# Development and content validation of a course in mental health nursing care

*Elaboração e validação de conteúdo de um curso na atenção de enfermagem em saúde mental*

*Elaboración y validación de contenido de un curso de enfermería en salud mental*

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## ABSTRACT

**Objective:** To develop and validate the content of a professional training course in mental health nursing care for hospitalized adult medical-surgical patients.

**Method:** Content validation research, with the participation of eight experts recruited in 2019, focused on a hospital institution in the southern region of Brazil. Data were collected online and treated by descriptive and analytical statistics.

**Results:** Four items of the course were evaluated, obtaining a Content Validation Index (CVI) of 0.98 in the item "concepts in mental health and its applicability to hospitalized medical-surgical patients"; 0.93 in the item "Pre- and post-course on evaluation of knowledge in mental health"; 0.95 in the item "Global overview of the systematization of nursing care in mental health"; and 0.94 in the item "Flowchart of the new mental health tree".

**Conclusion:** The validation of the professional training course showed satisfactory CVI, and its content validated for use.

**Keywords:** Mental health. Nursing process. Education, nursing, continuing. Nursing. Validation study.

## RESUMO

**Objetivo:** Elaborar e validar o conteúdo de um curso de formação profissional na atenção de enfermagem em saúde mental a pacientes adultos clínico-cirúrgicos hospitalizados.

**Método:** Pesquisa de validação de conteúdo, com a participação de oito especialistas recrutados no ano de 2019, tendo como focouma instituição hospitalar da Região Sul do Brasil. Os dados foram coletados online e tratados pela estatística descritiva e analítica.

**Resultados:** Foram avaliados quatro itens do curso, obtendo-se o Índice de Validação de Conteúdo (IVC) de 0,98 no item "conceitos em saúde mental e sua aplicabilidade para pacientes clínico-cirúrgicos hospitalizados"; 0,93 no item "Pré e pós-curso de avaliação de conhecimentos em saúde mental"; 0,95 no item "Panorama mundial da sistematização da assistência de enfermagemem saúde mental"; e 0,94 no item "Fluxograma da nova árvore de saúde mental".

**Conclusão:** A validação do curso de formação profissional apresentou IVC satisfatório, sendo seu conteúdo validado para uso.

**Palavras-chave:** Saúde mental. Processo de enfermagem. Educação continuada em enfermagem. Enfermagem. Estudo de validação.

## RESUMEN

**Objetivo:** Desarrollar y validar el contenido de un curso de formación profesional en atención de enfermería en salud mental para pacientes adultos clínico-quirúrgicos hospitalizados.

**Método:** Encuesta de validación de contenido, con la participación de ocho especialistas reclutados en 2019, con una institución hospitalaria en el sur de Brasil como escenario. Los datos se recopilaron en línea y se trataron mediante estadísticas descriptivas y analíticas.

**Resultados:** Se evaluaron cuatro ítems del curso, obteniendo una concordancia de 0.98 en el ítem "conceptos en salud mental y su aplicabilidad a pacientes clínico-quirúrgicos hospitalizados"; 0,93 en el ítem "Pre y post curso de evaluación de conocimientos en salud mental"; 0,95 en el ítem "Panorama global de la sistematización de la atención de enfermería en salud mental"; y 0,94 en el ítem "Diagrama de flujo del nuevo árbol de salud mental".

**Conclusión:** La validación del curso de formación profesional mostró concordancia de contenido satisfactoria y su contenido validado para uso.

**Palabras clave:** Salud mental. Proceso de enfermería. Educación continua en enfermería. Enfermería. Estudio de validación.

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## ■ INTRODUCTION

Mental health is a condition of emotional and psychosocial well-being evidenced, besides other components, by effective behavior and coping with daily routine situations[1]. Thus, it is transversal to nursing care in different scenarios and health situations. The patient in the hospital setting submits to the change of environment, to the manipulation of the body by the professionals and fears unknown procedures. This unknown context can lead to emotional and psychosocial issues.

In a study conducted in southern Brazil with 48 patients admitted to an adult medical unit, 39.6% manifested symptoms that characterize common mental disorders, of which 30.8% belonged to the "Depressive/anxious mood" group and to the "Somatic Symptoms" group, and the others included in the groups "Decreased energy" and "Depressive thoughts"[2]. This study shows that hospitalized patients go through moments of psychic suffering during their hospitalization, demanding nursing care in the mental health area.

The Brazilian psychiatric reform in the 1980s changed the focus from mental health care to care based on the psychosocial model. Such model has the therapeutic relationship as its main care technology, based on trust, empathy, non-judgment, acceptance, and genuine interest of the health professional by the patient[1].

The therapeutic relationship reaches its excellence through speech, which is essential for its development and for the application of the nursing process in mental health. That is, the nursing process in mental health must be directly linked to the nurse-patient relationship, constantly building and strengthening bonds[3–4].

Still, nursing process can be developed from the nurse-patient-family/caregiver therapeutic relationship, characterizing an advance in the construction of a broaden care, considering mental health in its different perspectives[4]. These bonds can and should be built in different health contexts, in order to assess the needs of each patient and make them through care free of stigma, but which is individual and comprehensive.

The demands on mental health presented by patients in the Adult Medical-Surgical Inpatient Unit (*Unidade de Internação Clínico-Cirúrgicas Adulto* – UICCA) can be manifested by depressed mood, irritability and/or anxiety and may influence the conditions for recovery or maintenance of the patient's health status and their family. Therefore, the nurse, when identifying these demands, assigns nursing diagnoses considering the defining characteristics and evidence to establish the expected results and thus plan care interventions. In this process, depending on the nurse's critical thinking,

the patients' emotional and psychosocial needs may not be listed as a priority, which could be considered as lack of knowledge on mental health care and its impacts on the patients' outcome.

The relevance of this study is on individual and comprehensive care for patients and their families/caregivers, which includes the emotional and psychosocial demands that emerge during hospitalization and that directly imply the recovery or maintenance of the patient's health status. Therefore, it was recognized the need to expand the knowledge and skills of UICCA nurses regarding mental health nursing. In the institution where this study was conducted, there was a shortage of records of diagnoses and nursing interventions in mental health in the electronic nursing process, which may be a characteristic of the UICCA service, which has professional nurses with a generalist profile, or experts in surgical and medical nursing, service management and nursing.

First, an improvement was made in the electronic system of the institution regarding the items available for the patient assessment, diagnoses and mental health interventions. After implementation, there was a need for an educational action on mental health care for UICCA nurses. Thus, the idea of a self-instructional and online professional training course on the theme emerged. Therefore, the research and development question for this product was: "How to develop and validate the content of a course to qualify the nursing process and mental health records for nurses in adult medical-surgical inpatient units?".

It is also intended to reduce possible worsening resulting from hospitalization or disease due to the lack of recognition of emotional and psychosocial problems that can increase the length of stay and direct and/or indirect hospital costs for the patient, family, institution, insurance plans and society. Therefore, the objective of this study was to develop and validate the content of a professional training course in mental health nursing care for hospitalized adult medical-surgical patients.

## ■ METHOD

Methodological study, with the development and content validation of a course, characterizing it as exploratory and descriptive for technological production, with a quantitative approach[5]. This study complies with the steps of Strengthening the Reporting of Observational Studies in Epidemiology (STROBE) to ensure quality[6]. The professional training course was structured in the form of extension, self-instructional and online, asynchronous, being the same

planned for nurses who work in the UICCA of a hospital institution in the southern region of Brazil. In this institution, there are 22 UICCA, where about 180 nurses are allocated.

This course, entitled "Mental health nursing care for hospitalized medical-surgical patients" has a workload of ten hours and was carried out in two stages: course development and course content validation.

## Course Development

The course was developed by a team consisted of a master nurse and mental health expert, two professors with doctorate in nursing and two nursing students, as scientific initiation fellows. At this stage, the storyboard tool was used to organize the content through a course script represented in drawings, schemes and flowcharts. Based on this script, the same sequence was followed for the presentation of the course, in order to simulate the final product overview[7,8].

The storyboard was designed using Microsoft Power Point® slideshows. This initial format was chosen, as each slide would later correspond to a screen or tab of the course, highlighting at that moment the educational contents that constituted the course in order to value them for the validation stage. A clear and attractive organization was also considered, which allowed the creation of the layout and visual identity of the course. The pedagogical contents of the storyboards were based on: books and scientific literature on nursing care and mental health management; in the integrative review of the global panorama of the Systematization of Nursing Care (SNC) in mental health[9]; and in the presentation of a new model of the mental health nursing process for the institution of the study.

Also, clinical cases related to the theme in question were added, such as the assessment of nurses' knowledge on mental health, which were applied before and after completion of the course, respectively. The clinical cases were designed so that course participants could identify mental disorders through clinical reasoning and define the needs for mental health care, as well as generate a perception of the importance of recording diagnoses and nursing interventions in mental health area.

## Course content validation

The process of content validation proposes that the evaluation to be performed by six to twenty experts, in addition to some descriptive evaluation[10]. The storyboard produced in the preparation stage of the course was thus submitted to the evaluation of a Committee of Experts selected by the Snowball method and working in any higher education institution in Brazil[11]. The eligibility criteria were: having a master's and/or doctoral degree in the areas of Education, Nursing or Health Sciences; having experience of at least one year in higher education teaching in mental health nursing or SNC; and not being on sick leave, maternity leave or vacation period.

The first expert was randomly drawn among eleven professors from the Nursing Department of a federal higher education institution who teach courses in the areas of Fundamentals of Nursing Care, Medical-Surgical Nursing, Mental Health Nursing and Nursing Management, but was excluded, as he/she was on vacation. Therefore, a random drawing was performed among the ten professors again, thus defining the first expert to start the process of course content validation.

The first expert received by e-mail an invitation to participate in the study, which contained the presentation of the study and the address for accessing the validation instrument. This instrument was structured by the FICF, descriptive fields for the indication of three new experts (name and email), the email address to access the storyboard in slideshow format (*.ppsx) and the questions for validation of four items: a) pre- and post-course evaluation of knowledge on mental health; b) concepts in mental health and its applicability to hospitalized medical-surgical patients; c) global panorama of SNC in Mental Health; and d) flowchart of the new mental health nursing process for electronic recording.

In this stage of content validation, the storyboard was made available only for viewing by experts and could not be directly edited or commented. The entire process of course content validation involved eight experts, who met the eligibility criteria, and lasted approximately 60 days.

The experts' agreement was analyzed by calculating the Content Validation Index (CVI), which measures the proportion of experts who agreed on the relevance or otherwise of certain aspects of the content and activities presented in the storyboard. It was considered a CVI greater than 0.80 for the experts' agreement[12]. It was used a Likert-type scale, with a score of one to four points, that evaluated relevance/representativeness, considering: (1) not relevant or not representative; (2) item needs major revision to be representative; (3) item needs minor revision to be representative; and (4) relevant or representative item. The CVI score is calculated by the sum of responses (3) or (4) divided by the sum of responses[10,13]. The experts registered the observations/suggestions in descriptive fields of the instrument, contributing to the qualification of the course content.

The study was approved by the Research Ethics Committee (REC) of the higher education institution and the hospital institution as co-participant, in 2019 via *Plataforma Brasil*, with the approval of both under opinion No.2,934,573 and No.3,109,035, respectively. All experts were invited to participate in the study, respecting the ethical precepts provided for in Resolution No. 466/2012 of the National Health Council[14], as well as the online signature of the FICF.

## ■ RESULTS

### Course Development

The content of the professional training course "Mental health nursing care for hospitalized medical-surgical patients" was planned and adapted to the profile of patients who are admitted to the UICCA. The storyboard was structured in five main modules, with a total of 71 slides: Course presentation; Pre-test; Mental health training and mental health nursing process; Post-test. This tool was developed by the authors of this study, totaling 400 hours between literature search on the theme, writing of pedagogical content and organization of layout.

The Course Presentation module had the cover, course objectives, necessary prerequisites for participants and presentation of the course authors (3 slides); the Pre-test had four clinical cases and objective questions with related responses (11 slides); Mental health training and mental health nursing process included content on the assessment of mental status, emotional and psychosocial demands, management of pre-surgical, post-surgical and hospitalized patients, communication and therapeutic relationship, non-pharmacological management for anxiety, depressed mood and anger/hostility/aggression; global panorama of SNC in mental health, proposal of a new mental health nursing process for SNC the hospital institution (42 slides); and the last one, the Post-test, similar to the Pre-test (11 slides). The final four slides presented the closing of the course and references used.

As for the design, images were selected that referred to the theme of the course and the color palette to define a visual identity for the course, as shown in Figure 1.
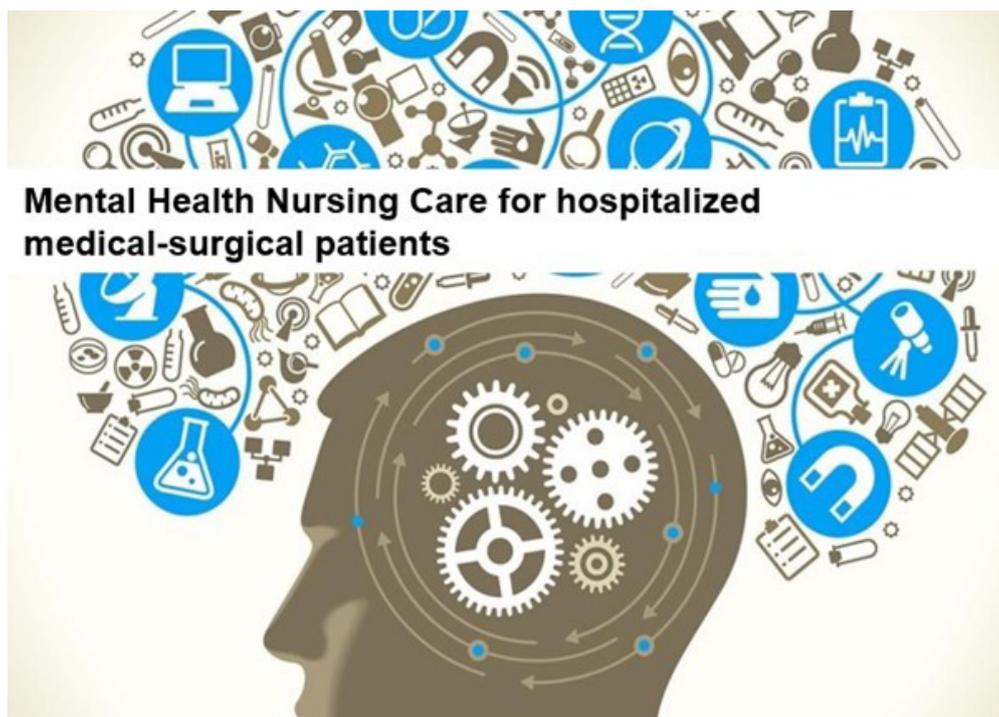


**Figure 1** – Visual identity of the course. Porto Alegre, Rio Grande do Sul, Brazil, 2019
Source: Research data, 2019.

## Course content validation

Regarding course validators, the profile of experts was predominantly female 7 (87.5%), with a mean age of 37.75±5.04 years, with a Doctorate degree 7 (87.5%) and professors in a public institution 7 (87.5%). Teaching time ranged from 7.5 (3.7-14) years and professional experience time was 11.1±5.3 years. The experts' area of knowledge was typified by mental health 4 (50%), SNC 3 (37.5%) and adult health 1 (12.5%).

Four items were evaluated by the experts directly related to the previously described course modules. In the first item "pre- and post-course evaluation of clinical reasoning in mental health", the validation instrument related the evaluation to the four clinical cases presented, according to Table 1.

The CVI ranged from 0.85 to 1.00 among the evaluated items, reaching an overall CVI of the item "pre and post-test of knowledge in mental health" of 0.93, as well as obtaining the mean of answers that denotes the homogeneity of the evaluation on the item. The lowest CVI score was 0.85 related to the item "The test evaluates nurses' knowledge of SNC in mental health", but the highest CVI obtaining the full score (1.00) was "Clinical cases are in line with the reality of care".

In the descriptive field, E6 stated that the pre- and post-course "do not evaluate knowledge specifically in SNC, but verify the clinical reasoning related to patients' mental health", corresponding to the course objectives.

The second item evaluated was "Concepts in mental health and its applicability to hospitalized medical-surgical patients", shown in Table 2.

The overall CVI score of the item "Concepts in mental health and its applicability to hospitalized medical-surgical patients" evaluated in the sum of the six criteria reached the CVI of 0.98, the maximum value that can be obtained. The validation criterion with the lowest CVI was 0.93 related to the existence of "Applicability in the daily clinical practice of nurses", and the highest CVI score (1.00) was reached in four of the six variables presented.

In the descriptive evaluation, the need to conceptualize some changes in the mental status test was pointed out (E5), and it was suggested to add an explanatory screen to associate this item with the next item in the Global panorama of SNC in mental health (E3). As these contributions were considered relevant, the course content was changed and complemented.

The third item evaluated was the presentation of the "Global panorama of SNC in mental health". Table 3 presents the criteria considered to validate the content of this item.

The item "Global panorama of SNC in mental health" ranged from 0.88 to 1.00 in six criteria evaluated. The content validation with the lowest CVI was 0.88 and was related to "the illustrations and texts motivate the professional to understand the content", and the highest CVI score (1.00) occurred in two variables that were "It presents appropriate layout to the proposed theme" and "The content is appropriate for the educational activity", the last one obtained a full score CVI from the Expert Committee.

Regarding the suggestions, two experts questioned the relevance of bringing the integrative review to compose

**Table 1** – Content validation index and experts' agreement (n=8) for the pre- and post-course evaluation of clinical reasoning in mental health. Porto Alegre, Rio Grande do Sul, Brazil, 2019

| Variables | CVI | Mean (SD) |
|---|---|---|
| Clinical cases are in line with the reality of care | 1.00 | 3.8(0.3) |
| Clinical cases provide sufficient information to answer the questions | 0.92 | 3.2(0.7) |
| The questions and alternative responses are in line with the clinical cases presented | 0.93 | 3.5(0.7) |
| The test evaluates nurses' knowledge of the mental health nursing process | 0.85 | 3.2(0.8) |
| There is applicability in the daily clinical practice of nurses | 0.93 | 3.7(0.7) |
| Overall CVI score | 0.93 | 18(3.1) |

Source: Research data, 2019.
Legend: CVI: Content Validation Index; SD: Standard Deviation; SNC: Systematization of Nursing Care.

**Table 2** – Content validation index and experts' agreement (n=8) for the item "Concepts in mental health and its applicability to hospitalized medical-surgical patients". Porto Alegre, Rio Grande do Sul, Brazil, 2019

| Variables | CVI | Mean (SD) |
|---|---|---|
| The addressed content presents relevant information for nursing practice in UICCA | 1.00 | 3.8(0.3) |
| It presents an appropriate layout for the proposed theme | 1.00 | 3.7(0.4) |
| The audios present clarity and coherence to understand the content | 0.96 | 3.2(1.0) |
| The illustrations and texts motivate professionals to understand the content | 1.00 | 3.6(0.5) |
| There is applicability in the daily clinical practice of nurses | 0.93 | 3.7(0.7) |
| The content for the learning object is appropriate for the educational activity | 1.00 | 3.7(0.4) |
| Overall CVI score | 0.98 | 22(2) |

Source: Research data, 2019.
Legend: CVI: Content Validation Index; SD: Standard Deviation; UICCA: Adult medical-surgical inpatient unit.

**Table 3** – Content validation index and experts' agreement (n=8) of the item Global panorama of SNC in mental health. Porto Alegre, Rio Grande do Sul, Brazil, 2019

| Variables | CVI | Mean (SD) |
|---|---|---|
| The addressed content presents relevant information for nursing practice in UICCA | 0.96 | 3.5(1.0) |
| It presents an appropriate layout for the proposed theme | 1.00 | 3.6(0.5) |
| The contents present clarity and coherence for understanding | 0.93 | 3.5(0.7) |
| The illustrations and texts motivate professionals to understand content | 0.88 | 3.2(1.1) |
| There is applicability in the daily clinical practice of nurses | 0.93 | 3.7(0.7) |
| The content is appropriate for the educational activity | 1.00 | 4.0(0.0) |
| Overall CVI score | 0.95 | 21.6(3.9) |

Source: Research data, 2019.
Legend: CVI: Content Validation Index; SD: Standard Deviation; UICCA: Adult medical-surgical inpatient unit.

the learning object (E3/E6). Despite this, all items had a CVI above the 0.80 recommended by the content validation process. There were no specific suggestions or critics about how the presentation could be qualified. Therefore, it was decided to keep this item in the course, in view of the production of knowledge about the use of nursing diagnoses and interventions in mental health on the global scenario, as well as the need for a clinical assessment of the patient's mental status by the nurse to highlight and prioritize care in line with the real needs of the patient and family/caregivers.

In the fourth item, it was proposed to the experts an evaluation of the "Flowchart of the new mental health nursing process", according to Table 4.

**Table 4** – Content validation index and experts' agreement (n=8) for item flowchart of the new mental health nursing process. Porto Alegre, Rio Grande do Sul, Brazil, 2019

| Variables | CVI | Mean (SD) |
|---|---|---|
| The addressed content presents relevant information for nursing practice in UICCA | 1.00 | 3.8(0.3) |
| It presents an appropriate layout for the proposed theme | 0.92 | 3.2(0.7) |
| The illustrations motivate professionals to understand content | 0.84 | 3.1(0.8) |
| There is applicability in the daily clinical practice of nurses | 0.93 | 3.7(0.7) |
| The content is appropriate for the educational activity | 1.00 | 3.7(0.4) |
| Overall CVI score | 0.94 | 17.7(2.1) |

Source: Research data, 2019.
Legend: CVI: Content Validation Index; SD: Standard Deviation; UICCA: Adult medical-surgical inpatient unit.

In this item, "Overall assessment of the flowchart of the new mental health nursing process" obtained the lowest CVI agreement (0.94), when compared to the other items validated. In this item, "the fragility of the illustrations to motivate the understanding of the content" was highlighted, with the CVI being 0.84. On the other hand, two variables had highest CVI score (1.00): "The addressed content presents relevant information for nursing practice at UICCA" and "The content is appropriate for the educational activity".

In the descriptive evaluation, one of the experts registered as a potentiality of the educational action the excellent conduction of the clinical reasoning proposed in item (E3). All descriptive critics and suggestions helped to qualify the final proposal for the content of the professional training course. Changes were made in the formatting of the final product. This product will be offered as an extension course, self-instructional and online, in the Virtual Learning Environment of the Modular Object-Oriented Dynamic Learning Environment®(AVA-Moodle®) for UICCA nurses.

## ■ DISCUSSION

The proposal for this course with the theme of mental health was the result of a Professional Master's Dissertation, that is, it was a demand identified by a professional from the hospital institution, and supported and encouraged by the hospital institution, which enabled its execution. Thus, the validation of the course content was performed by an Expert Committee, from different areas of knowledge, who also agreed with the proposal related to the continuing education of the institution's nurses, in the distance format

and with the contents presented, with variation of the overall CVI of each item between 0.93 and 0.98.

The validation results corroborate the appreciation of corporate, continuing and/or permanent education of health professionals. Such appreciation is based on the search, by health institutions, for a constant training program for professionals, aimed at transforming professional practices, fostering learning according to the needs identified in the services, thus characterizing Permanent Health Education (PHE). In addition, this process increases the possibility of implementing the desired changes in institutional practices[15] which, in turn, are reflected in the indicators of quality of care, patient safety, length of stay and hospital costs.

The course was proposed as extension modality, self-instructional and online because UICCA nurses work in different shifts due to the permanent functioning of nursing care, and some work double shifts or even study in the opposite shift, which would difficult the in-person education of these professionals. For this reason, it was decided to use distance learning as an important PHE strategy for health professionals, providing training and qualification in which the student has better control and management of his time and his educational process[16].

Thus, we aim to reach a greater number of professionals, providing remote access to all nurses, regardless of their working hours, which is planned to be executed in the VLE-Moodle® of the educational institution. Thus, nurses have greater flexibility and freedom to plan, organize and manage their improvement in the work environment. In addition, this course was a proposal to qualify the nursing process in the institution, strengthening inter-institutional

partnerships (university and health service) from the perspective of teaching-service integration.

The distance modality with the use of information and communication technologies as a mediator of PHE practices allows the acquisition of knowledge in the workplace or in any other space, besides enabling autonomy in the learning process, making the nurse the protagonist of their teaching-learning process[15].

The content that structured the course aims to expand mental health nursing knowledge of UICCA nurses, fostering clinical reasoning in the face of signs and/or symptoms and emotional and psychosocial comorbidities to define nursing diagnoses and interventions, as well as improve the management of non-pharmacological resources in mental health. It is understood that this proposal is an opportunity to improve the quality of patient care and the records of the nursing process from the perspective of the SNC, aiming at comprehensive and individual care consistent with the mental health demands of medical-surgical patients.

The lack of training and/or knowledge in the mental health area by generalist nurses was cited in different studies as an aspect that negatively interferes with the quality of comprehensive care for patients[17–18]. A qualitative study conducted with health professionals, mostly nurses, showed that they consider to be complex the demands in mental health and that PHE can provide knowledge that enables appropriate conduct for patients in psychological distress and their families[19].

However, for the PHE offered by health institutions to be effective, it is necessary for professionals to identify their own weaknesses and seek qualification and training to fill this knowledge gap and overcome their difficulties in acting in a given area, in this case, mental health[20].

Also in association with the quality of care, it is worth remember that the unpreparedness of nurses can lead to the occurrence of a greater number of adverse events, increase costs and length of medical-surgical hospitalization of patients with mental health issues in general hospitals.

With regard to content validation, in a study that explains the validation of a booklet for the prevention of vertical transmission of HIV carried out in 2017, for example, nine experts evaluated the content, with the variation of the CVI score from 0.78 to 0.96, obtaining the minimum agreement of the content for the distribution of the educational resource[21]. Another study, which validated an educational technology on nursing care for the prevention of syphilis, carried out in

2021, showed that the CVI score ranged from 0.94 to 1.00 in the topics evaluated[22]. Also, in a study carried out to validate the content of seven digital educational resources that addressed health and safety at work for use in talking circles of health workers in primary health care, a CVI score of 0.88 to 0.96[23].

Therefore, it was observed that several studies used the concordance based on the CVI, obtaining indices that support the development of an educational technology in the different areas of health care. This course will be offered to UICCA nurses, and it is expected that the applicability of this knowledge will be used in professional practice, reflecting on the care and in the patient's electronic medical record. Thus, it is expected that the appreciation of these mental health care, when prioritized during the hospitalization of medical-surgical patients, can bring direct and indirect impacts on care indicators.

However, the educational actions that promote the development of employees in the health service ensure the expansion and sharing of knowledge, the safety culture, the change of attitudes and the achievement of resolution in the face of health care problems. The patient brings problems to the hospital setting that can be complicating factors for a longer stay and high hospital costs.

## ■ FINAL CONSIDERATIONS

The content of the professional training course was submitted to the validation of an Expert Committee composed by eight experts. The content validated by the agreement of the experts of each item generated an overall CVI score that ranged from 0.93 to 0.98, which met the acceptable criterion above 0.80, as recommended by the literature.

The main limitation of this study was temporality, as there was not enough time to obtain results from the course and the evaluation of nursing process records regarding the applicability of this knowledge by nurses in the institution's electronic system.

In addition, the eligibility criteria of the experts may also have been a limitation, as some had greater expertise in mental health, others in SNC, specifying their evaluations to their areas of greater knowledge. It is noteworthy that some of the experts indicated by the Snowball method did not meet the inclusion criteria, and some potential experts were excluded from the study.

As for the evaluation instrument, no specific questions were asked regarding the visual identity, as the storyboard presents a simulation of the course, not contemplating the interactions and layouts produced in the course execution program. Therefore, the lack of evaluation of the course layout can also be considered a limitation since the understanding of the contents permeates the design.

The contents addressed in this course aimed to value essential aspects of mental health care for UICCA patients, encompassing the evaluation of the mental status, emotional and psychosocial demands that these patients may present, as well as the appropriate non-pharmacological management for each situation, such as to promote communication and therapeutic relationship and mental health nursing process.

This professional training course can contribute to an individual, comprehensive and qualified nursing care for UICCA patients capable of encompassing their emotional and psychosocial demands by raising nurses' awareness of the evaluation of these aspects that can contribute to wear the patient's relationships with family members/caregivers and health professionals. Therefore, the evidence observed at the bedside becomes potent for mental health care, as it allows the electronic record of the nursing process to be coherent to the SNC. Moreover, the course promotes effective care, demonstrating satisfactory results in patient health care by nursing and directly and indirectly reflecting on indicators of quality of care, patient safety, length of stay and hospital costs.

As a suggestion for the other validation studies, it is indicated the development of a layout evaluation instrument for the course, after content validation, to be applied by experts in the field of education and visual arts.

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