, adding up to a total of 60 evaluators, who were invited via e-mail to receive explanations about the goals of the research and the importance of their participation.

In case of a positive response, another e-mail was sent with a consent form, in order to ensure that all ethical precepts were respected. After the consent form was sent back, signed by the evaluator, they were sent the evaluation form, and asked to respond with the results in 20 days. For this process, a two-round Delphi Technique was used [21], from May to August 2022.

It is worth noting that, in Delphi II, in addition to the electronic form with the topics described above, judges were sent a file that included the suggestions of change given by them in the first round, as well as our justifications to accept these suggestions or not. We excluded from the research any specialists who did not agree to participate, did not send back the signed consent form, and those who did not fill in the electronic questionnaire in Delphi I.

Data was tabulated and organized in Microsoft Excel 2010. We considered valid all items that reached an agreement of 80% among judges and a Content Validation Coefficient (CVC) >0.8 [14,21].

This research is in accordance with the ethical precepts of Resolution No. 466, from December 12, 2012, by the National Council of Health. It was approved by the Research Ethics Committee at the Universidade Federal do Rio Grande do Norte (UFRN) under CAAE No. 46980621.2.0000.5537.

3. Results

Using content from the ScR, the theoretical framework, and the observational visits, we reached the goal of creating a course to train PHC nurses, so they can educate expert patients. It was registered in the Ministry of Education Integrated Platform and is available at https://plataformaintegrada.mec.gov.br/recurso/360192.

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Content validation took place in two Delphi rounds, which took place from May to August 2022. Nine judges participated in Delphi I. Their sociodemographic and work characterization is in Table 1.

Table 1. - Sociodemographic and work characteristics of Delphi I judges.

Variable	n	%
Gender		
Female	08	88.9
Male	01	11.1
Age group		
30-40 years	02	22.2
41-50 years	04	44.5
51-60 years	03	33.3
Education		
Nursing	07	77.8
Pharmacy	01	11.1
Medicine	01	11.1
Time since graduation		
10-20 years	05	55.6
21-30 years	02	22.2
31-40 years	02	22.2
Field of work		
Research	01	11.1
Teaching and research	03	33.3
Teaching, research, and direct care	05	55.6
Time working in the field		
01-10 years	04	44.5
11-20 years	02	22.2
21-30 years	01	11.1
31-40 years	02	22.2

Regarding their line of work, a single participant can work with more than one topic. Thus, they may be able to discuss the development of activities with the SP (09; 45.0%), health quality management (07; 35.0%), and health technologies (05; 20.0%).

As for the evaluation of the materials according to Pasquali et al. (2010), there were agreement levels above 80% among judges in all items evaluated, with CVC values above 0.90 in Delphi I (Table 2).

Table 2. – CVC values in Delphi I.

Pasquali's Criteria, Adapted	Characteristics	Syllabus	Objectives	Contents	Methodology	Evaluation	Schedule	Appendix 1	Appendix II	Appendix III	Appendix IV
Behavioral	0.99	0.96	0.96	0.99	0.96	0.96	0.99	0.96	0.96	0.96	0.96
Objectivity	0.99	0.96	0.92	0.96	0.99	0.96	0.96	0.99	0.99	0.99	0.99
Simplicity	0.99	0.96	0.96	0.96	0.96	0.99	0.99	0.99	0.99	0.99	0.99
Clarity	0.96	0.92	0.92	0.96	0.96	0.96	0.99	0.96	0.96	0.96	0.96
Relevance	0.99	0.92	0.96	0.96	0.99	0.96	0.99	0.96	0.96	0.96	0.96
Precision	0.99	0.96	0.92	0.96	0.99	0.99	0.96	0.99	0.99	0.99	0.99
Variety	0.96	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99
Modality	0.99	0.96	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99
Typicality	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99

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Credibility	0.99	0.92	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99
Amplitude	0.96	0.96	0.96	0.96	0.99	0.96	0.99	0.99	0.99	0.99	0.99
Balance	0.99	0.99	0.96	0.96	0.99	0.99	0.99	0.99	0.99	0.99	0.99
Total CVC*	**0.98**	**0.96**	**0.96**	**0.98**	**0.98**	**0.98**	**0.98**	**0.98**	**0.98**	**0.98**	**0.98**

Caption: CVC= Content Validation Coefficient.

After the first Delphi round, judges' suggestions were considered to determine whether they should be included or not, considering the justifications shown in Chart 1.

Chart 1 - Judge suggestions, modifications, and justifications after Delphi I.

JUDGES' SUGGESTIONS	STATUS	RESPONSES TO JUDGES
I – CHARACTERISTICS		
Staff in Charge: Ddo. The Portuguese abbreviation is written incorrectly. I suggest rewriting it. Collaborators: PhD students, MS students, and graduation students (members of the research group). I suggest: Collaborators: PhD, MS, and graduation students (...)	Suggestion implemented	- We accepted the suggestion to describe the collaborators as PhD, MS, and graduation students (members of the research group)
I would just add the percentage of hours used for in-person and distance meetings.	Suggestion implemented	- The percentage of hours of in-person (80%) and remote (20%) meetings was described
II - SYLLABUS		
The concept of expert patient is not widespread and understood by all professionals	Suggestion implemented	- The word "concept" was added to the syllabus
CLARITY - since this is a new concept, I believe that a short and operational definition of the term "expert patient" should be presented in the documents of the course. I think that it must be clear to course students (nurses) what kind of behavior they will attempt to promote in these patients. I still did not understand clearly what I should expect (or not expect) from an expert patient. I do not know whether the syllabus is the best place for this, but I decided I should mention this in the beginning of the questionnaire.	Suggestion not included	- Since the target audience (Primary Health Care nurses) and the goal of the course already have a connection to the topic being discussed, and considering that it does appear in the main project from which this research stems (a thesis), the concept of expert patient was not detailed in the course documents. Nevertheless, in order to use this course in other contexts and with other audiences, we understand that it would be essential to present the goals of the course, including the definition of terms that are not much disseminated, as part of the announcements used to advertise the course.
a) RELEVANCE - I believe that strategies to promote expert patients are more closely associated with other dimensions of quality (such as the centrality of the patient and effectiveness) than with safety - which is not to say that I disagree that an increased participation of the patient	Suggestion not included	a) We understand that the dimensions of quality management of care, such as patient centrality and effectiveness, are relevant and directly related to the goals of this course. However, since this study is part of a larger product focused on

 doi:10.20944/preprints202507.0284.v1

increases their safety. That in mind, I think that the beginning of the course should discuss the quality of care, as well as content on the centrality of the patient. As a consequence, the contents about safety could be more succinct. b) An important point that, as far as I could see, was not mentioned in the course documents, is how professional-patient health relations are vertical, leaving little space for the patient to be active. I understand that in PHC this relation is less vertical than in hospital care, but still, one must consider the resistance of many professionals to recognizing and valuing the voice, the knowledge, and the experience of patients.		patient safety in Primary Health Care, and considering that said study found that there are shortcomings in this regard that should be addressed by the research subjects (with direct contact and participation in the main project), we chose to focus on patient safety and associate it with the patient expert in Primary Health Care. b) The observation about the vertical nature of care and professional-patient relationships is also noteworthy, considering the culture of care that was built over time and the different realities that exist. However, although this is not clearly described in the syllabus, meetings 3, 4, and 5 will address evidence in regard to the aspects that make it easier or more difficult to train an expert patient in Primary Health Care, as well as the factors that help or hinder adherence to self-care, not to mention these topics were addressed in the theoretical context considered for the thesis.
The topic of the syllabus: The role of nursing in the health-disease process of chronic patients, is not closely connected to the goals and content suggested. You could make it more clear how this topic is associated with the context of the course.	Suggestion implemented	- The topic was changed for: The role of nurses and strategies to form expert patients.
III - OBJECTIVES		
a) I think the objective "To analyze the benefits of expert patients, the aspects that hinder and help the self-care of chronic patients, discussing potential activities aimed at strengthening and minimizing them." Cannot be reached, considering the content presented. I suggest removing it or transforming it in an object of the research, not of the training. b) I also suggest including Bandura as a reference to support the training in regard to self-efficacy when adhering to self-care.	Suggestion implemented	a) The objective was changed to: List the potential benefits of an expert patient, the aspects that make it more difficult and those that help the self-care of chronic patients, discussing potential actions in order to strengthen and minimize them. b) Bandura was included as a reference in item V-METHODOLOGY, in addition to the references from Ludojovski and Ausubel.
Include the objective: 1. Train Primary Health Care nurses to develop expert	Suggestion not included	- We believe that the objective suggested is the main objective of

 doi:10.20944/preprints202507.0284.v1

patients. Include some communication tools and strategies.		the course, since all objectives described in the course are the goals that the participants are expected to achieve, this includes becoming able to form expert patients.
a) Patient safety is mentioned too often in the objectives of the course, with 4 out of 7 objectives being associated with it. In line with my previous comment, I think that one of the objectives could be related to the quality of care, and another, to the centrality of the patient. b) An objective could also be included that is associated with the idea of the nurse "preparing" the health team, including physicians, to deal with patients that are more active in their health care.	Suggestion not included	a) As explained above, although we understand the relevance of this association, this study is focused on patient safety in the PHC, and the objectives and initial content are associated with these topics. b) The suggestion to include a goal related to the idea that the nurse could help/train the other team members in the training of the expert patient is included in the specific objectives of the 5th session of item IV - CONTENTS.
IV – CONTENTS		
A previous comment suggested reviewing the content in regard to the syllabus and its objectives.	Suggestion not included	- The non-inclusion was explained in previous Items
V - EVALUATION		
a) I suggest making the attendance assessment clearer. 100% attendance? 75%? b) Be clear about how active participation will be evaluated. c) Will there be an instrument using indicators for this evaluation?	Suggestion implemented	a) The minimum attendance will be 75% (in-person and distance meetings) b) We indicated in item VI - EVALUATION which tools/activities will be used to evaluate active participation c) No specific instrument will be used for this evaluation, which will be subjective
VI – SCHEDULE		
I think that, here, coherence with the objectives, as I commented above, is also relevant.	Suggestion not included	- The non-inclusion was explained in previous Items
VII – APPENDICES (clinical simulation scenarios)		
I would recommend changing terms that stigmatize the patient, such as "hypertensive", to "person with systemic arterial hypertension".	Suggestion implemented	- The term hypertension was changed into person with systemic arterial hypertension in the document as a whole.
GENERAL COMMENTS		
General comment: Since this course is targeted at health workers, and considering the difficulties in inviting and retaining participants in the course, I felt there was not sufficient information regarding how this aspect will be developed.	Suggestion not included	- Since this is a course, it is not possible to describe this aspect of the document. However, it explains that recruitment will be conducted using the existing means of communication (e-mail, phone, social networks, and others) to

 doi:10.20944/preprints202507.0284.v1

	reach Primary Health Care nurses who are already close to the investigation at hand. Additionally, dates and times of meetings will be suggested and/or decided with the subjects beforehand.

After the changes were made according to the suggestions of the judges, a second Delphi round was conducted, and the same participants from the previous round were invited to participate. From the nine evaluators who participated in Delphi I, six participated in Delphi II. Their characteristics are in Table 3.

Table 3. - Sociodemographic and work characteristics of Delphi II judges.

Variable	n	%
Gender		
Female	05	83.3
Male	01	16.7
Age group		
30-40 years	01	16.7
41-50 years	02	33.3
51-60 years	03	50.0
Education		
Nursing	05	83.3
Pharmacy	01	16.7
Time since graduation		
10-20 years	03	50.0
21-30 years	01	16.7
31-40 years	02	33.3
Field of work		
Teaching and research	01	16.7
Teaching, research, and direct care	05	83.3
Time working in the field		
10-20 years	03	50.0
21-30 years	01	16.7
31-40 years	02	33.3

Regarding their line of work, a single participant can work with more than one topic. Thus, they may be able to discuss the development of activities with the SP(06; 40.0%), health quality management (05; 33.3%), and health technologies (04; 26.7%).

Regarding the evaluation of the materials according to Pasquali et al. (2010), judges maintained agreement levels above 80% in all items evaluated, with a total CVC value of 0.99 in all items, except for the objectives (Table 4).

Table 4. – CVC values in Delphi II.

Pasquali's Criteria, Adapted	Characteristics	Syllabus	Objectives	Contents	Methodology	Evaluation	Schedule	Appendix 1	Appendix II	Appendix III	Appendix IV
Behavioral	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99
Objectivity	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99
Simplicity	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99

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Clarity	0.99	0.99	0.98	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99
Relevance	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99
Precision	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99
Variety	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99
Modality	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99
Typicality	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99
Credibility	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99
Amplitude	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99
Balance	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99
Total CVC*	**0.99**	**0.99**	**0.98**	**0.99**	**0.99**	**0.99**	**0.99**	**0.99**	**0.99**	**0.99**	**0.99**

Caption: CVC= Content Validation Coefficient.

4. Discussion

The training of nursing professionals is increasingly more appreciated, given that people seek safe and good quality health care, making it necessary to increase the self-esteem and appreciation of these workers, helping change a hospital-centered practice and the curative-focused biomedical model [6,22].

This takes place, mainly, through the improvement and growth of PHC assistance, as it organizes and integrates health services according to the needs of the population. It also promotes the axes that structure the health system and are based on the care process, generating effective and efficient interventions [13,23].

PHC conditions have been extremely important in later years, especially in the post-pandemic world, since the number of people with chronic diseases exponentially increased. Furthermore, population aging and behavior and lifestyle changes contributed to the current epidemiological landscape [24,25].

In this regard, universities, technical education organizations, and health services from countries such as the United Kingdom, the United States, Canada, Australia, and Spain, have formed partnerships for the technical-scientific improvement of their health workers, so they can identify, train, and form expert patients, in order to provide continuous, holistic, preventive, and effective care to these individuals [5,26,27].

These institutions often provide courses periodically, or according to existing or apparent needs, to improve the techniques used in the teaching-learning process; to produce and share scientifically-backed materials to optimize their activities; to create new national and international collaborative efforts to replicate successful activities; and to conduct investigations to evaluate the level of effectiveness of the educational practices being conducted [5,26,27].

Nonetheless, the motivation of nursing workers in regard to the contents and activities from the course is an essential element for individual or collective production. Active participation, together with the other subjects, is essential to raise prospective discussions and help significant learning [13,16].

To reach this result, the course must, in order to train health workers, be based on theoretical and methodological frameworks that are consistent with these individuals [16–18], appropriately using teaching strategies and tools with a direct connection to the contents addressed [5,27].

An example of this includes discussions in small or large groups about experiences with potential expert patients; mental maps to organize the understanding of the concept of expert patient; simulation scenarios that encourage the development of self-care actions and the resolution of daily problems, covered by patients and optimized by nurses; interactive quizzes and/or the collective elaboration of an interactive mural showing the benefits and the aspects that help or hinder self-care activities; and other possibilities [2,3,5,26,27].

In regard to the validation of the characteristics of the final sample in both Delphi rounds, the fact that most evaluators were female is a constant element in health throughout the years, especially

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in nursing. Furthermore, most participants are from this field, since it is the largest workforce in health services and is in accordance with the target audience of the course being elaborated [6,10].

In regard to their age group and time working in the field, although the Delphi II had 10 years less, participants were found to be experienced and have an affinity with the topics of this research, PHC and safe care. This led to significant contributions that helped improve the quality of the structure and contents addressed in the course developed [11–13,22,28].

The same explanation can be associated with the time since the graduation of the judges, which varied from 10 to 20 years, and the fact that most worked with the triad teaching, research, and direct assistance. This indicates that the suggestions have a wide scientific basis, being closer to the issues found in the context of their work, whether this work is associated with scientific projects/articles, or to the practices they carry out in health care units [13].

Nonetheless, the fact that most participants are associated with the topic of patient safety shows how important the topic is, and how it must be considered in a cross-sectional way, from teaching to the activities developed by all those involved in the process of care – that is, health workers, patients/users and their families or support persons, based on the idea of providing a safer, higher-quality assistance [28,29].

Regarding the agreement level of the judges about the items evaluated, it was found to be uniform, as all items reached a total CVC above 0.90 since the first Delphi round. This indicates that the content was able to reach its goals. However, a Delphi II was necessary to consider the suggestions of the judges, which were relevant and increased the total CVC to 0.99 for all elements evaluated, with the exception of the objectives [30].

The suggestions proposed included clarifying what the percentage of the course dedicated to in-person and remote activities was, clarifying the essence of the approach and the goal of the course. Seeing as this is a type of training requires developing and evaluating practical actions from the participants, in person activities must be the most prevalent in order to provide a dynamic environment that can encourage the performance of these activities [23,31].

Additionally, given that the target audience is a public who works in the PHC for 40h a week, it is important to make clear, since the beginning, that this course is a way to improve their work practices, causing no harm. Professionals and managers of the work units are contacted beforehand, so they feel more motivated and open to active participation in the course meetings [13,22].

It is worth noting that helping promote a more receptive and interested behavior from course participants is valuable to reach positive results. This is in accordance with the Self-efficacy Theory [18] recommended by a Delphi I judge and in andragogy, which discusses the education of younger adults – in this case, PHC nurses. The TML is also associated with this aspect of the research, as it generates a more robust cognitive structure by joining new and old knowledge [16,17].

Another idea from the judges was presenting and/or succinctly mentioning the concept of expert patients, which is the base of the course elaborated here, since the activities of the course aim to enable nurses to identify, recruit, and train this new patient profile. These patients would be able to self-manage their care, helping others in similar situations, have a more active attitude in regard to their own clinical conditions and, although the topic is addressed during the meetings of the course, the target audience must have a general awareness about the contents to be addressed [1,2].

Concerning this suggestion, we would like to highlight the fact that this course is destined to PHC nurses because we want to encourage the community to recognize and use the PHC as the entryway to other health services. Moreover, there is a higher number of individuals that are potential expert patients, especially considering their characteristics, including having some chronic disease and being attended in Primary Health Units [5,8,26].

Therefore, the relationship between PHC professionals and patients must be horizontal and based on trust and mutual responsibility, in order to bring short, medium, and long term benefits to all those involved in the care process, even if there are some difficulties [6].

Limitations found in the development of this study include the impossibility of monitoring training sessions to form expert patients in the health centers and schools visited, since, at the time

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the visits were carried out, no session was being held; this prevented us from observing these sessions, which could help apprehend new ideas and experiences. Furthermore, the different understandings and experiences of the specialists during the evaluation process could generate mistaken interpretations.

Nevertheless, the results found here contribute to increasing the importance of seeing the patient as the center of their own self-care; to fostering reflections in nurses about the fast and constant epidemiological transitions, and the need to update and adapt work strategies; to encouraging the building and validation of teaching tools for continued education in health services; and to increasing knowledge and, therefore, strengthen the activities carried out by health care professionals.

5. Conclusion

The course developed here to train nurses to educate expert patients was validated via judge evaluations. Although there were pertinent suggestions in the first Delphi round to improve the quality of the development of this technology, specialists gave a positive evaluation of the content. In Delphi II, all items evaluated had an agreement index above 90%, with a total CVC of 0.99. Therefore, the contents of the course were found to be adequate, meaning that the course was considered to be a valid way to support the training of nurses in the PHC, so they can educate expert patients.

Supplementary Materials: The following supporting information can be downloaded at the website of this paper posted on Preprints.org. Includes the structured course, with all its topics, descriptions, and materials, as evaluated in the validation stage of this study.

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