

DR. GETTY HUISMAN-DE WAAL (Orcid ID : 0000-0003-2811-4176)

DR. REBECCA FEO (Orcid ID : 0000-0001-9414-2242)

Article type : Special Issue Article

Students' perspectives on basic nursing care education

Getty Huisman – de Waal¹, Rebecca Feo², Hester Vermeulen¹, Maud Heinen¹

¹ Radboud university medical center, Radboud Institute for Health Sciences, IQ healthcare, **P.O. Box 9101, 6500 HB, Nijmegen, The Netherlands**

² Adelaide Nursing School, The University of Adelaide, Level 4, Adelaide Health and Medical Sciences Building, Adelaide, South Australia, 5005, Australia

Corresponding author:

Getty Huisman-deWaal, Radboud university medical center, Radboud Institute for Health Sciences, IQ healthcare, **P.O. Box 9101, 6500 HB, Nijmegen, The Netherlands**; T: +31 (0)24 3619750;
E: Getty.Huisman-deWaal@radboudumc.nl

ACKNOWLEDGEMENTS / CONFLICT OF INTEREST

The 'Basic Care Revisited' project received a research grant from The Netherlands Organization for Health Research and Development (ZonMw) in 2014 (520002003).

All authors listed in this study do not have any interests that might be interpreted as influencing the research. All of the authors believe that the information written in this article contributes significantly to understanding the perspectives of nursing students on basic nursing care. The authors acknowledge and appreciate the assistance of participating nursing schools and nursing wards in completing this study. The collaboration of the authors on this article is also greatly appreciated.

Abstract

Aims and objectives

The aim of the study is to explore the perspectives of nursing students on their education concerning basic nursing care, learned either during theoretical education or clinical placement, with a specific focus on nutrition and communication.

This article has been accepted for publication and undergone full peer review but has not been through the copyediting, typesetting, pagination and proofreading process, which may lead to differences between this version and the Version of Record. Please cite this article as doi: 10.1111/jocn.14278

This article is protected by copyright. All rights reserved.

Background

Basic care activities lie at the core of nursing, but are ill-informed by evidence and often poorly delivered. Nursing students' education on basic care might be lacking, and the question remains how they learn to deliver basic care in clinical practice.

Design

Descriptive study, using an online questionnaire.

Methods

Nursing students at the vocational and bachelor level of six nursing schools in the Netherlands were invited to complete an online questionnaire regarding their perception of basic nursing care education in general (both theoretical education and clinical placement), and specifically in relation to nutrition and communication.

Results

Nursing students (n=226 bachelor students, n=30 vocational students) completed the questionnaire. Most students reported that they learned more about basic nursing care during clinical placement than during theoretical education. Vocational students also reported learning more about basic nursing care in both theoretical education and clinical practice than bachelor students. In terms of nutrition, low numbers of students from both education levels reported learning about nutrition protocols and guidelines during theoretical education. In terms of communication, vocational students indicated that they learned more about different aspects of communication during clinical practice than theoretical education, and were also more likely to learn about communication (in both theoretical education and clinical practice) than were bachelor students.

Conclusion

Basic nursing care seems to be largely invisible in nursing education, especially at the bachelor level and during theoretical education.

Relevance to clinical practice

Improved basic nursing care will enhance nurse sensitive outcomes and patient satisfaction and will contribute to lower healthcare costs. This study shows that there is scope within current nurse education in the Netherlands to focus more systematically and explicitly on basic nursing care.

Keywords: basic nursing care, fundamentals of care, nursing students, nutrition, communication, nursing education, nursing curricula.

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

- Basic nursing care activities are important in light of calls for improved quality of care for patients.
- A renewed focus on and appreciation of basic care is crucial for positively influencing nursing sensitive outcomes and patient satisfaction, and, subsequently, diminishing healthcare costs.
- There is a need for more focus on basic nursing care in nursing curricula.

INTRODUCTION

Communication and nutrition, together with care for breathing, elimination, cleanliness and dressing, mobility, rest and sleep, body temperature, expressing sexuality and safety (prevention of complications), are daily-executed, basic nursing care activities (Kitson *et al.* 2010). These care activities are required by all patients, are crucial for their health and wellbeing throughout their life, and are generic across medical conditions and health care settings (Feo & Kitson 2016, Kitson *et al.* 2010). Such care activities are also commonly referred to as the fundamentals of care or essential nursing care, however, here, we use the term basic nursing care (Hamers *et al.* 2016, Juve-Udina *et al.* 2014, Kitson *et al.* 2014, van Achterberg 2014).

Despite its crucial role in patients' health and wellbeing, basic nursing care is poorly delivered in many healthcare settings globally. It has been argued that basic care is poorly delivered due to the invisibility and subsequent devaluing of such care across healthcare systems, including in nursing education and research (Feo & Kitson 2016). Whilst international nursing research has developed strongly over the past decades, there has been little emphasis on basic nursing care. As a result, evidence to underpin basic nursing care activities (McCloskey JC 1996), and to inform basic nursing care education (van Achterberg 2012), is limited. This evidence is essential to improve nursing-sensitive patient outcomes in various settings, including patient functioning, ability for self care, safety (mortality, failure to rescue, infections, falls, delirium, medication errors) and satisfaction with care experiences (Burston *et al.* 2014, Hamers *et al.* 2016). In the Dutch Basic Care Revisited project, This article is protected by copyright. All rights reserved.

eight studies are performed in different care settings to generate this much-needed evidence.

Communication and nutrition are two of the basic nursing care activities being studied within this project. This paper reports on a study as part of Basic Care Revisited that explored students' perspectives on basic nursing care education, specifically in relation to nutrition and communication.

BACKGROUND

Nursing is a practice-based discipline with caring at its core, hence, basic nursing care activities should be explicit concepts within nursing curricula. With the increasing complexity of care and advances in technology however, it seems that basic nursing care is becoming increasingly invisible within curricula and clinical practice, and that students are not receiving the education they require to deliver high-quality basic nursing care in practice (Ausserhofer *et al.* 2014). Indeed, there is evidence to suggest that students perceive basic nursing care as less important than more complex, technical skills, with nursing education seen to play a key role in this devaluing of basic care (Thomas *et al.* 2012). Educators and practice nurses, without being aware of it, might be teaching nursing students, through lecture content, assigned readings, language, or role modelling, that basic nursing care is unimportant, uncomplicated and not nursing's responsibility (MacMillan 2016). This 'hidden curriculum' has consequences for how students understand and perceive basic nursing care (MacMillan 2016). Some students have begun to reject basic care as central to the role of a Registered Nurse, even lamenting that undertaking basic nursing care on clinical placement, such as providing bed pans to patients, limits their opportunities for learning (Allan & Smith 2009).

Assessing nursing students' skills with regard to basic nursing care, and how their education helps them to develop these skills, is a complex and challenging process. A first step is to explore nursing students' perspectives on their education for basic nursing care, including theoretical education and clinical placement. This study aims to generate this evidence, with a special focus on nutrition and communication (including patient involvement).

Nutrition

Maintaining good nutrition is one of the fundamental tasks of nurses as described by Kitson *et al.* (2014). Disease-related undernutrition can develop as a consequence of deficiency in dietary intake,

This article is protected by copyright. All rights reserved.

increased requirements associated with disease state, or from a combination of these factors (Soeters *et al.* 2008). A large study in Dutch hospitals showed that undernutrition is common in 1 out of 7 patients (14%), with geriatric (38%), oncology (33%), internal medicine (27%), and gastroenterology (27%) wards having the highest prevalence. In 2016, the length of stay (LOS) of undernourished patients in the Netherlands was 1.4 days longer than the LOS for patients who were well-nourished (Kruizenga *et al.* 2016). Undernutrition is also common in 10% of Dutch community-dwelling and frail elderly, and in 19% of nursing homes patients (R.J.G. Halfens & A.A.L.M. Rondas 2015, Tieland *et al.* 2012).

While dietitians are the clinical experts in identifying and treating undernutrition, nurses are often the first health professional to meet the patient at admission (Green & James 2013), providing an ideal opportunity for nutrition screening. Nurses also provide basic nursing care 24/7 in several care settings. In a survey of hospital nurses, Duerksen *et al.* (2016) found that identification of undernourished patients was considered by nurses to be of relevance to their professional role. However, nurses stated that they could not always assist their patients with eating and, in their opinion, this was a significant contributor to hospital undernutrition. The majority (92%) of these nurses were interested in receiving additional training and education on patient nutrition.

Communication

Research shows that tailored communication positively influences clinical and health outcomes known to be crucial for recovery and quality of life, including information recall, adherence to treatment and advice, reassurance, and fulfillment of individual needs (Meterko *et al.* 2010, van Dulmen 2011).

Effective communication is defined as a pattern of exchanging information and ideas with others that is sufficient for meeting one's needs and life goals (Herdman 2012). Through effective communication, patients are able to participate in their care by setting achievable short- and long-term goals in relation to regaining control over their bodily functions, as well as by regaining a sense of personal integrity and self (Kitson *et al.* 2013). Communication is also an integral part of any nurse-patient encounter, with daily care activities such as bathing, dressing, eating and walking, requiring frequent verbal and non-verbal communicative interactions (Fawole *et al.* 2013, Kitson *et al.* 2013, McGilton *et al.* 2012).

The need for patients to be involved in their care is highlighted by international research on patient-centered care and patient participation (Tobiano et al. 2016). Patient participation (also called patient involvement) includes having a dialogue and sharing knowledge with health professionals, and taking part in planning one's care (Eldh et al. 2006). Although effective communication helps patients to be engaged in their care (Feo et al. 2016, Feo & Kitson 2016), such communication and engagement is often lacking, particularly in acute care (Ausserhofer et al. 2014, Frank et al. 2009, Jangland et al. 2016). Research has shown that 35-49% of hospital patients do not receive information about symptoms of possible health problems that could appear after they leave the hospital, or about additional care at home, whilst 85% of patients do not receive information about aspects of patient safety in hospital (Hopman *et al.* 2011).

As demonstrated by the research above, nutrition and communication are two examples of basic nursing care that are complex and require specific attention in nursing education. Hence, the aim of this study is to explore the perspectives of nursing students on their education for basic nursing care, particularly nutrition and communication, either during theoretical education or clinical placement. This knowledge can be used as a first step to further improve education on basic nursing care.

METHODS

Design, setting and sample

This descriptive study, using a survey questionnaire, was part of a national project in the Netherlands, 'Basic Care Revisited', involving three universities (Nijmegen, Maastricht, Utrecht). The questionnaire was available electronically during October 2016. Participants were final-year student nurses from five universities in the middle part of the Netherlands.

There are several forms of education for nurses in the Netherlands. Registered Nurses can be educated at an intermediate, higher or academic level, and are required to register (and re-register every five years) in accordance with the Individual Health Care Professions Act. In this study, we focused on nursing students educated at the intermediate and higher levels. Intermediate-level nurse education, also known as vocational education, takes four years to complete and includes at least 6400 hours of theory and clinical placement. Higher-level nurse education, also known as bachelor

This article is protected by copyright. All rights reserved.

education, also takes four years and results in a Bachelor of Nursing degree. This four-year trajectory includes at least 6720 hours of theory and clinical placement.

Nurses who complete the intermediate educational course become general nurses, while those with a higher education are prepared for more leading roles in patient care, particularly with regard to quality improvement and integrating evidence-based practice. In 2014, in the Netherlands, 2641 students graduated from the Bachelor program, and 4431 students graduated at the vocational level.

For this study, final-year nursing students from six nursing schools in the middle part of the Netherlands were invited to participate (n=791). Half of the schools was at the level of bachelor education (higher education); the other three were at the vocational (intermediate) level.

Questionnaire

The questionnaire completed by students involved three different sections. The first section included general demographic questions, such as students' type of education (vocational or bachelor-level) and clinical placements (e.g., aged care, hospital setting). The second section focused on evaluating students' perspectives on their basic nursing care education. To design this part of the questionnaire, the 'fundamentals of care template', which includes 14 discrete fundamentals of care (Kitson *et al.* 2010), was used (Table 1). This pragmatic and focused template was developed from a narrative review of seminal nursing texts. For each of the fundamentals (n=14), students were asked whether they had learned about it during theoretical education and/or clinical placement. The third section included questions regarding nutrition (separate questions were asked in regards to eating and drinking) and communication (including patient involvement). These questions were based on the tasks and responsibilities of nurses, as written in a formal document of The Dutch Nursing Association (V&VN 2012).

Response options for the first section were categorical (e.g. male/female). Response options for the questions in Sections 2 and 3 were based on a 5-point Likert scale (Likert 1978). Respondents ranked perspectives from 'strongly disagree' to 'strongly agree'. The feasibility of the questionnaire was tested on six nursing students from Nijmegen University of Applied Sciences. Data from these

students are not included in this paper. Based on this feasibility test, changes were made to the layout, introduction, and order of the questions.

Data collection and ethical approval

The basic nursing care questionnaire was sent to eligible students by email. This email, including the link to the questionnaire, was sent by the nursing schools at each participating University. All students who were invited to complete the questionnaire were informed about the purpose of the study.

Completion of the questionnaire was taken as evidence of students' consent to participate in the study. All data were treated anonymously, and students were not rewarded nor penalized for their decision to participate. Completion of the questionnaire took about 15 minutes.

According to the Dutch national legislation, and as judged by the local Medical Ethics Committee, the CMO Arnhem – Nijmegen, the study is non-invasive and does not fall under the scope of the Medical Research Involving Humans Subjects Act (WMO). Hence, ethical approval was not required (Ministry of Health 2016).

Data analysis

Data were analyzed using SPSS 22.0 for Windows (IBM 2013). Data from the questionnaires were analysed descriptively, with means, standard deviations, range and percentages. Results from the questions with a 5-point Likert scale are shown in percentages. The answers 'agree' and 'strongly agree' have been combined and the answers 'disagree' and 'strongly disagree' have been combined to give a clearer overview of the students' perspectives.

RESULTS

Respondents

All nursing schools agreed to participate in the study. From one of the schools (vocational education) only 6% of students (3 out of 48) completed the questionnaire. These students were therefore excluded from the study. Of the other five nursing schools, 43% (n=314 of 743) of the students started to fill in the questionnaire (Table 2), however 58 students (18%: n=50 from bachelor education, n=6

from vocational education) were excluded because they answered less than 50% of the questions. In total, 256 (34%) questionnaires were analyzed.

Of the students who were included in the study, 91% (n= 233) were female and most were educated at the bachelor level (88%, n=226). Students undertook clinical placements in a diversity of settings, including nursing homes (72%), general hospitals (67%), academic hospitals (41%), home care facilities (58%), places of care for the disabled (31%), psychiatric settings (28%) and rehabilitation settings (14%).

Students' perspectives

Basic nursing care

Most students educated at the bachelor level agreed or strongly agreed that they learned about basic nursing care during theoretical education (78%). This is compared to 97% of students educated at the vocational level. More than half of the bachelor students (58%) agreed or strongly agreed they learned to conduct basic nursing care in a systematic way (to act in a well considered manner), compared to 85% of the vocational students. During clinical placements, almost all students learned about basic nursing care (96% for bachelor students, 100% for vocational students), and most students agreed or strongly agreed that they learned to conduct this care in a systematic way (84% for bachelor students, 91% for vocational students) (see Figure 1).

Nutrition

Students at the vocational level were more likely than bachelor students to report that they learned during theoretical education how to support patients with eating and drinking. For eating and drinking, respectively, this was 27% and 28% at the bachelor level, and 70% and 67% at the vocational level (see Table 3). This was also the case for learning how to register a patient's food intake (35% at bachelor level vs 57% at vocational level).

More students at both educational levels appeared to learn about aspects of eating and drinking during clinical placement. Of the students trained at the vocational level, 73%-100% agreed or strongly agreed that they learned about the different aspects of eating and drinking during clinical

placement, versus 23–73% for theoretical education. Of the bachelor students, 63–95% agreed or strongly agreed that they learned about the different aspects of eating and drinking during clinical placement, versus 23–53% for theoretical education. Surprisingly low numbers of students, regardless of their educational level, learned about nutrition protocols and guidelines during their theoretical education (31%, 27%, and 47% of all students learned about protocols and guidelines on eating, drinking, and undernutrition, respectively). During clinical placement, these percentages were 64%, 68%, and 70%. Further, almost three-quarters of all students stated that they learned how to recognize undernutrition and which (preventive) interventions for undernutrition are important, but students stated that they were more likely to learn this during clinical placement (81 and 88%, respectively, for recognizing undernutrition and identifying interventions) than theoretical education (74 and 73%, respectively). Risk factors and consequences of undernutrition were taught both during theoretical education and clinical practice to most of the students (83–90%) (Table 3).

Communication

In general, students reported that they were least likely to learn about the following aspects of communication during theoretical education: how to build a trustful relationship with a patient (70% of all students indicated they learned about this during theoretical education), how to promote patient participation (70%) and how to respect a patient's opinion and ideas (78%). By contrast, students were more likely to learn about the following during their theoretical education: how to listen effectively to a patient (89% of all students), how to inform patients (90%) and how to ask for information (92%). The overall percentages for clinical placement were somewhat different. Specifically, the three topics that scored the lowest during theoretical education, scored higher during clinical placement: how to build a trustful relationship with a patient (89%), how to promote patient participation (82%) and how to respect a patient's opinion and ideas (86%). Hence, students were more likely to learn about these aspects of communication during clinical placement. By contrast, the three topics that scored the highest for theoretical education, typically scored lower in clinical placement: how to listen effectively to a patient (82% of all students), how to inform patients (87%) and how to ask for information (87%). Hence, students reported that they were more likely to learn about these aspects during their theoretical education

Regarding the differences between educational levels during theoretical education, a higher number of bachelor students, compared to vocational students, indicated that they learned about informing patients (91% vs 82%, respectively), asking patients for information (94% vs 74%), and listening to patients in an effective way (90% vs 78%). With regard to how to build a trustful relationship and how to respect a patient's opinion, there were no clear differences between educational levels (69% and 78% for bachelor students, and 67% and 82% for vocational students). Lower numbers of bachelor students (69%) compared to vocational students (78%) learned how to promote patient participation during theoretical education. In terms of clinical placement, there appears to be a clear difference between vocational and bachelor students. Vocational students were more likely than bachelor students to report that they learned about (all) aspects of communication during clinical placement (93-96% for vocational students and 81-88% for bachelor students).

When we explore the differences between theoretical education and clinical placement for each educational level, we see that more bachelor students learned how to build a trustful relationship with a patient and how to promote patient participation during clinical placement (81% and 88%, respectively) than during theoretical education (69% for both aspects). This was also the case, but with a smaller difference, with regard to respecting a patient's opinion; 78% of bachelor students indicated that they learned about this aspect of communication during theoretical education, compared to 85% during clinical placement. With regard to the other three aspects of communication that were investigated, informing patients, asking patients for information, and listening to patients in an effective way, bachelor students indicated that they were more likely to learn about these during theoretical education rather than clinical placement. By contrast, vocational students indicated that learn were more likely to learn about all communication aspects during clinical placement rather than theoretical education.

DISCUSSION

This descriptive study explored the perspectives of nursing students on their basic nursing care education, with a specific focus on nutrition and communication. This study identified two key findings worthy of further exploration. The first is that most nursing students, regardless of education level, reported that they learned about basic nursing care (i.e., the 14 Fundamentals of Care) during clinical

This article is protected by copyright. All rights reserved.

placement rather than theoretical education. These findings could reflect the fact that clinical placement involves students providing care to 'real' patients under 'real' conditions. Hence, clinical placement, as opposed to theoretical education, might provide greater opportunity for students to engage in, and subsequently learn about, basic nursing care. The second key finding is that, in general, vocational students reported receiving more education on basic nursing care than did bachelor students, particularly during theoretical education. For example, most bachelor students did not learn during theoretical education how to support patients with eating and drinking or how to register the oral fluid and food intake, whereas most of the vocational students reported that they did. These findings might indicate that there is a lack of education, particularly theoretical education, on basic nursing care at the bachelor level.

The fact that students educated at the bachelor level did not appear to receive as much education on basic nursing care as those educated at the vocational level, raises the question as to whether basic nursing care is seen as crucial to the role of nurses educated at this higher level. As noted earlier, nurses educated at the bachelor level in the Netherlands are prepared for leading roles in patient care, particularly with regard to quality improvement and integrating evidence-based practice. The apparent lack of focus on basic nursing care in bachelor education begs the question whether such care is seen as integral in this 'leading role' in patient care. Such questions were asked by Willis (2012) who queried whether nursing education was designed to develop nurses with the skills and knowledge to deliver hands-on basic nursing care or whether it was designed to develop nurses whose primary role is to oversee the delivery of such care by someone else within the healthcare team (e.g., a healthcare assistant or a nurse trained at vocational level). It is crucially important to answer this question to understand how best to teach basic nursing care at different education levels. We argue that basic nursing care is, and should be, a crucial area of clinical practice for all Registered Nurses in the Netherlands. Hence, nursing curricula, at all education levels, must incorporate an explicit focus on such care.

In regards to nutrition, the present study showed that at least half of students from both education levels reported that they did not learn during theoretical education when to offer patients food and drink, nor how to register a patient's food intake. There were also differences between students

This article is protected by copyright. All rights reserved.

educated at the bachelor and vocational level in regards to nutrition education. Only some of the bachelor-educated nurses reported that they learned about caring tasks (e.g. registering food intake) and problems (e.g. undernutrition) relating to nutrition in both theoretical education and clinical placement. Given nurses have 24/7 contact with patients, they are in an ideal position to identify, prevent and manage problems with regard to eating and drinking (Tappenden et al. 2013). Research has shown that nurses' awareness of the importance of food and their ability to support patients' dietary needs, especially at mealtimes, are lacking (Zanini et al. 2017). Duerksen et al. (2016) found that Canadian Registered Nurses' nutrition education and knowledge were suboptimal. In practice, this sometimes means that patients are unable to reach drinks or open packaging, and do not receive adequate assistance to eat (Kalisch 2006). The results of the present study also showed that surprisingly low numbers of students learned about nutrition protocols and guidelines during their theoretical education (range 23-47% for both levels of education). Tappenden et al. (2013) highlighted the critical role of nutrition interventions in clinical care and suggested practical ways to promptly diagnose and treat malnourished patients and those at risk for malnutrition, but concluded that one of the barriers was a lack of nursing protocols focused on nutrition.

With regard to communication, overall percentages indicated that bachelor students typically learned less about communication than did vocational students. At the vocational level, more students learned about communication during clinical placement than during theoretical education. For bachelor students, these numbers varied for the different aspects of communication. The difference between theoretical learning and clinical placement for bachelor students was typically smaller. For all students, the differences between theoretical education and clinical placement were the largest on the topic of building a trustful relationship with a patient; 19% difference at the vocational level and 29% difference for the bachelor students. Bachelor students learned the least during their theoretical education about aspects of communication relating to building a trustful relationship, respecting a patient's opinion and ideas, and promoting patient participation. The number of bachelor students learning about these aspects of communication during clinical placement was also lower than the number of vocational students learning about these aspects during clinical placement. Promoting patient participation was the topic that bachelor nurses reported learning least about during theoretical education and clinical placement.

This article is protected by copyright. All rights reserved.

In the light of the growing evidence emphasizing the importance of person-centered care and building a trustful relationship as fundamental to the delivery of quality nursing care (Capezuti & Hamers 2013, Edvardsson *et al.* 2014, Ekman *et al.* 2012, Feo *et al.* 2016, Feo & Kitson 2016, Hafskjold *et al.* 2016, Lindberg *et al.* 2013, Sjogren *et al.* 2015, Street *et al.* 2009), it is striking that these concepts appear to receive the least attention in the theoretical and clinical training of bachelor-educated nurses. However, this is not an isolated finding. In a study by Hammar *et al.* (Hammar *et al.* 2017) on the perspective of Swedish nursing students on communication with older people, students had a relatively shallow understanding of the complexity of communication. Hammar *et al.* argued that the real challenge of nursing education lies in how best to increase student nurses' awareness of effective, person-centered communication skills. Communication is essential not only in the encounter between nurses and patients but in encounters between health professionals and the patient's spouse, other relatives or caregivers. A study by Belanger *et al.* (Belanger *et al.* 2017) showed that communication with caregivers is influenced by nurses' perceptions regarding the usefulness of family caregivers as care partners as well as by nurses' lack of availability to meet the demands of caregivers. Awareness of underlying mechanisms influencing communication with patients and caregivers should also be incorporated in nursing students' education.

The findings of the present study suggest there is scope for incorporating a more systematic and explicit focus on basic nursing care within theoretical education and clinical placement, particularly at the bachelor level. The Fundamentals of Care Framework, developed by the International Learning Collaborative (ILC), could be useful in achieving this aim and in structuring nursing curricula. The Framework focuses on how nursing can put basic care at the centre of its activity, and focuses on three key dimensions (1) the nurse-patient relationship; (2) the integration of different care needs (physical, psychosocial and relational); and (3) the context in which care is delivered (Kitson *et al.* 2013). The Framework offers an action plan for educators, stating that educators have to evaluate how basic nursing care is integrated in nursing curricula at different levels. This study represents one of the first attempts to do so. The Framework also states that educators must develop appropriate tools and techniques for the education of basic nursing care (Kitson 2010, Kitson *et al.* 2013). Subsequent research that seeks to build on the findings presented here and to understand, in more

This article is protected by copyright. All rights reserved.

detail, the type of education nursing students currently receive is an essential precursor to developing these tools.

Methodological considerations and limitations

One of the strengths of this study is that it is the first to focus on nursing students' perception on how basic nursing care is taught in the Netherlands. The knowledge generated in this study can be built on to better understand how to incorporate a more explicit focus on basic nursing care in theoretical education and clinical placement. Another strength is that we included nursing students from five different nursing schools and two different levels of education. Furthermore, response rates (34%) were reasonable for an online questionnaire, and therefore, it is likely that results can be generalised to all students of the included nursing schools.

There are some limitations with regard to this study. First, the questionnaire was not validated. Only expert validity was tested. Second, because of the nature of the study (a descriptive study using a survey questionnaire), and the focus on nutrition and communication, it was not possible to ask in-depth questions on all fundamentals of care or even on the two topics we focused on; nutrition and communication. Third, the number of vocational students included in this study was much lower than the number of bachelor level students (30 compared to 226). This is mostly due to the fact that less vocational students were invited to participate. Response rates for the two groups, however, were comparable (35 vs 30%). Fourth, we only asked nursing students whether they learned about aspects of nutrition and communication; we did not ask about the content of their education. Hence, further research is required to identify the specific aspects of basic nursing care that are being taught within theoretical education and clinical placement, and the effectiveness of this education.

CONCLUSION

This is the first study in the Netherlands to explore nursing students' perceptions on how they are taught basic nursing care. Whilst the findings require validation in future research, the results suggest that most nursing students learned about basic nursing care on clinical placement than during

This article is protected by copyright. All rights reserved.

theoretical education. Vocational students were also generally more likely to learn about basic nursing care in both theoretical education and clinical placement than were bachelor students. Hence, within some areas of nursing education in the Netherlands, it appears that basic nursing care is not being made explicit.

Recommendations

All (student) nurses need to have a 'firm grasp' on basic nursing care because it is their core responsibility to provide such care for their patients. Further research is necessary to identify the specific elements of basic nursing care that are taught in theoretical education at both bachelor and vocational levels, and to identify which aspects of such care might be lacking in this education. This could be achieved through curriculum mapping as well as interviews with nursing students and nursing educators. Additional research in which students and their tutors are observed during clinical placement could further inform educators, researchers and professionals how to teach, as well as evaluate and improve the quality of, basic nursing care.

RELEVANCE TO CLINICAL PRACTICE

Basic nursing care activities are crucial for patients' safety and care experiences, and should therefore be taught systematically at both the vocational and bachelor level, as well as during theoretical education and clinical placement. A renewed focus on and appreciation of basic care within nursing education is crucial for positively influencing nursing-sensitive patient outcomes and patient satisfaction in clinical practice, and, subsequently, for diminishing healthcare costs.

References

- Allan HT & Smith PA (2009) How student nurses' supernumerary status affects the way they think about nursing. *Nurs Times* **105**, 10-13
- Ausserhofer D, Zander B, Busse R, Schubert M, De Geest S, Rafferty AM, Ball J, Scott A, Kinnunen J, Heinen M, Sjetne IS, Moreno-Casbas T, Kozka M, Lindqvist R, Diomidous M, Bruyneel L, Sermeus W, Aiken LH, Schwendimann R & consortium RC (2014) Prevalence, patterns and predictors of nursing care left undone in European hospitals: results from the multicountry cross-sectional RN4CAST study. *BMJ Qual Saf* **23**, 126-135.10.1136/bmjqs-2013-002318
- Belanger L, Bourbonnais A, Bernier R & Benoit M (2017) Communication between nurses and family caregivers of hospitalised older persons: a literature review. *J Clin Nurs* **26**, 609-619.10.1111/jocn.13516
- Burston S, Chaboyer W & Gillespie B (2014) Nurse-sensitive indicators suitable to reflect nursing care quality: a review and discussion of issues. *J Clin Nurs* **23**, 1785-1795.10.1111/jocn.12337
- Capezuti E & Hamers JP (2013) Perspectives on how to improve the nursing care of older adults. *Int J Nurs Stud* **50**, 1153-1155.10.1016/j.ijnurstu.2013.06.005
- Duerksen DR, Keller HH, Vesnaver E, Laporte M, Jeejeebhoy K, Payette H, Gramlich L, Bernier P & Allard JP (2016) Nurses' Perceptions Regarding the Prevalence, Detection, and Causes of Malnutrition in Canadian Hospitals: Results of a Canadian Malnutrition Task Force Survey. *JPEN J Parenter Enteral Nutr* **40**, 100-106.10.1177/0148607114548227
- Edvardsson D, Petersson L, Sjogren K, Lindkvist M & Sandman PO (2014) Everyday activities for people with dementia in residential aged care: associations with person-centredness and quality of life. *Int J Older People Nurs* **9**, 269-276.10.1111/opn.12030
- Ekman I, Wolf A, Olsson LE, Taft C, Dudas K, Schaufelberger M & Swedberg K (2012) Effects of person-centred care in patients with chronic heart failure: the PCC-HF study. *Eur Heart J* **33**, 1112-1119.10.1093/eurheartj/ehr306
- Eldh AC, Ehnfors M & Ekman I (2006) The meaning of patient participation for patients and nurses at a nurse-led clinic for chronic heart failure. *Eur J Cardiovasc Nurs* **5**, 45-53.10.1016/j.ejcnurse.2005.06.002
- Fawole OA, Dy SM, Wilson RF, Lau BD, Martinez KA, Apostol CC, Vollenweider D, Bass EB & Aslakson RA (2013) A systematic review of communication quality improvement interventions for patients with advanced and serious illness. *J Gen Intern Med* **28**, 570-577.10.1007/s11606-012-2204-4
- Feo R, Conroy T, Marshall RJ, Rasmussen P, Wiechula R & Kitson AL (2016) Using holistic interpretive synthesis to create practice-relevant guidance for person-centred fundamental care delivered by nurses. *Nurs Inq*.10.1111/nin.12152
- Feo R & Kitson A (2016) Promoting patient-centred fundamental care in acute healthcare systems. *Int J Nurs Stud* **57**, 1-11.10.1016/j.ijnurstu.2016.01.006
- Frank C, Asp M & Dahlberg K (2009) Patient participation in emergency care - a phenomenographic analysis of caregivers' conceptions. *J Clin Nurs* **18**, 2555-2562.10.1111/j.1365-2702.2008.02477.x
- Green SM & James EP (2013) Barriers and facilitators to undertaking nutritional screening of patients: a systematic review. *J Hum Nutr Diet* **26**, 211-221.10.1111/jhn.12011
- Hafskjold L, Eide T, Holmstrom IK, Sundling V, van Dulmen S & Eide H (2016) Older persons' worries expressed during home care visits: Exploring the content of cues and concerns identified by the Verona coding definitions of emotional sequences. *Patient Educ Couns* **99**, 1955-1963.10.1016/j.pec.2016.07.015
- Hamers J, Nijhuis-van der Sanden M, Ettema R, Heinen M, Huisman-de Waal G, de Man-van Ginkel J, Metzeltin S, Zwakhalen S & Schuurmans M (2016) Essential nursing care: most provided, least evidence based. The basic care revisited program. In *J Adv Nurs*.

- Hammar LM, Holmstrom IK, Skoglund K, Meranius MS & Sundler AJ (2017) The care of and communication with older people from the perspective of student nurses. A mixed method study. *Nurse Educ Today* **52**, 1-6.10.1016/j.nedt.2017.02.002
- Herdman T (2012) *NANDA International Nursing Diagnosis, Definitions and Classifications 2012-2014*. Wiley-Blackwell, Oxford.
- Hopman P, de Boer D & Rademakers J (2011) Wat heeft 5 jaar CQ-index opgeleverd? (Nivel ed.). Nivel, Utrecht.
- IBM C (2013) IBM SPSS Statistics for Windows, Version 22.0 (IBM Corp. Released 2013. IBM SPSS Statistics for Windows VA, NY: IBM Corp ed.), NY.
- Jangland E, Kitson A & Muntlin Athlin A (2016) Patients with acute abdominal pain describe their experiences of fundamental care across the acute care episode: a multi-stage qualitative case study. *J Adv Nurs* **72**, 791-801.10.1111/jan.12880
- Juve-Udina ME, Perez EZ, Padres NF, Samartino MG, Garcia MR, Creus MC, Batllori NV & Calvo CM (2014) Basic nursing care: retrospective evaluation of communication and psychosocial interventions documented by nurses in the acute care setting. *J Nurs Scholarsh* **46**, 65-72.10.1111/jnu.12062
- Kalisch BJ (2006) Missed nursing care: a qualitative study. *J Nurs Care Qual* **21**, 306-313; quiz 314-305
- Kitson A (2010) Reclaiming nursing care. *Collegian* **17**, 1-2
- Kitson A, Conroy T, Wengstrom Y, Profetto-McGrath J & Robertson-Malt S (2010) Defining the fundamentals of care. *Int J Nurs Pract* **16**, 423-434.10.1111/j.1440-172X.2010.01861.x
- Kitson A, Marshall A, Bassett K & Zeitz K (2013) What are the core elements of patient-centred care? A narrative review and synthesis of the literature from health policy, medicine and nursing. *J Adv Nurs* **69**, 4-15.10.1111/j.1365-2648.2012.06064.x
- Kitson AL, Muntlin Athlin A & Conroy T (2014) Anything but basic: Nursing's challenge in meeting patients' fundamental care needs. *J Nurs Scholarsh* **46**, 331-339.10.1111/jnu.12081
- Kruizenga H, van Keeken S, Weijs P, Bastiaanse L, Beijer S, Huisman-de Waal G, Jager-Wittenaar H, Jonkers-Schuitema C, Klos M, Remijnse-Meester W, Witteman B & Thijs A (2016) Undernutrition screening survey in 564,063 patients: patients with a positive undernutrition screening score stay in hospital 1.4 d longer. *Am J Clin Nutr* **103**, 1026-1032.10.3945/ajcn.115.126615
- Likert R (1978) Rensis Likert on managing human assets. *Bull Train* **3**, 1-4
- Lindberg E, Horberg U, Persson E & Ekebergh M (2013) "It made me feel human"-a phenomenological study of older patients' experiences of participating in a team meeting. *Int J Qual Stud Health Well-being* **8**, 20714.10.3402/qhw.v8i0.20714
- MacMillan K (2016) The Hidden Curriculum: What Are We Actually Teaching about the Fundamentals of Care? *Nurs Leadersh (Tor Ont)* **29**, 37-46
- McCloskey JC BG (1996) *Nursing Interventions Classification*, 2nd ed edn. St. Louis: Mosby.
- McGilton KS, Sorin-Peters R, Sidani S, Boscart V, Fox M & Rochon E (2012) Patient-centred communication intervention study to evaluate nurse-patient interactions in complex continuing care. *BMC Geriatr* **12**, 61.10.1186/1471-2318-12-61
- Meterko M, Wright S, Lin H, Lowy E & Cleary PD (2010) Mortality among patients with acute myocardial infarction: the influences of patient-centered care and evidence-based medicine. *Health Serv Res* **45**, 1188-1204.10.1111/j.1475-6773.2010.01138.x
- Ministry of Health WaS (2016) Medical Research (Human Subjects) Act, 's-Gravenhage.
- R.J.G. Halfens EM, J.C.L. Neyens, & A.A.L.M. Rondas SR, S. Wolters, J.M.G.A. Schols (2015) Dutch National prevalence measurement of care problems (Landelijke Prevalentiemeting Zorgproblemen (LPZ)).
- Sjogren K, Lindkvist M, Sandman PO, Zingmark K & Edvardsson D (2015) To what extent is the work environment of staff related to person-centred care? A cross-sectional study of residential aged care. *J Clin Nurs* **24**, 1310-1319.10.1111/jocn.12734

- Soeters PB, Reijven PL, van Bokhorst-de van der Schueren MA, Schols JM, Halfens RJ, Meijers JM & van Gemert WG (2008) A rational approach to nutritional assessment. *Clin Nutr* **27**, 706-716.10.1016/j.clnu.2008.07.009
- Street RL, Jr., Makoul G, Arora NK & Epstein RM (2009) How does communication heal? Pathways linking clinician-patient communication to health outcomes. *Patient Educ Couns* **74**, 295-301.10.1016/j.pec.2008.11.015
- Tappenden KA, Quatrara B, Parkhurst ML, Malone AM, Fanjiang G & Ziegler TR (2013) Critical role of nutrition in improving quality of care: an interdisciplinary call to action to address adult hospital malnutrition. *J Acad Nutr Diet* **113**, 1219-1237.10.1016/j.jand.2013.05.015
- Thomas J, Jack BA & Jinks AM (2012) Resilience to care: a systematic review and meta-synthesis of the qualitative literature concerning the experiences of student nurses in adult hospital settings in the UK. *Nurse Educ Today* **32**, 657-664.10.1016/j.nedt.2011.09.005
- Tieland M, Borgonjen-Van den Berg KJ, van Loon LJ & de Groot LC (2012) Dietary protein intake in community-dwelling, frail, and institutionalized elderly people: scope for improvement. *Eur J Nutr* **51**, 173-179.10.1007/s00394-011-0203-6
- Tobiano G, Bucknall T, Marshall A, Guinane J & Chaboyer W (2016) Patients' perceptions of participation in nursing care on medical wards. *Scand J Caring Sci* **30**, 260-270.10.1111/scs.12237
- V&VN (2012) Professional profile for Nurses (Organization TDN ed.), Utrecht.
- van Achterberg T (2012) Call for papers: examination of basic nursing care. *J Nurs Scholarsh* **44**, 313-314.10.1111/j.1547-5069.2012.01481.x
- van Achterberg T (2014) Revisiting basic nursing care. *J Nurs Scholarsh* **46**, 1-2.10.1111/jnu.12061
- van Dulmen S (2011) The value of tailored communication for person-centred outcomes. *J Eval Clin Pract* **17**, 381-383.10.1111/j.1365-2753.2010.01586.x
- Zanini M, Bagnasco A, Aleo G, Timmins F & Sasso L (2017) Returning to the sacred - the importance of careful attention to patients' nutritional needs in hospital settings. *J Adv Nurs* **73**, 523-526.10.1111/jan.12879

Table 1

The Fundamentals of Care Template

Fundamentals of care
Safety, prevention and medication
Communication and education
Respiration
Eating & Drinking
Elimination
Personal cleansing & dressing
Temperature control
Rest & sleep
Comfort (including pain management)
Dignity
Privacy
Respecting Choice
Mobility
Expressing sexuality
Table derived from Kitson, Conroy et al. (2010), Reprinted with permission

Table 2

Response rates

	Number (n)	Complete response (n)	Complete response (%)
Students (Higher level) Bachelor education			
• Utrecht	198	45	23
• Nijmegen	257	120	47
• Ede	188	61	32
Total Bachelor level	643	226	35
Students (Intermediate level) Vocational education			
• Utrecht	56	10	18
• Ede	44	20	45
Total Vocational level	100	30	30
All students	743	256	34

Table 3

Nursing students' perspectives on nutrition and communication as taught during theoretical education and clinical placement

Did you learn through theoretical education / clinical placement	Theoretical education			Clinical placement		
	Total (n = 256)	Bachelor (n=226)	Vocational (n=30)	Total (n = 256)	Bachelor (n=226)	Vocational (n=30)
Eating, % agree and strongly agree						
How to support a patient with eating	32	27	70	90	89	93
At what moments to offer patients food	26	23	30	84	81	97
How to register patients' oral food intake during a shift	38	35	57	90	89	90
How to identify problems with eating	54	53	63	84	84	87
Which protocols and guidelines to use when there are eating problems	31	31	23	64	63	73
Drinking, % agree						
How to support a patient with oral fluid intake	32	28	67	90	89	93
At what moments to offer patients something to drink	27	23	63	86	85	93

How to register oral fluid intake	52	50	73	96	95	100
How to identify problems with oral fluid intake	54	53	67	87	86	93
Which protocols and guidelines to use when there are problems with oral fluid intake	27	25	37	68	66	83
Undernutrition, % agree						
What a good nutritional intake is	74	74	73	73	71	90
What undernutrition means	86	86	83	77	74	93
What risk factors of undernutrition are	86	86	90	83	80	100
What consequences of undernutrition are	90	90	90	85	84	93
Which preventive interventions are important	72	72	73	86	85	97
How to recognize undernutrition	74	73	83	81	79	93
Which interventions are important	73	72	77	88	88	93
Which protocols and guidelines to use in case of undernutrition	47	47	43	70	69	77
Communication, % agree						
How to inform patients	90	91	82	87	87	96
How to ask patients for information	92	94	74	87	87	93
How to build a trustful relationship with a patient	70	69	67	89	88	96
How to listen effectively to a patient	89	90	78	82	81	96
How to respect a patient's opinion and ideas	78	78	82	86	85	96
How to promote patient participation	70	69	78	82	81	93