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# Integrating the fundamentals of care framework in baccalaureate nursing education

An example from a Nursing School in Denmark

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#### Title

Integrating the Fundamentals of Care framework in baccalaureate nursing education: an example from a Nursing School in Denmark

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## **Short title**

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#### **Short title**

Fundamentals of Care in nursing education

#### Abstract

### Aim and objectives

To describe and discuss the process of integrating the Fundamentals of Care framework in a baccalaureate nursing education at a School of Nursing in Denmark.

## Background

Nursing education plays an essential role in educating nurses to work within health care systems in which a demanding workload on nurses results in fundamental nursing care being left undone. Newly graduated nurses often lack knowledge and skills to meet the challenges of delivering fundamental care in clinical practice. To develop nursing students' understanding of fundamental nursing, the conceptual Fundamentals of Care framework has been integrated in nursing education at a School of Nursing in Denmark.

### Design and methods

Discursive paper using an adjusted descriptive case study design for describing and discussing the process of integrating the conceptual Fundamentals of Care Framework in nursing education.

## Results

The process of integrating the Fundamentals of Care framework is illuminated through a description of the context, in which the process occurs including the faculty members, lectures, case-based work and simulation lab in nursing education. Based on this description, opportunities such as supporting a holistic approach to an evidence-based integrative patient care and challenges such as skepticism among the faculty are discussed.

#### Conclusion

It is suggested how integration of Fundamentals of Care Framework in lectures, case-based work and simulation lab can make fundamental nursing care more explicit in nursing education, support critical thinking and underline the relevance of evidence-based practice. The process relies on a supportive context, a well- informed and engaged faculty, and continuous reflections on how the conceptual framework can be integrated.

### Relevance to clinical practice

Integrating the Fundamentals of Care framework can support nursing students' critical thinking and reflection on what fundamental nursing care is and requires and eventually educates nurses in providing evidence-based fundamental nursing care.

## Keywords

Fundamentals of Care, nursing education, case-based work, evidence-based practice, critical reflection, critical thinking, clinical decision-making

#### Impact statement

### What does this paper contribute to the wider global clinical community?

- Describes and discusses how Fundamentals of Care can be integrated in nursing education
- Describes and discusses how the Fundamentals of Care framework can support a shared language between nursing education and clinical practise

 Presents reflections on how the Fundamentals of Care framework is expected to strengthen the nursing students' critical thinking and evidence-based practice

#### **INTRODUCTION**

Nursing education plays a vital role in educating and preparing future nurses to work within a highly specialized and complex health care system in constant change, and for providing patient-centred care ensuring they meet patients' fundamental care needs (Aiken et al., 2012; Larsen et al. 2014; Feo & Kitson, 2016). With quality assurance being central to the delivery of nursing care, inquiry into clinical practice requires critical thinking based on patients' perspectives, best possible evidence and clinical expertise (Melnyk et al. 2014; Harvey and Kitson, 2015). However, recent studies and graduate surveys report that preparing nurses for clinical practice is a challenge and is not always achieved (Voldbjerg et al., 2016, Voldbjerg et al., 2017, Pennbrant et al. 2013). The educational challenges, expectations and demands in clinical practice have compelled a School of Nursing in Denmark to reconsider the content in core courses of what nursing is and requires. In this process, the Fundamentals of Care framework (FoC) (Kitson et al., 2010; Kitson et al., 2013; Kitson et al., 2014) was chosen and is currently being integrated in nursing education to enhance nursing students' understanding of what nursing is and requires. This paper aims to describe the process of integrating the FoC framework in a baccalaureate nursing education at a School of Nursing in Denmark.

#### **BACKGROUND**

Nursing care is under pressure and is carried out in contexts where productivity and efficiency is in focus (Aiken et al., 2014, Feo & Kitson, 2016). The demanding workload of nurses has consequences reflected in elements of fundamental nursing care being left undone, which ultimately influences patients' outcomes negatively (Krumholtz 2013, Aiken et al., 2014, Kalisch 2014). A study on the nurse workforce in 12 European countries reports that nurses are compelled to prioritize their care often leaving out elements like comforting patients, educating about self-care and talking with patients and relatives about their concerns (Aiken et al 2014). Studies on patients and families' perspectives support such inadequacies in nursing care (Jørgensen et al 2015, Feo & Kitson, 2016).

A health-care system under pressure indirectly places a demand on nursing education to prepare future nurses to work in an environment under pressure and at the same time professionally advocate for patients' rights to receive fundamental nursing care. Recent studies highlight that nursing students and newly graduated nurses lack the knowledge, skills and competencies to meet the challenges of delivering fundamental care in clinical practice (MacMillan 2016, Voldbjerg et al. 2016, Voldbjerg 2016, Voldbjerg et al. 2017, Halpin et al. 2017). Particularly, newly graduated nurses lack intradisciplinary expertise meaning that they lack consciousness of what nursing is and requires in relation to other health disciplines (Voldbjerg 2016). This results in situations where patients do not receive adequate fundamental care because of nurses' deficit in assessing the patients' needs for nursing care (Voldbjerg 2016). This deficit seems to derive from the nurses' lack of ability to clearly articulate and clarify what nursing is and the nurses' role in the care and treatment of patients (Voldbjerg 2016).

Studies report that newly graduated nurses use evidence and involve patients to a limited extent in their clinical decision-making (Forsman et al. 2010; Wangensteen et al. 2011; Forsman et al. 2012; Voldbjerg et al. 2016). Use of evidence and patient involvement are two key elements in meeting the patients' needs of fundamental care where decisions are derived from an evidence-based practice. Additionally, newly graduated nurses report that they experience an education-clinical practice gap, whereby what they have been taught in theories, methods and models, they do not recognise in clinical practice and have a hard time seeing the relevance of (Whitehead 2001, Pellico et al. 2009, Voldbjerg et al. 2016). In addition, newly graduated nurses are reluctant to question and reflect on clinical practice (Voldbjerg 2016). Thus, nursing and what nursing requires seem to be articulated differently in the educational and clinical setting building a gap, which leaves nursing students and newly graduated nurses discouraged, confused and feeling incompetent, resulting in theories and new evidence not being used and implemented in clinical practice (Maben et al. 2016; Voldbjerg et al. 2016).

Internationally and nationally, concern has been expressed on the newly graduated nurses' readiness to work within clinical practice once graduated (Missen et al. 2016; Voldbjerg 2016; Voldbjerg et al. 2017). Thus, in the planning of the course content on fundamental nursing care in a School of Nursing in Denmark, it was considered crucial to focus on strengthening the nursing students' understanding of what fundamental nursing care is and requires, and to increase their competencies in involving patients and evidence in clinical decision-making. To support this process, the FoC framework (Figure 1 and 2) was chosen because it aims to ensure delivery of high quality nursing care (Kitson et al. 2013, Kitson et al. 2014, Feo & Kitson 2016). Furthermore, FoC framework may be one way to 're-

conceptualise the value of fundamentals of care' and 'develop the evidence base behind the fundamentals' and 'greater role clarification' (Feo & Kitson 2016). The FoC framework comprises of three dimensions required for delivery of FoC. In the development of the FoC framework, a narrative review of nursing texts was performed and subsequent work undertaken to test and validate the framework (Kitson et al. 2010, Kitson et al. 2013, Kitson et al. 2014). The inner core is the nurse-patient relationship, which is the base of FoC. The second circle focuses on integration of physical, psychosocial and relational dimensions in nursing care, and the third and outer circle concerns how the health care system or context can affect the delivery of fundamental care (Kitson et al. 2013, Kitson et al. 2014). As such, the FoC framework incorporates the relational, integrative, and contextual dimensions to ensure delivery of high–quality nursing care (Kitson et al. 2013, Kitson et al. 2014, Feo & Kitson 2016).

Kagan (2014) has previously reflected upon how FoC can be integrated in nursing education. However, to our knowledge there is no published work of the processes of integrating the FoC framework throughout the nursing education with the overall intention of enhancing nursing students' understanding of what nursing care is and requires. Therefore, the aim of this paper is to describe and discuss the process of integrating the FoC framework in a baccalaureate nursing education at a School of Nursing in Denmark.

#### **DESIGN AND METHODS**

This discursive paper uses an adjusted descriptive case study design to describe the process of integrating the FoC framework in a baccalaureate nursing education. According to Yin (2009) a process can be considered the case in a *case study*. Although the case study

approach is best suitable for empirical inquiries (Yin 2009), the adjusted approach in this study is used to facilitate a systematic description and discussion of the process related to integrating the FoC conceptual framework in nursing education. The rationale for applying a case study design is the complexity of the case that encompasses important contextual conditions and because it can provide perspectives on how the case and the initiatives can be evaluated. In the following, the process of integrating the FoC framework is illuminated through a description of the context, in which the process occurs including the faculty members, lectures, case-based work and simulation lab in nursing education. Based on this description, opportunities and challenges related to the process of integration are discussed.

### **RESULTS**

## The process of organizing the integration of FoC

To support the integration of FoC in nursing education, the School of Nursing has entered a cross-institutional partnership involving six institutions that represent all hospitals, academic institutions and the largest municipality in Region North, Denmark. The cross institutional partnership aims to integrate FoC in nursing education, clinical nursing and research by developing and structuring a research-, development- and implementation program around FoC. The program comprises a steering committee, a program management, an advisory board, a patient panel and six institutional working groups. The dean at the School of Nursing, is part of the steering committee. The benefits of this partnership to teaching the FoC will be discussed in the discussion section. Researchers within the regional health-care and academic institutions have been members of the International Learning Collaborative (ILC), and have participated in the research and

refinement of the FoC framework since 2012, ultimately to improve the delivery of fundamental care in nursing. The School of Nursing provides a three and a half year bachelor's degree programme in nursing based on 120 theoretical credits and 90 clinical credits (Ministry of Education, 2016). Approximately 160 nurses graduate every year. The School of Nursing organizes the students' clinical internship in a close collaboration with the Regional Hospitals.

## Introducing faculty to FoC

To integrate FoC in nursing education it was and is considered important that faculty members at the School of Nursing are well informed on what FoC is and why it is relevant to integrate as a framework for nursing. The faculty members were initially consulted on the relevance of introducing FoC as a framework for nursing through reading articles on FoC and provided with a presentation on the FoC framework followed by dialogues where advantages and disadvantages in introducing a new framework were discussed. Following the dialogues, the faculty and the leadership decided to integrate the FoC conceptual framework in selected lectures and case-based work throughout the baccalaureate nursing education.

In the process of integration, there was a need to clearly communicate to the faculty the aim of integrating FoC. Furthermore, it is important to recognize and acknowledge that the faculty have sound theoretical knowledge and expertise within nursing which has to be utilized and benefitted from in the planning of educational interventions integrating the FoC framework. To support the integration of FoC five faculty members with a special interest in teaching and development of FoC were appointed as facilitators. Facilitation is a core

construct in the process of integration and implementation of new initiatives (Harvey & Kitson, 2015). The facilitators' role is to be knowledgeable around FoC and engage in dialogue and reflection with colleagues around how FoC can be integrated and taught in nursing education. Furthermore, the facilitators' role is to engage in pilot-studies and research projects concerning the integration of FoC. To evaluate initiatives taken in introducing FoC the facilitators have systematically collected data on the process of integration among faculty members through focus-group interviews. The aim of the interviews has been to explore what has worked well and what challenges the faculty members encounter in using the FoC framework in their teaching and supervision of students. The collected data is currently being analyzed. Results will be integrated in the further process of integration. The facilitators work in close collaboration with a researcher employed in a joint post.doc. position between the School of Nursing and the Clinical Nursing Research Unit at the local University Hospital. The postdoc's main task is to initiate, manage and complete pilot-studies and research projects around the integration of FoC in nursing education and clinical practice.

For easy accessibility to relevant and up to date knowledge on FoC, a folder containing continuously updated articles and teaching materials on FoC has been uploaded on a shared electronic platform. To engage the staff in discussions, reflections and planning of FoC initiatives in their area of teaching, two one-day workshops on the integration of the FoC framework has been held within the first half year of introducing FoC and further two are planned.

#### FoC in lectures, case-based work and simulation lab

The conceptual FoC framework has been integrated in selected courses throughout the three-and-a-half year of baccalaureate nursing education. The framework with its three concentric circles (Figure 1 and Figure 2) is introduced to the students in its illustrative form to initiate, support and guide the nursing students' critical thinking and reflection on what nursing is and requires. Nursing students are introduced to the framework within the first week of nursing education and subsequently encounter the framework in lectures and case-based work in theoretical as well as clinical practice throughout the three-and-a-half years.

The Fundamentals of Care framework is introduced through lectures where the scientific foundation of FoC framework is presented and reflected upon in relation to other frameworks and theories on nursing. An example is the first year where students are introduced to the difference between Virginia Henderson's 14 components of basic nursing care (International Council of Nurses 1961; Henderson 1966) and the FoC conceptual framework (Kitson et al 2013). As nursing students progressively are introduced to theories and evidence on nursing, the theories and evidence is continuously related to the concepts within the FoC framework. The purpose is on one hand to unfold and elaborate the concepts through evidence, theories and philosophies and on the other hand to create a relevance of the presented evidence, theories and philosophies to nursing care. Concepts within FoC, which have shown to be central to patient care (Kitson et al 2016) are explored and described using research-based literature, theories and philosophies. This is an attempt to respond to nursing students' evaluations of nursing curriculum, where they experience being taught nursing theories and philosophies they find difficult seeing the relevance of in patient care (Voldbjerg 2016). An example is lectures on communication skills which are

taught the second year. With a focus on the five elements (focus, know, trust, anticipate, evaluate) within the core of the framework (Figure 2) 'trust' is amongst other concepts that the students learn about. The FoC framework underlines that establishing a relationship between patient and nurse is imperative in order to meet the patients nursing care needs. To establish a relationship 'trust' is a central element. However, 'trust' as a concept does not define what 'trust' is and how it is established and maintained. This is where students are introduced to and work with theories and philosophies on what 'trust' is and demands. The students are introduced, among other theories and philosophies, to the Danish philosopher and theologian Knud Ejler Løgstrup's analyses of the phenomena 'trust' which he takes to be fundamental to moral life (Løgstrup, 1997). Løgstrup's analyses is subsequently put into a nursing perspective by introducing the Norwegian nursing philosopher Kari Martinsen's philosophy of caring where the fundamental relational dimension of care is empathized. The theories on trust are then linked to theories on verbal and non-verbal communication. Based on the Calgary-Cambridge Guide (Silverman et al, 2013) the students learn and explore evidence-based verbal and non-verbal communication skills on how to establish trust and develop a relationship (Silverman et al, 2013). The students are taught about active listening, including how to demonstrate engagement in a conversation by paraphrasing and summarizing, reflecting and being silent. Verbal skills are supported by nonverbal communication skills such as displaying appropriate body language through eye contact, looking attentive, leaning forward, nodding head and mirroring (Silverman et al, 2013).

The lectures are continuously followed by case-based work where the FoC framework in its illustrative form is integrated (Figure 1 and 2). Case-based work is the pedagogical method integrated throughout the first three years of nursing education. Case-based work has shown to stimulate student reflexivity (Thistle Thwaite et al., 2012) and develop and support the nursing students' ability to analyze, investigate and reflect on clinical decision-making (Popil, 2011). Furthermore, case-based work lends a frame where the FoC framework can draw attention to patient-centered nursing issues related to fundamental care.

The nursing students work in groups of six to twelve independently or under supervision of a lecturer. To prepare students for the complex reality in which nursing takes place, students work with realistic patient cases alongside being introduced to theory (Popil, 2011). The case descriptions progressively become more complex throughout their education. In the case-based work the students are required to find and draw on evidence, theories and philosophies relevant to the described patient situation and the concepts illustrated within the FoC framework. The pedagogical focus is on the interaction between theory and practice combined with critical thinking and reflection (Popil, 2011).

The students are presented with a case describing a patient situation which is in written format, a picture or a short film. Each student reads the case description, studies the picture or watches the film. The illustration of the FoC framework (Figure 1 and 2) is visibly displayed in front of the students. The framework with its three concentric circles and related concepts serves as a guide for discussions, questions and reflections on what nursing issues appear in the case and how the nurse can meet these needs using best possible evidence. The themes of the three concentric circles (Relationship established, Integration

of care and Context) remind the students to focus on how to meet single needs of nursing care such as keeping the patient hydrated. Furthermore, it reminds students to consider how the establishment of a relationship through involving the patient influences if and how the need can be met as well as to consider how contextual factors may influence the delivery of care. By using the framework, the students are made aware of the complexities of nursing care and what their responsibilities as a nurse are to the individual patient. Working with each case, relevant concepts within the FoC framework and issues relevant to the patient are identified. Furthermore, a literature search in relevant databases is performed by the students to find research based evidence on identified issues which may inform their clinical decisions and guide their nursing practice. The students practice and use their skills within evidence-based practice by formulating a structured PICO-question, searching evidence/literature, appraising the evidence/literature and applying the evidence combined with clinical expertise and patient preferences. They are reminded of the importance of questioning how the patients' needs can be met the best possible way. In this process the students will have to articulate and reason for their nursing care. Critical thinking and reflection is initiated and questions are posed and answered within a frame of fundamental nursing care. We anticipate that combining the case-based work with the conceptual FoC framework strengthens the nursing students' decisions regarding evidencebased fundamental care.

The lectures and case-based work on the concepts within the FoC framework are followed by sessions in a simulation lab, where the students get the opportunity to put theory into action in a safe learning environment under the supervision of faculty members. In the simulation lab the students are presented with a case, such as a patient with cardiac

respiratory failure, and take turns in smaller teams where they observe, make clinical judgements, decisions and deliver appropriate nursing care to the high-tech mannequin.

Throughout the session the FoC framework is used in its illustrative form (Figure 1 and 2) in timeouts to support critical thinking and reflection on what to be attentive to in the situation and how to identify and act on relevant fundamental nursing care issues. This also includes a reflection on how to prioritize the handling of issues identified. Evidence-based research and theories taught and used in previous lectures and case-based work is drawn on to support reflections on how to deliver best possible nursing care in the concrete situation.

#### DISCUSSION

This paper describes initiatives taken in the integration of the FoC framework in a baccalaureate-nursing education in Denmark. The process of integrating a new framework for nursing in an educational context presents opportunities and challenges, thus several considerations have been taken and will have to be taken into account in the ongoing process. The opportunities and challenges in integrating FoC in an educational context, among faculty members and lectures and case-based work will be discussed in the following.

# Opportunities in integrating FoC in nursing education

Being part of the cross-institutional partnership around FoC and introducing FoC as a conceptual framework for nursing across educational and clinical context is an opportunity to help establish a shared language across relevant institutions for what fundamental care is and what it requires from nurses. Working with and around a shared framework for nursing may highlight the necessity and relevance to nursing students of theories, philosophies and

evidence in explaining, guiding and delivering nursing care (Feo et al. 2017) and thus making theories and evidence taught in nursing education relevant for clinical practice (Voldbjerg et al. 2016). The cross-institutional collaboration on FoC lends a shared conceptual framework, which may open up for further engagement and collaboration between the faculty at the school of nursing and nurses within clinical practice. As MacMillan (2016) highlights, introducing FoC cross-institutionally may nurture a mutual understanding, articulation of what nursing is among faculty, and clinical nurses and the students may to a higher degree perceive a concurrence in how nursing is articulated and understood across theoretical and clinical practice. Integrating new initiatives which demands a change of thinking and behavior requires an attentive and supportive culture (Harvey & Kitson, 2015). An attention on FoC from clinical practice may support and put a demand on the faculty's ongoing need for attentiveness as to what FoC is, how it can be used and how it relates to the theoretical and practical field the faculty members are engaged in. Furthermore, the shared framework has already enabled the development of joint educational interventions and research projects around fundamentals of care. Clear organizational support with a strong leadership is imperative in order to introduce and maintain change ((Kitson et al., 2013; Feo & Kitson, 2016). Having the dean and leaders within the School of Nursing, cooperating hospitals and other healthcare institutions engaging and committing themselves in introducing FoC is a strength and opportunity to establish a supportive culture. With leadership support, there is a willingness to allocate time and resources required for the process of integration as well as the development and research into teaching the fundamentals of care.

The literature underlines that the continuous involvement of patients and best available evidence in clinical decision-making requires a slower, rational and more deliberate and analytical form of reasoning than an intuitive, automatic form of reasoning (Rycroft-Malone et al. 2004; Doran, 2010; Melnyk et al. 2014). Integrating FoC as a conceptual framework for nursing in case-based work may support critical reflection and evidence-based practice skills. This may lead to nursing students having a more rational approach by questioning practice, through critical thinking and reflection, supporting a holistic approach to integrative patient care. Integrating the framework in the students' case-based work seems to draw attention to aspects of nursing care that are otherwise overruled or overshadowed by technical procedures or task oriented care (Voldbjerg 2016). Psychosocial and relational elements of nursing care may be accentuated, put up for critical reflection and highlight the complexities of nursing care. As Kitson et al. (2014) underline it may support a more reflective approach by 'thinking and linking' rather than focusing and prioritizing 'time and task' in professional nursing care. The importance of involving patients and the relevance of incorporating evidence in clinical decision-making may be accentuated and supported. In the process of integrating FoC, the initial overall feedback from students is positive. The students have started to draw on the framework when describing what nursing is, they seem to have become more aware of the complexities of nursing care including how the contexts influence meeting patients' needs. However, the students learning in regards to what nursing is and requires, critical thinking and skills within evidence-based practice it yet to be explored and evaluated systematically through observational studies and interviews of students.

## Challenges in integrating FoC in nursing education

Integrating FoC in nursing education requires the faculty to think of fundamental care differently than usual and to change their way of teaching and supervising students (Harvey & Kitson, 2015). The initial idea of integrating FoC in nursing education came from the leadership. It has been and continues to be important for the leadership to establish a sense of urgency among the faculty members (Kotter, 1996). A sense of urgency, which clarifies the reasons and undisputable need for change in the organization and mirrors the seriousness of leadership commitment to integrate FoC. Two seminars for faculty members were held where researchers displayed the need for change on the base of research showing that nursing students and newly graduated nurses are partly due to their education, challenged as to delivering evidence-based fundamental nursing care. In the process of integration it is a challenge, that the need to integrate the FoC framework did not originate from the faculty members directly and may thus not see the relevance for change and therefore reluctant to change their way of teaching and supervising. It was therefore important that the two seminars additionally opened up for faculty members to express and discuss their thoughts and reflections on integrating FoC. Skepticism as to why and how FoC should be integrated was expressed among faculty members at the two seminars. It is wellresearched that organizational change is not always experienced as pleasant and often leads to resistance (Kotter & Schlesinger, 1979; Kotter, 1996). Four reasons for change-resistance have been identified: Parochial self-interest; Misunderstanding and lack of trust; Differing assessments; Low tolerance (Kotter & Schlesinger, 1979; Kotter, 1996). Firstly, parochial self-interest occurs when change is believed to lead the loss of value, including loss of power or less decision-making situations. An important aspect to notice is that organizational change is to benefit the organization and not the individual. Misunderstanding and lack of

trust is common and often due to communication problems and incorrect or inadequate information. Different assessments refers to the varying perspectives people have throughout an organization. Therefore, several perceptions need to be acknowledged. The fourth reason is low tolerance as recipients may struggle with anxiety and stress when they experience change (Kotter & Schlesinger, 1979; Kotter, 1996). Working in a certain way for years is aligned with security and stability, which may be challenged when exchanged for the unknown. Being attentive to reasons for change-resistance among faculty members is central to obtain an integration of FoC in nursing education. The facilitators' ongoing evaluation through focus-group interviews of faculty members will attempt to accommodate and address these challenges.

According to Social Learning Theory, people learn by experiencing and observing others (Bandura, 1971). It is therefore important that both faculty and clinical supervisors are knowledgeable on FoC and use the framework to support and guide critical thinking on nursing care. If there is a lack of use of FoC in daily educational and clinical practice, this may portray that FoC is irrelevant and may not be adopted by the nursing students. A challenge for the collaborative work around FoC is that the framework is new to both the faculty and clinical supervisors and there is an uncertainty on how to use the framework and its contribution to nursing and nursing education. However, this uncertainty can be mitigated through collaboration where there is a mutual acknowledgment of the various competencies each part brings into the development of educational activities concerning FoC.

Implementation science stresses that the underlying evidence-base of an innovation effects the implementation process (Harvey and Kitson, 2015). Although not being an evidencebased innovation as referred to in implementation science, integration of FoC encounters similar challenges. The FoC conceptual framework is based on a narrative review, exploration of patient perspectives and expert reports (Kitson et al. 2014). However, the underlying evidence of an eventual effect from integrating the FoC conceptual framework throughout nursing education is not yet described and explored. This has shown to cause skepticism among the faculty in using time and energy on integrating a framework, which has not yet proven to work. Therefore, it is important to contribute to research on FoC within nursing education, which may eventually guide education to an evidence-based practice. The FoC framework is under continuous development and being adjusted according to newest research evidence. A challenge is how to secure that it is the updated version of the conceptual framework representing the newest concepts, which is being used both within educational and clinical settings. With a framework undergoing continuous development there is the risk of being more than one version pending, resulting in confusion and misunderstandings. It is therefore important that the School of Nursing is part of the regional cross-institutional collaboration and an active member of the International Learning Collaborative (ILC) contributing to the international work around FoC.

### CONCLUSION

This paper describes the process of integration and the opportunities and challenges in integrating the conceptual framework FoC in a baccalaureate nursing education in Denmark.

This process is one step in exploring how FoC can contribute to the education of nursing students and ultimately patient care. The paper has described an approach to how FoC can

be integrated in nursing education. An integration, which has been called for in the attempt to make a shift in the delivery of fundamentals care. Based on the descriptions and discussions, we suggest how integration of FoC in lectures, case-based work and simulation labs can make fundamental nursing care more explicit in nursing education, stimulate and support critical thinking, including the capacity to inquire into own and others' clinical practice; highlight the relevance of evidence and theories, and underline the importance of involving patients in clinical decision-making. We conclude that the process relies on a supportive context, a well- informed and engaged faculty, and continuous reflections on where and how the conceptual framework can be integrated in nursing education. For future research observational and interview studies of students, faculty members and clinical supervisors are planned to evaluate how the integration of FoC in nursing education influences the students learning in regards to what nursing is and requires, critical thinking and skills within evidence-based practice.

#### RELEVANCE TO CLINICAL AND EDUCATIONAL PRACTICE

This paper informs clinicians, educators and leaders on how the conceptual framework FoC can be integrated in nursing education. It gives an insight into opportunities and challenges of integrating the framework as well as reflections on how the integration can make fundamental nursing care more explicit and support critical thinking, reflection and an evidence-based practice in educational and clinical setting. Teaching students about the integrated nature of nursing care through the FoC framework can support future Registered Nurses in providing evidence-based fundamental nursing care.

#### **REFERENCES**

Aiken, L. H., Sermeus, W., Van den Heede, K., Sloane, D. M., Busse, R., McKee, M., Kutney-Lee, A. (2012). Patient safety, satisfaction, and quality of hospital care: Cross sectional surveys of nurses and patients in 12 countries in Europe and the United States. BMJ (Clinical Research Ed.), 344, e1717. doi:10.1136/bmj.e1717

Aiken, L.H., Rafferty A.M., Sermeus, W. (2014) Caring nurses hit by a quality storm. Nursing Standard. 28, 22-25. doi.org/10.7748/ns2014.04.28.35.22.s26

Bandura A. (1971) Social Learning Theory. General Learning Corporation, New York City.

Doran D. M. (2010) An outcomes framework for knowledge translation. In: Evaluating the impact of implementing evidence-based Practice. Edited by Bick D. and Graham I.D., Wiley-Blackwell, Sigma Theta Tau International.

Feo, R., & Kitson, A. (2016). Promoting patient-centred fundamental care in acute healthcare systems. International Journal of Nursing Studies, 57, 1-11. doi:10.1016/j.ijnurstu.2016.01.006

Feo, R., Conroy, T., Alderman, J., Kitson, A. (2017) Implementing fundamental care in clinical practice. Nursing Standard. Apr 5; 31, 52-62. doi: 10.7748/ns.2017.e10765.

Forsman, H., Rudman, A., Gustavsson, P., Ehrenberg, A. & Wallin, L. (2010) Use of research by nurses during their first two years after graduating. Journal of Advanced Nursing 66, 878–890. http://dx.doi.org/10.1111/j.1365-2648.2009.05223.x

Forsman, H., Wallin, L., Gustavsson, P. & Rudman, A. (2012) Nursing students' intentions to use research as a predictor of use one year post graduation: A prospective study.

International Journal of Nursing Studies 49, 1155-1164.

Halpin, Y., Terry, L.M., Curzio, J. (2017) A longitudinal, mixed methods investigation of newly qualified nurses' workplace stressors and stress experiences during transition. Journal of Advanced Nursing. May 24. doi: 10.1111/jan.13344. [Epub ahead of print]

Harvey, G. & Kitson, A. L. (2015). Implementing evidence-based practice in healthcare: A facilitation guide. Abingdon, Oxon: Routledge.

Henderson, V. (1966). The Nature of Nursing: A Definition and Its Implications for Practice, Research and Education. Macmillan, New York.

International Council of Nurses (ICN) (1961). Basic Principles of Nursing Care. London: ICN International learning collaborative. (2017). Retrieved from http://intlearningcollab.org/

Jørgensen, L., Garne, J.P., Søgaard, M., Laursen, B.S. (2015). The experience of distress in relation to surgical treatment and care for breast cancer: An interview study. European Journal of Onclogy Nursing 2015 dec; 19,612-8

http://dx.doi.org/10.1016/j.ejon.2015.03.009

Kagan, S.H. (2014). Implications of the fundamentals of care for nursing education. Nursing Leadership; 27, 23-30.

Kalish, B.J. (2014) Errors of Omission: Missed Nursing Care. Western Journal of Nursing Research. Aug; 36,875-90. doi: 10.1177/0193945914531859.

Kitson, A., Conroy, T., Wengstrom, Y., Profetto-McGrath, J., & Robertson-Malt, S. (2010).

Defining the fundamentals of care. International Journal of Nursing Practice, 16, 423-434.

doi:10.1111/j.1440-172X.2010.01861.x [doi]

Kitson, A., Conroy, T., Kuluski, K., Locock, L., & Lyons, R. (2013). Reclaiming and redefining the fundamentals of care: Nursing's response to meeting patients' basic human needs.

Adelaide, South Australia: School of Nursing, the University of Adelaide.

Kitson, A. L., Muntlin Athlin, Å, & Conroy, T. (2014). Anything but basic: Nursing's challenge in meeting patients' fundamental care needs. Journal of Nursing Scholarship, 46, 331-339. doi:10.1111/jnu.12081

Kotter, J.P., Schlesinger L.A. (1979). Choosing strategies for change. Harvard Business Review. Mar-Apr; 57,106-14.

Kotter, J. P. (1996). Leading Change. Boston: Harvard Business School Press.

Krumholtz, H.M. (2013). Post-Hospital Syndrome — An Acquired, Transient Condition of Generalized Risk. New England Journal of Medicine 368,100-102.DOI: 10.1056/NEJMp1212324

Larsen, K., Emmerich Hansen, P., Højbjerg, K. & Bundgaard Dige, M. (2014). Kompleks fremtid og refleksive sundhedsprofessionelle: Om videreudvikling og forbedring af sundhedsuddannelserne: Afrapportering af Sundhedskartellets uddannelsesprojekt. Implement Consulting Group, Aalborg Universitet og Sundhedskartellet

Løgstrup, K.E. (1997). The Ethical Demand. University of Notre Dame Press, Notre Dame.

Maben, J., Latter, S. & Macleod, C. J. (2006). The theory–practice gap: impact of professional–bureaucratic work conflict on newly-qualified nurses. Journal of Advanced Nursing 55,465–477.DOI: 10.1111/j.1365-2648.2006.03939.x

MacMillan, K. (2016) The Hidden Curriculum: What Are We Actually Teaching about the Fundamentals of Care? Nursing Leadership (Toronto, Ont.), 29, 37-46.

Melnyk, B.M., Gallagher-Ford, L., Long, L.E. & Fineout-Overholt, E. (2014). The establishment of evidence-based practice competencies for practicing registered nurses and advanced practice nurses in real-world clinical settings: proficiencies to improve healthcare quality, reliability, patient outcomes, and costs. Worldviews on Evidence Based Nursing 11, 5-15. doi: 10.1111/wvn.12021.

Ministry of Education. (2016). Ministerial order on the Bachelor of Science in nursing programme. (No. 804). Ministry of Education.

Missen, K., McKenna, L. & Beauchamp, A. (2016). Registered nurses' perceptions of new nursing graduates' clinical competence: A systematic integrative review. Nursing Health Science 18, 143-53. doi: 10.1111/nhs.12249. Epub 2015 Nov 23

Pellico, L.H., Brewer, C.S. & Kovner, C.T. (2009). What newly licensed registered nurses have to say about their first experiences? Nursing Outlook 57, 194-203. doi: 10.1016/j.outlook.2008.09.008.

Pennbrant, S., Nilsson, M.S., Öhlén, J. & Rudman, A. (2013). Mastering the professional role as a newly graduated registered nurse. Nurse Education Today 33, 739-45. doi: 10.1016/j.nedt.2012.11.021.

Popil, I., (2011). Promotion of critical thinking by using case studies as teaching method.

Nurse education today, 31, pp. 204-207.

Rycroft-Malone, J., Seers, K., Titchen, A., Harvey, G., Kitson, A. & McCormack, B. (2004). What counts as evidence in evidence-based practice? Journal of Advanced Nursing 47, 81-90. http://dx.doi.org/10.1111/j.1365-2648.2004.03068.x

Silverman, J., Kurtz, S., Draper, J. (2013). Skills for Communicating with Patients. CRC Press, 3rd Edition

Thistle Thwaite, J.E., Davies, D., Ekeocha, S., Kidd, J.M., Macdougall, C., Matthews, P., Purkis, J. and Clay, D., (2012) The effectiveness of case-based learning in health professional education. A BEME systematic review: BEME Guide No. 23. Medical teacher, 34, 421-44.

Voldbjerg, S. L., Gronkjaer, M., Sorensen, E. E., & Hall, E. O. (2016). Newly graduated nurses' use of knowledge sources: A meta-ethnography. Journal of Advanced Nursing, 72, 1751-1765. doi:10.1111/jan.12914 [doi]

Voldbjerg, S.L. (2016) Newly Graduated Nurses' use of Knowledge Sources in Clinical Decision Making: A qualitative study. Aalborg Universitetsforlag (Thesis).

Voldbjerg, S. L., Gronkjaer, M., Wiechula, R., & Sorensen, E. E. (2017). Newly graduated nurses' use of knowledge sources in clinical decision-making: An ethnographic study. Journal of Clinical Nursing, doi:10.1111/jocn.13628 [doi]

Wangensteen S., Johansson I.S., Björkström M.E. & Nordström G. (2011). Research utilisation and critical thinking among newly graduated nurses: predictors for research use.

A quantitative cross-sectional study. Journal of Clinical Nursing 20, 2436-2447.

http://dx.doi.org/10.1111/j.1365-2702.2010.03629.x

Whitehead J. (2001). Newly qualified staff nurses' perceptions of the role transition. British Journal of Nursing 10, 330-339.

Yin R.K. (2009). Case study Research Design and Methods. Fourth Edition. Thousand Oakes: SAGE.

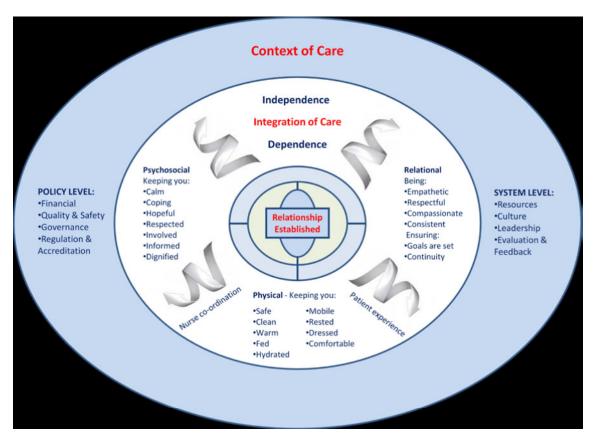


Figure 1. The Fundamentals of Care Framework: Relational, Integrative and Contextual Dimensions. Reprinted from: "Reclaiming and redefining the fundamentals of care: Nursing's response to meeting patients' basic human needs" (p.11), by Kitson, A., Conroy, T., Kuluski, K., Locock, L., & Lyons, R., 2013, Adelaide, South Australia: School of Nursing, the University of Adelaide.

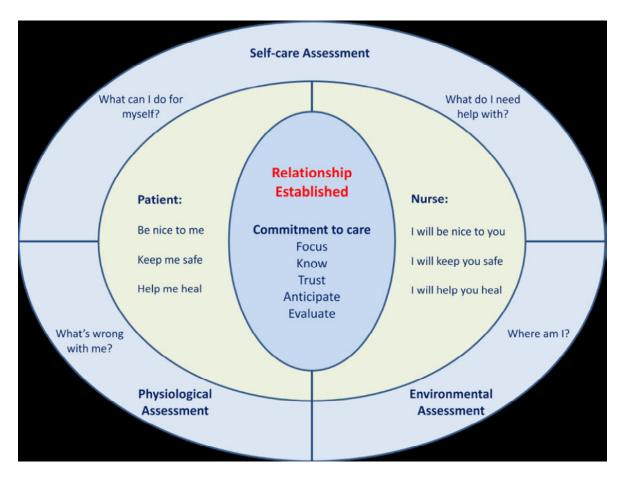


Figure 2. Protecting and communicating the nature of the relationship to others.

Reprinted from: "Reclaiming and redefining the fundamentals of care: Nursing's response to meeting patients' basic human needs" (p.13), by Kitson, A., Conroy, T., Kuluski, K., Locock, L., & Lyons, R., 2013, Adelaide, South Australia: School of Nursing, the University of Adelaide.