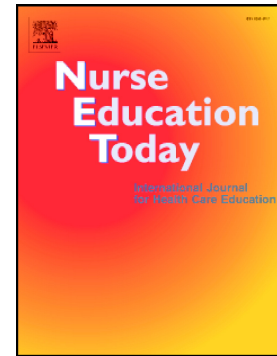


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Development of an instrument to measure the attitudes and skills of undergraduate nursing students in caring for family caregivers: an international multi-method study

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Abstract

Background: The increasing demands on family caregivers due to the shortage of healthcare professionals and the rising prevalence of chronic conditions underscore the need for adequate nursing support to enhance family caregivers' abilities and reduce their burden. No instrument exists to measure undergraduate nursing students' attitudes and skills in involving family caregivers. This study aimed to develop a questionnaire to evaluate undergraduate nursing students' attitudes and skills in caring for family caregivers.

Methods: A three-phase multi-method study was conducted involving a consortium of five universities in Italy, Denmark, India, Spain, and Sweden. Theoretical models and literature analysis and review informed initial item generation. Then, a Delphi process with purposefully

selected international experts across three rounds refined the item list based on clarity, essentiality, and relevance, achieving consensus on a final set of items. Finally, pilot testing with purposefully selected 25 students assessed face validity and clarity.

Results: The preliminary phase led to 130 items. Delphi rounds reduced the initial 130 items to a refined set of 39 (13 items on attitudes, 26 on skills). Content Validity Index (CVI) scores for clarity and relevance were high (S-CVI/Ave = 0.93 for clarity, 1.0 for relevance). From the pilot test among 25 students, items scored an average clarity of 0.84 (I-CVI). Two items were removed, resulting in a final 37-item questionnaire (12 attitudes, 25 skills).

Discussion: The developed questionnaire bridges a gap in nursing education assessment. Emphasizing attitudes and skills, it addresses key areas such as understanding family dynamics, emotional support, and collaborative planning with caregivers, aligning with nursing education needs across diverse cultural contexts. The use of this instrument will support educational programs in enhancing family-centered care competencies of undergraduate nursing students, ultimately improving support for family caregivers in healthcare settings.

Keywords

Development, Instrument, Attitudes, Skills, Undergraduate nursing students, Caring, Family caregivers.

1. Introduction

Including family caregivers in the healthcare process is crucial for promoting better patient outcomes and enhancing the quality of care (1). The increasing shortage of healthcare professionals, including nurses, coupled with the rising elderly population and the prevalence of chronic conditions, has intensified the demands on family caregivers in patient care (2). In Europe, family caregivers provide 80% of long-term care through various daily activities, including managing patients' medical conditions, providing transportation, home care, and handling the family's financial matters (3, 4).

These substantial caregiving responsibilities necessitate significant time and support for caregivers to transition into their roles, which involve phases of shock, uncertainty, confusion, and resistance (4, 5). Family caregivers often experience stress due to lack of personal time, feeling unprepared, emotional distress over the family member's condition, and impact on their social, personal, and professional lives (4, 5). This stress can lead to caregiver burden, which

includes depressive symptoms, self-neglect, neglect of the care recipient, social isolation, work-related disinterest or resignation, economic difficulties, and physical issues (4-6).

These challenges significantly impact caregivers' ability to provide effective care (7). In addition, illness within a family affects not only primary caregivers but also other members who must adapt to changes in the family's functional balance (2). Added caregiving responsibilities can disrupt the family routine, necessitating a redistribution of tasks among members (8).

Family caregivers offer invaluable insights into patients' preferences and habits, helping reduce loneliness, anxiety, delirium, hospital stays, and readmission rates (9-12). Caregivers can enhance patients' treatment adherence and quality of life and manage symptoms and relapses (13). Therefore, recognizing and mitigating caregiver burden and supporting family functioning is essential for the well-being of both caregivers and care recipients.

As the largest health workforce mandated to provide holistic care, nurses should acquire competencies to identify family caregivers early, assess their needs, and support them through care transitions and managing different aspects of their daily lives (14, 15).

Therefore, it is crucial for nursing education to equip students with the necessary skills to communicate with and support family caregivers.

Previous studies indicate that nursing students recognize the importance of family and informal caregivers but often feel insecure and anxious in their interactions (16-19). Students described their idea of caring for family mostly as involving and educating family caregivers and managing distress and emotions in family relationships. However, they feel unprepared for this during their education and express the need for structured support by clinical teachers and instructors (16-18). The competence of undergraduate nursing students in this area has been poorly investigated. Few studies demonstrate moderate to low competence in caring for family caregivers (20-22). Due to the paucity of evidence, these studies adopted questionnaires originally developed for graduated nurses. However, available instruments exhibit several limitations when applied to undergraduate nursing students. Firstly, many of these tools demonstrate low psychometric properties and insufficient quality of content validation (23), reducing their reliability and applicability for assessing the competencies of students still in training. Additionally, many of these questionnaires were specifically designed for childcare settings, limiting their relevance to broader nursing competencies required at the undergraduate level. Moreover, instruments with a broader scope beyond childcare primarily focus on nurses' professional practice and fail to incorporate a progressive range of competencies from basic to advanced. Indeed, these assessments often assume a level of clinical expertise that undergraduate students have not yet attained or, at best, may develop by their final year. Many items require an advanced understanding of family care concepts and related decision-making processes typically developed through years of clinical experience. Consequently, undergraduate students, especially those in the first and second year, may struggle to answer those items conscientiously, as they lack the knowledge and exposure necessary for an informed response. This misalignment between the instruments and the target population not only affects the validity of the assessment but may also lead to inaccurate conclusions about students' competencies.

Therefore, the primary aim of this study is to develop a questionnaire to measure undergraduate nursing students' attitudes and skills in involving caregivers and families in healthcare.

2. Methods

A multi-method study was conducted in three phases: developing the preliminary version of the instrument, an international Delphi survey, and a pilot test (Figure 1).

A consortium of five universities was conventionally established across Italy, Denmark, India, Spain, and Sweden to collect diverse knowledge from experts to enhance the instrument's external validity. Characteristics of educational sessions about caring for family caregivers delivered during the undergraduate nursing programs in the universities involved were collected (Appendix 1). This allowed us to map the contexts in which the questionnaire was developed and interpret differences in the results achieved from the steps of development and validation of the questionnaire.

2.1 Phase 1: Development of the preliminary version of the instrument

To develop the questionnaire, we first developed an extended pool of items in English. This was built based on the theoretical frameworks of the concept of informal caregivers, a family as the unit of care (Figure 1).

2.1.1 Theoretical framework

This study is based on the Family Caregiver concept, the Calgary Family Assessment Model (CFAM), and the Calgary Family Intervention Model (CFIM). A family caregiver is defined as any relative, partner, friend, or neighbor with a significant personal relationship with the care recipient, providing unpaid assistance with activities of daily living and care due to physical or mental illness (3, 24, 25). These family caregivers may live with or apart from the person and take on new roles and responsibilities, affecting family dynamics and requiring nursing support beyond their caregiving role (2). The CFAM identifies family members based on emotional ties, belonging, and durability, emphasizing that “the family is who they say they are” (2). According to CFIM, families should be viewed as systems receiving care, using a systemic approach to assess their structure, relationships, and functioning to promote family health (2). In this context, “caring for families” involves engaging, educating, and supporting family members and informal caregivers, recognizing their caregiving role and the family as a whole unit of care.

2.1.2 Preliminary phase of questionnaire development

The preliminary phase consisted of three steps: (1) the analysis of a qualitative study previously conducted by the Italian leading team, (2) the analysis of a meta-synthesis already conducted by the Italian leading team, and (3) the literature screening of available measurement instruments.

In the first step, the qualitative study considered was conducted in 2023 and 2024 and published elsewhere (26), in which interviews were conducted in Italy with 35 participants—15 undergraduate nursing students from all the academic years, 10 preceptors, and 10 clinical teachers to elicit their experience on the involvement of family caregivers in the care process. Based on the constructive grounded theory approach (27), a theory of learning for undergraduate nursing students in caring for family caregivers was developed consisting of two themes:

- Learning Areas, composed of five stages of the process: a) Seeing and considering families and informal caregivers; b) Assessing needs and resources; c) Preparing and planning interventions; d) Acting with families and informal caregivers; e) Reflecting on interventions. In addition, learning opportunities were identified for applying these skills in diverse settings.

- Learning antecedents, including characteristics of the student (traits, confidence and experience, reflective abilities), interpersonal relationships with preceptors and families, and clinical training setting. More details are described in the published paper (26).

The codes that emerged from the coding process included in each theme were used to formulate new items by two researchers independently, considering codes reflecting students' acquired attitudes or skills. The two researchers discussed and collated their results with a third researcher.

In the second step, to integrate the results of the qualitative study with international perspectives, a meta-synthesis of qualitative studies aimed at describing students' experience in caring for family caregivers was analysed (*under review*). The review synthesizes findings from seven qualitative studies conducted between 2000 and 2022 involving 131 nursing students (19, 28-33). These studies took place across Canada, Brazil, Hong Kong, Australia, Scotland, Sweden, and Italy and explored themes such as death, palliative care, end-of-life issues, paediatric care, and homelessness. Results highlighted the importance for students of learning verbal and non-verbal communication and coping with emotions, including anxiety, anger, and happiness. They often felt unprepared and stressed. Students believed families are crucial in patient care, providing support and comfort. They stressed the importance of involving families in daily care and decision-making, supporting the families with care strategies, and teaching them how to cope with difficult situations.

Narrative results and quotes extracted from each article included in the review were considered to formulate new items by the two researchers involved in the previous phase independently when expressing students' acquired attitudes or skills. The two researchers discussed and collated their results with a third researcher.

In the third step, principal databases (PubMed, PsycINFO, CINAHL) were screened to identify instruments to measure nursing competencies in involving caregivers and families in patient care. Two researchers selected instruments independently based on the relevance of their items to undergraduate nursing students, alignment with the theoretical framework, and demonstrated strong psychometric properties. Disagreements were solved with a third researcher. All the items of the selected instruments were inputted in an Excel file. The two researchers involved in the previous phases independently screened the items and included them if expressing the acquired attitudes or skills in caring for families and caregivers. A third researcher solved disagreements.

All the items created or maintained from the three steps were inputted into an Excel file and independently screened for redundancy and relevance according to the theoretical framework by three researchers. The results were discussed, and the items were finalized in a collegial meeting with five researchers.

2.2 Phase 2: Delphi survey

The Delphi survey was conducted as an iterative process to collect experts' input and reach a consensus on pre-established dimensions according to the key methodologic criteria suggested by Diamond et al. (34) and Nasa et al. (35).

2.2.1 Recruitment of panellists

To form the Delphi expert panel, we conducted a purposive sampling within the five universities involved. Expert panellists from different countries were involved to ensure the cultural relevance

of the items, thus increasing the usability of the questionnaire across different countries. The selection criteria were: (1) having clinical experience supervising students or research experience about family caregivers and nursing education for at least three years; (2) holding a post-graduate degree in health-related areas; (3) being willing to participate. Experts were searched through the researcher's networks and approached via email.

Although there is no agreed standard size for panel members, according to previous studies suggesting at least 10 (35), we aimed to include at least three to four per country for a total of 15-20 experts to have an adequate representation of each country.

2.2.2 Delphi process

The e-Delphi methodology was used (36, 37), and three rounds were performed. For each round, specific forms were elaborated and sent electronically via the EUSurvey online platform provided by the European Commission, guaranteeing privacy and anonymity. The experts were asked to answer anonymously and independently in each round since they knew each other.

Answers were required on each item regarding:

- Clarity: evaluated through the Likert scale "(1) unclear", "(2) unclear, needs rewording" or "(3) clear"; eventual free text to propose the reworded item;
- Essentiality: evaluated through the Likert scale "(1) not necessary", "(2) useful but not necessary", "(3) necessary";
- Relevance: evaluated through the Likert scale "(1) absolutely not relevant", "(2) not relevant", "(3) quite relevant" or "(4) very relevant".

Two open questions were included for the entire questionnaire: a) Are there items that need to be removed? b) Are there any items missing?

We established consensus and closing criteria to define the number of Delphi rounds (35). The consensus criteria were calculated on the content validity ratio and content validity index (Table 1). The experts' comments collected through the open questions were carefully considered and integrated with the results of the quantitative indexes to modify, retain, or delete the items.

The closing criteria for stopping the Delphi rounds with experts was defined as the absence of a need to modify sentences. Only modifications for grammar issues were considered acceptable to stop the rounds.

2.3 Phase 3: Pilot test

To evaluate face validity, the clarity of the items was assessed through a pilot test involving a purposively selected sample of five undergraduate nursing students proficient in English from each country. The project leaders recruited the students in each participating university, university college, or college course. They informed them that their participation would remain anonymous and that their identities could not be traced.

The questionnaire was administered via the EUSurvey online platform. Clarity was assessed using CVI, applying the same thresholds adopted in the Delphi process. Additionally, an open-ended question was included to gather feedback: "Do you have any suggestions to improve the questionnaire? (For example: Are there items that should be added or removed?)"

2.4 Ethical aspects

The study was approved by the Comitato di Approvazione della Ricerca sulla Persona (N. 28, 20/12/2023). Informed written consent was obtained from all participants before data collection. Confidentiality and anonymity were strictly maintained to protect participants' rights. Data were managed anonymously, ensuring compliance with privacy criteria by GDPR regulations. No personally identifiable information was collected or stored, and participants had the right to withdraw at any stage without consequences.

3. Results

3.1 Development of the preliminary version of the instrument

From the analysis of qualitative study codes, we identified 76 items, to which we added 14 based on the review of students' experience in caring for families and informal caregivers.

In addition, four instruments from the literature were identified to address our topic and were deemed relevant to undergraduate nursing students according to their good psychometric properties (23): Families' Importance in Nursing Care: Nurses' Attitudes-Revised (38); Family Nurse Practice Scale (39); Family Nurse Caring Belief Scale (40); Measure of Beliefs about Participation in Family-Centered Service (41). From these instruments, 53 items were included. After eliminating redundant items, the first version of the questionnaire comprised 130 items.

3.2 Delphi process

3.2.1 Panellists Demographics

Seventeen experts participated in the first round. The mean age of the participants was 42.5 years (IQR 38–54 years), and all but two were female. The panel included three clinical nurses specializing in intensive care, home care, and transitional care services; four assistant or associate professors; three full professors; three lecturers and researchers; and one research assistant. All panel members had experience in clinical practice or research related to families, informal caregivers, and nursing education. In the second and third rounds, nine of the original 17 panellists continued to provide their responses.

3.2.2 Results of the Delphi process

In the first round, 82 out of 130 items were removed after considering quantitative criteria and expert feedback.

Among the remaining 48 items, 21 received an I-CVI score above 0.79 for clarity and relevance and a CVR of 0.44 for essentiality. Additionally, 15 items received I-CVI scores between 0.70 and 0.79 for either clarity or relevance.

Of the remaining 11 items, nine had I-CVI scores between 0.44 and 0.69 for relevance (1 item = 0.44; 2 items = 0.63; 1 item = 0.65; 5 items = 0.69), while two had I-CVI scores of 0.56 and 0.69 for clarity. Given the panellists' feedback and the fact that these items met the threshold for other criteria, all 48 items were retained.

Subsequently, 10 new items suggested by the panellists were added, 10 items were removed for redundancy, and eight were revised (Figure 1).

Based on panellists' comments, 26 items were categorized as attitudes and 22 as skills.

A Likert scale was developed for each category:

- Attitudes: Students will be asked for their level of agreement with the statements on a Likert scale: 1) Strongly disagree; 2) Disagree; 3) Neither agree or disagree; 4) Agree; 5) Strongly agree
- Skills: Students will be asked to answer about "How much they feel competent" on a Likert scale: 1) I do not feel competent; 2) I can do it in collaboration with the nurse (I can say or do the easiest parts and the nurse carries out the most complex parts); 3) I can do it with the supervision of the nurse (if s/he intervenes in case I'm wrong or I'm missing information); 4) I am autonomous in carrying out it.

The Likert scales were sent to the panellists for evaluation, and feedback was collected through open questions.

A total of 48 items were included in the second round, of which four items received I-CVI scores below 0.79 for clarity (one item scored 0.56; three items scored 0.67). Given the few panellists, the CVR cut-off value, based on Lawshe's criteria, was adjusted to 0.78. Since only 18 items met this threshold, a conservative approach was taken by focusing primarily on the I-CVI for relevance. This led to the deletion of 14 items with an I-CVI of 0.67. According to the panellists' suggestions, 15 new items were added, 10 were removed for redundancy, and 12 were revised. The panellists also approved the Likert scales (Figure 1).

A total of 40 items were included in the third round. All but one met the established I-CVI and CVR criteria, with the S-CVI/Ave scoring 0.93 for clarity and 1.0 for relevance. Based on the panellists' feedback, 12 items were slightly revised to enhance grammatical accuracy. The final set consisted of 39 items, comprising 13 related to attitudes and 26 focused on skills (Figure 1).

3.3 Pilot study

Five students from each country completed the questionnaire, resulting in a total sample of 25 students. The mean age was 22.6 years (IQR 22.5–23 years). Seven students were in their first or second year, while the remaining were in their penultimate or final year.

The overall S-CVI/Ave was 0.84; six items received an I-CVI for clarity below 0.79. Two of these were removed due to a high frequency of scores 1 or 2 ("The item is completely unclear" or "The item is partially unclear"), and students' comments supported their deletion. The other four items were retained since they were rated mostly with a score of 2 ("The item is partially unclear"), and students' feedback suggested that the lack of clarity was related to specific terminology or grammatical issues, along with suggested revisions. Other three items were modified according to students' comments, although rated with I-CVI >0.79. No additional rounds were deemed necessary.

The final questionnaire consisted of 37 items: 12 focused on attitudes and 25 on skills in caring for family caregivers (Table 2).

4. Discussion

The study described the development of the ASk-UNS-FaC "Attitudes and skills of undergraduate nursing students in caring for family caregivers" questionnaire using a Delphi process at the international level, followed by a pilot study.

The process started with a preliminary phase aimed at generating items based on evidence, and the final questionnaire is composed of 37 items, including 12 items investigating attitudes and 25

skills. The I-CVI, CVR, and S-CVI/Ave met satisfactory levels; thus, the questionnaire has achieved satisfactory content validity.

The questionnaire covers different aspects of caring for family caregivers that emerged relevant from the literature. Specifically, the attitude section aims at ascertaining the perceived importance of a trusting relationship between nurses and family members for effective patient care. Other attitudes that should be developed during the undergraduate nursing program regard involving families in care planning and understanding their needs, expectations, and resources. Families should be seen as a unit of care, and nursing students should learn how to focus on promoting the health and well-being of the entire family, supporting them in identifying their priorities, and helping them cope with their situation (2). It is important that students develop confidence in being a resource for families and informal caregivers, offering guidance and positive feedback to reduce their anxiety and insecurities (16-19).

The skill section has been built as a process of assessing, intervening, and evaluating. Assessing refers to understanding families' and informal caregivers' perspectives, needs, values, dynamics, roles, and burdens. Intervening refers to supporting them in difficult emotional and social situations to help them find and use their own resources and planning care. Students should learn how to consider cultural, contextual, and religious values, collaborate with other health professionals, and use scientific evidence in care delivery for family caregivers (26).

These dimensions provide a comprehensive framework for family-centered care tailored to undergraduate nursing students, emphasizing assessment, support, education, and advocacy. The questionnaire utilizes appropriately designed Likert scales to measure advancements in educational outcomes.

However, some considerations must be addressed when implementing this instrument.

The concepts of care and family are deeply embedded in the cultural contexts of each country, city, community, and health system, and they continuously evolve. Furthermore, undergraduate nursing programs vary significantly across countries in their approaches to teaching family and informal caregiver care, as highlighted in our study.

Another relevant point refers to the implications of the questionnaire. The developed questionnaire reflects low to high levels of attitudes and skills due to the strong emphasis on these topics in undergraduate programs in certain countries, such as Spain. By contrast, in Italy, topics such as family care planning, role assessment, family dynamics, and documentation are generally addressed in postgraduate programs.

This discrepancy points to a dual practical implication for the questionnaire: it can address current educational gaps by serving two purposes. First, it can identify student attitudes and skills deficiencies, highlighting areas where additional instruction or experiential learning is needed. Second, it can serve as a valuable resource for curricular development by guiding the refinement of course content to better align with the competencies required for effective family-centered nursing practice.

The instrument could be integrated into nursing education programs in multiple ways to reach these purposes. Academic and faculty teachers could use the questionnaire as a diagnostic tool at the beginning of a course or academic year to assess baseline competency levels to tailor instructional strategies. Additionally, clinical teachers and preceptors could use the questionnaire as a formative assessment tool at the beginning and the end of clinical internships to measure students' progress and adjust teaching methodologies accordingly.

Since not all nursing graduates pursue postgraduate education, integrating this assessment tool into undergraduate curricula ensures that foundational knowledge and skills are adequately

developed. This approach equips students with the competencies necessary to provide effective care to family caregivers across various healthcare settings, ultimately enhancing patient and caregiver support quality.

The primary limitation of this study lies in including only a subset of countries from Europe and India. Adapting the questionnaire for use in other contexts may require adjustments to align with the specific competency levels expected in undergraduate programs and to address cultural nuances. In addition, the number of panellists drops across the Delphi rounds, potentially undermining the content validity process. However, agreement scores were adjusted according to the number of participants to ensure a reliable process for defining items.

Future research efforts will focus on conducting a comprehensive psychometric evaluation of the questionnaire to confirm its structural validity, reliability, and cross-cultural applicability. This will involve performing exploratory factor analysis (EFA) and confirmatory factor analysis (CFA) to examine the instrument's underlying structure in English and localized versions across participating countries. To assess cross-cultural measurement invariance, we will apply a multi-group CFA approach, evaluating configural, metric, and scalar invariance across different educational systems. This will ensure that the questionnaire measures the intended constructs consistently across diverse cultural and linguistic contexts, supporting its comparability and generalizability. Additionally, differential item functioning (DIF) analyses will be carried out to identify any potential biases in item responses, allowing for further refinement where necessary. Furthermore, we will calculate Cronbach's Alpha and McDonald's Omega to assess internal consistency to establish the instrument's reliability.

5. Conclusion

This questionnaire addresses a significant gap in measuring an essential topic, with the potential to enhance educational assessments and guide curriculum development in nursing education related to the care of families and informal caregivers. This instrument contributes meaningfully to education and practice by improving the quality of care. Furthermore, it could be a foundational tool for developing questionnaires tailored to other healthcare professions supporting families and informal caregivers within the care process.

Nevertheless, these results should be interpreted with caution due to a geographically limited sample of countries and participant attrition during the Delphi rounds. Therefore, adjustments may be necessary to accommodate cultural differences and varying educational standards. Nonetheless, the results encourage further validation studies on structural validity, reliability, and cross-cultural applicability.

Author statement

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Table 1. Consensus criteria

Criteria	Formula	Cut-off values
Essentiality		
Content Validity Ratio CVR (42-44)	$CVR = (N. \text{ experts rating essential} - (N. \text{ experts}/2)) / (N. \text{ experts}/2)$	> 0.44 for 18 evaluators, according to Lawshe Table
Relevance and clarity		
Item-Content Validity Index I-CVI (43, 44)	I-CVI = (N. experts in agreement) / (N. experts)	
	Agreement if giving item:	
	- a clarity rating 3 (clear)	• < 0.70: deleting the item
	- a relevance rating of 4 for the first round	• 0.70 < I-CVI < 0.79: item review
	- a relevance rating of 3 or 4 for the 2 nd and 3 rd round	• > 0.80: retaining the item

Scale-level- Content	S-CVI/Ave = (sum of I-CVI scores)/(N. item)
Validity Index	S-CVI/Ave > 0.8 is acceptable
S-CVI(Ave) (43, 44)	

Table 2. The final questionnaire “Attitudes and skills of undergraduate nursing students in caring for family caregivers”

Attitudes
Students will be asked for their level of agreement with the statements on a Likert scale: 1) Strongly disagree; 2) Disagree; 3) Neither agree nor disagree; 4) Agree; 5) Strongly agree.
A strong relationship based on trust between healthcare providers and family members helps nurses to manage patient care
It is essential to ask what is important (i.e., expectations, desires, educational needs, resources, and support needed) for the family when planning care
Families should be cared for as a unit of care (assessing relationships, and expectations of members), considering patients and caregivers as a whole
Family members should be invited to actively take part in planning patient care (defining home care plan, discharge setting, medication time plan...)
Family members should not be invited to actively take part in the patient's care (hygiene, mobilization, oral care, meal assistance...)
Family nursing should incorporate health promotion actions for the family as a whole
Helping families to identify their needs and priorities is a way to connect with them and value family members
I see myself as a resource for families in helping them to cope with their situation
Involving family members and giving positive feedback helps them to deal with their insecurities, fears, and anxiety
Nurses have to check the family members' attitudes and skills in taking care of the patient
Working with the family represents an obstacle to patient care
Patient's care is not improved when nurses rely on information collected from the family (i.e., patient's preferences)
Skills
Students will be asked to answer about "How much they feel competent" on a Likert scale: 1) I do not feel competent; 2) I can do it in collaboration with the nurse (I can say or do the easiest parts, and the nurse carries out the most complex parts); 3) I can do it with the supervision of the nurse (if/she intervenes in case I'm wrong or I'm missing information); 4) I am autonomous in carrying out.
Asking for family members' point of view on the patient
Assessing the family relationships and dynamics between family members
Assessing the role of family members in caring for the patient
Assessing the families' competence in caring for the patient
Assessing the burden of family members in caregiving for the patient
Considering the cultural and religious values of the family members in delivering care
Identifying each family member's health and illness, needs, and goals in family assessment
Assessing the family's health goals as a unit
Identifying family's worries and difficulties in pursuing their family health goals
Reflecting on the interference of my own biases and cultural preconceptions when assessing and educating the family
Asking families how I can support them
Discussing with the family to identify their strengths and resources to cope with situations
Informing the family to make knowledgeable health care decisions (consequences of life-changing decisions such as tracheostomy, PEG, institutionalization...)
Helping families understand how to use their own resources to cope with situations and pursue their health goals as a family
Supporting family members when they're going through difficult emotional situations (anxiety about patient's situation...)
Involving family members in planning the patient's care (defining home care program, discharge setting, medication time plan...)
Involving family members in the patient's nursing care (i.e., hygiene, mobilization, oral care, meal assistance...) to promote their engagement and skills development
Teaching family members new techniques (wound medication, injections) using appropriate pedagogical methodologies (teach-back...)
Acknowledge the family's achievements and abilities in the care of the patient and provide positive feedback
Adapting the teaching content, style, and strategies, taking into consideration the family's/patient's situation and context (social, economic, cultural...)
Acting as an advocate for the rights of the patient and family during health and illness experiences
Identifying when it is appropriate to involve other healthcare professionals and social workers to get family properly taken care

Utilizing evidence-based practice to provide care for the families
Evaluating with families the adequacy of the family interventions carried out
Documenting information related to family nursing care

Highlights

- We developed a validated 37-item tool to assess nursing students' caregiving skills
- The tool focuses on attitudes and skills in involving family caregivers in healthcare
- We conducted transnational Delphi and pilot studies for content and face validity
- Adopting the tool can support curriculum development for family-centered nursing care