

Nutritional care in hospitalized geriatric patients

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Abstract

Background: The prevalence of malnutrition in hospitals is high, and malnutrition is associated with poor clinical outcomes. Nurses have an important role in the identification, prevention, and treatment of malnutrition. Nutritional care is one of the fundamental topics of nursing care research in the project Basic Care Revisited. One of the first steps to improve the quality of care, is to have insight in the current practice of nutritional care and the barriers and facilitators nurses experience.

Objective: To describe the current practice of nutritional care for geriatric patients in hospitals and the facilitators and barriers nurses experience.

Method: An ethnographic design with observations and focus group interviews with healthcare professionals in a hospital.

Analysis: The data were examined using a thematic analysis. The observation data were coded using the six steps of the nutrition process. The results of the observations were used to make a topic list for the focus group interviews. The focus group interviews were coded using open and axial coding.

Results: 130 hours of observation were performed, and 13 professionals participated in two focus group interviews. Nurses perform various nutritional interventions. The monitoring of interventions and outcome management is not commonly executed. Identification, high workload, frequent changes in staff, electronic patient record, insight in nutrition intake, multidisciplinary cooperation and priority to nutritional care are barriers. Electronic patient record and environment during mealtimes were facilitators.

Conclusion: The observations showed that the current practice of nutritional care is mostly focused on interventions, with less emphasis on monitoring and outcome management of nutritional interventions. Seven barriers and two facilitators were identified.

Implication of key findings: The results of the study demonstrate the need for explicit attention to monitoring and evaluation in the development of an evidence-based nutritional intervention.

Key words: activities of daily living, nurses, geriatric nursing

Samenvatting

Achtergrond: De prevalentie van ondervoeding in ziekenhuizen is hoog en ondervoeding is geassocieerd met negatieve patiënt uitkomsten. Verpleegkundigen hebben een belangrijke rol in de screening, preventie en uitvoering van de behandeling van ondervoeding. Eten en drinken is een van de basiszorg onderdelen die onderzocht wordt door het project Basic Care Revisited. Om de kwaliteit van zorg te kunnen verbeteren is inzicht nodig in de huidige voedingszorg en belemmerende en bevorderende factoren die verpleegkundigen ervaren.

Doel: Het beschrijven van de huidige voedingszorg voor geriatrische patiënten opgenomen in ziekenhuizen en de belemmerende en bevorderende factoren die verpleegkundigen ervaren.

Design: Etnografisch design

Methode: Observaties van de verpleegkundigen en focus groep interviews met verschillende disciplines.

Analyse: De data werd geanalyseerd door middel van een thematische analyse. De observaties werden gecodeerd met behulp van een framework, gebaseerd op de zes stappen van de voedingszorg. De resultaten van de observaties zijn gebruikt voor het opstellen van de topiclijst voor de focus groep interviews.

Resultaten: De verpleegkundigen voeren verschillende voedingsinterventies uit. Het monitoren en de overdracht naar andere zorgverleners wordt niet stelselmatig gedaan. Belemmerende factoren zijn identificatie, werkdruk, wisselend personeel, elektronisch patiëntendossier, inzicht in intake, multidisciplinaire samenwerking en voeding als prioriteit. Bevorderende factoren zijn het elektronisch patiëntendossier en omgevingsfactoren tijdens maaltijd.

Conclusie: De observaties lieten zien dat de huidige voedingszorg vooral gericht is op interventies maar dat er minder aandacht is voor het monitoren en outcome management van de interventies. Zeven belemmerende en twee bevorderende factoren zijn beschreven.

Implication of key findings: Bij het ontwikkelen van een interventie op het gebied van voeding moet expliciete aandacht besteed worden aan het monitoren en evalueren van de interventie.

Introduction

Malnutrition is a common problem in hospitalized patients with a prevalence of 20% to 34%, depending on the tool used to assess it¹⁻⁷. Malnutrition is associated with poor clinical outcomes such as poor quality of life, increased morbidity, mortality, and more re-admissions^{8,9}. Because of these negative patient outcomes, care for malnourished patients is more expensive than for well-nourished patients¹⁰. The World Health Organization (WHO) defines malnutrition as an imbalance between people's intake and needs of nutrients and energy¹¹.

Nurses have an important role in the identification, prevention, and treatment of malnutrition. To identify patient at risk of malnutrition in an early stage, multiple screening tools are developed. In the Netherlands, common tools to assess malnutrition or risk of malnutrition are the malnutrition universal screening tool (MUST) and the short nutritional assessment questionnaire (SNAQ). Kitson et al. indicate eating and drinking as one of the 14 fundamentals of nursing care in the fundamentals of care framework (FoCF)^{12,13}. Kitson et al. state that these fundamentals, such as nutritional care, are crucial to the health, recovery, and safety of patients, but in practice are poorly delivered. Despite the impact on patients' health, nutritional care is not nurses' first priority¹⁴. In the more complex healthcare settings, fundamentals of care can be overlooked by acute care demands¹³. Previous research found that nurses experienced difficulties in performing good nutritional care due to time pressure, lack of knowledge about malnutrition, lack of usage of screening instruments, and poor communication and documentation of nutritional information^{1,6,15-18}.

In literature research is found that evaluate interventions to improve nutritional care, and the results of evaluation studies suggest that these interventions lead to improvement of patients' outcomes such as weight and quality of life¹⁹. However, only a few randomized controlled trials have been conducted on nutritional interventions for hospitalized patients and geriatric patients in particular^{8,16}. Because of the inconsistency of the findings and the limited number of high-quality RCTs, there is a lack of strong evidence for the effect of nutritional interventions^{8,16,20-25}, and no evidence-based practice in hospitals when it comes to nutritional care²⁶. A systematic review conducted in 2016 highlighted the importance of good-quality evidence for nutritional interventions¹⁶.

The project Basic Care Revisited (BCR) (www.basiscarerevisited.nl) of the Dutch organization for Health Research and Development (ZonMw) aims to develop evidence-based nurse interventions on fundamentals of care such as nutrition²⁷. In the Netherlands, 4 out of 14 fundamentals of care are topics of research: bathing and dressing, mobility, eating and drinking,

and communication. For nutritional care, the study Nurses for Food (NFF) is connected to the BCR project. The aim of NFF is to improve nutritional care and self-management of patients admitted to a hospital²⁸.

To improve the quality and evidence base of nutritional care in nursing, it is necessary to have a clear view of current nursing nutritional care practices and good insights in the barriers and facilitators that nurses experience regarding this care. This knowledge will be the first step in the development of evidence-based interventions of nursing nutritional care.

2. Objective

The objective of this study is to describe the current practice of nursing nutritional care for geriatric patients in hospitals and the facilitators and barriers in nutritional care experienced by nurses.

3. Methods

3.1 Design

An ethnographic observation was used to collect data in daily nursing nutritional care. Ethnographic designs are used in nursing research to study beliefs and practices in relationship to nursing care^{29,30}. Ethnographic data collection methods are participant observations and interviews with key informants²⁹, in this study, patients, nurses, nutrition assistants, and a dietician from a geriatric academic hospital ward. Observations were used to describe the current nursing practice. The focus group interviews served to gain more in-depth knowledge about the perception of nurses and to identify barriers and facilitators experienced by nurses in nutritional care. In the focus group interview guide, the results of the observations were used.

3.2 Population and domain

This study was conducted from January 2018 to July 2018. Within the project BCR, a similar study was conducted between September 2017 and January 2018. Observation data from this previous study were added to the current analysis.

The population of interest comprised healthcare professionals and patients of geriatric wards at hospitals. The study population for the observations included nurses and patients of the geriatric ward of an academic hospital, and the population for the focus groups consisted of healthcare professionals working in the geriatric ward: dieticians, nurses, and nutrition assistants.

Participants for the observations and focus group interviews were selected by using inclusion. There were no specific exclusion criteria for patients or nurses to participate in this study.

Observations

Nurses:

- Registered nurses in the geriatric ward

Patients:

- Patients admitted to the geriatric ward
- 18 years or older

Focus group interviews

- Working as a nurse (student), dietician, or nutrition assistant in the geriatric ward

3.3 Data collection and study procedures

Observations

The observations were used to explore the current practice of nutritional care. The researcher was a complete observer³¹. The observations took place in sessions of four hours. Both patients and nurses were observed. Both perspectives were used to create a complete view of the nutritional care process in the geriatric ward. The observations took place between 7:00 and 21:00. This timeframe was chosen to describe not only the nutrition care during mealtimes but also the times when there are no nutrition assistants. The researcher did not intervene or ask questions during the observations to avoid affecting the practice of nutritional care or causing any bias.

An observation guide (appendix 1) was used to structure the observations. The guide described the fundamentals of care and the subjects about which the researcher took notes. An observation form was used to collect data systematically (appendix 2). The data were collected by three bachelor students and one master student. The data collection and analysis were an iterative process. After an observation session, the researcher transcribed and coded the data.

Data was collected until saturation was reached: there was enough in-depth data to identify patterns, and no new information was obtained in the last observations and focus group interviews²⁹.

Focus group interviews

The results of the observations were used to create an interview guide (appendix 3) for the focus group interviews. This method gave the researcher the opportunity to gain more insight in the perception of the nurses. After the first focus group interview, the interview guide was adjusted and focused on the subjects that needed more deepening (appendix 4). Two focus group interviews were held to gain more insight into the facilitators and barriers that nurses experience in providing nutritional care. The researcher started with an explanation of the aim of the study and the focus group. After the introduction, the researcher led the group interview and ensured that all topics of the guide were discussed.

The first focus group was multidisciplinary and consisted nurses, a dietician, and a nutrition assistant. In the second focus group, only nurses participated. The focus group interviews were audio recorded.

The participants were recruited by the unit managers of the geriatric ward. When they agreed to participate in the study, the unit manager gave their names and email addresses to the

researcher. The researcher then sent an invitation to the participants followed by a reminder two days before the focus group meeting.

Participants could leave the study at any time for any reason if they wished to do so, without any consequences. However, there were no drop outs in this study.

3.4 Data analysis

The data were analyzed using the program Atlas.ti, version 8.0.34.

Observations

First, the researcher read the transcripts of the observations several times to familiarize herself with the data. She divided the data into meaningful parts and coded them with open codes. After the open coding, the codes were connected in larger categories, which were the different fundamentals of care: mobility, bathing, etc. The codes with a connection to nutritional care were connected into themes. The themes were linked to the six steps of nutritional care¹⁴. This described the current practice of nutritional care that nurses provide, from screening to outcome.

After the analysis of the first observations, the researcher made additional observations at the same ward to gain more in-depth data on subjects that were not clear from the first observations. The additional observations were coded using open coding. After the open coding the codes were connected into larger categories. These categories were compared to the results of the first observations and merged together.

One the researcher coded and analyzed the data. To avoid a subjective interpretation of the observations, the analysis was checked by a second researcher and results were discussed in the research group.

Focus group interviews

The focus group interviews were recorded, and the recordings were transcribed verbatim. The transcripts were analyzed using open coding and axial coding. First, the researcher read the transcripts familiarize herself with the data. She then divided the text into meaningful fragments and labeled them with codes. Fragments referring to the same topic were given the same code, which were combined and connected to larger categories and themes³². These themes described the facilitators and barriers that nurses experience in nutritional care.

3.6 Context

The study was conducted in a geriatric ward in an academic hospital. The ward has 15 beds and annually 650 patients are admitted to the ward. The team healthcare professionals consist 23

nurses, senior nurses, physical assistants, physicians, nutrition assistants, care assistants and a dietician.

There is a nutrition protocol specified for the geriatric patients at the hospital; it describes the responsibilities and interventions of the physician, dietician, nurse, and nutrition assistant in the nutritional care of the geriatric patient. The protocol states that every geriatric patient who is admitted to the ward is at high risk of malnutrition. For this reason, no screening instruments are used to identify patients at risk. Instead, all patients receive standardized nutritional interventions such as supplementary feeding and high-protein meals. On the fourth day of admission, their nutrition intake is reported, and a nurse calculates the protein intake the following night. The dietician is consulted if this intake is less than 50% of the desired value, if the patient is losing weight, or if tube feeding is needed.

3.7 Ethical issues

The study was conducted according to the declaration of Helsinki (64th version)³³ and the Personal Data Protection Act. Because it was a non-invasive study method, the Medical Research Involving Human Subjects was not required. The Nurses for Food study was assessed by the CMO Radboud UMC and there was no objection (File number CMO: 2017-3468).

All nurses and patients received an information letter that described the aim of the study and the risks and benefits. Before the start of the observations, the patients and nurses were asked if they had objections to the observation. The participants of the focus group interviews signed an informed consent form before the start of the interviews.

4. Results

4.1 Observations

Three bachelor students observed 120 hours in November and December 2017, and one master student observed 10 hours in February 2018. In total, nurses were observed during their work 35 times, with a total of 130 hours of observation. Characteristics of the patients were not collected.

Insert table 1

The data were connected to the six steps of nutritional care for nurses¹⁴. These six steps describe how to deliver optimal nutritional care and were used as a framework to analyze the observations. The first three steps were no focus in the observation because of the regulations in the nutrition protocol.

Step 1: Nutritional screening: No screening tool was used to identify patients at risk for malnutrition; the nutrition protocol states that all patients of the geriatric ward are at high risk of malnutrition.

Step 2: Nutrition assessment: During the observation period, there was no consultation of the dietician or nutrition assessment by the dietician.

Step 3: Nutrition diagnosis: No patients were diagnosed with malnutrition during the observations. All patients were considered to be malnourished and were treated this way.

Step 4: Intervention: During the observations, a range of nutritional interventions were observed. All patients were given supplementary feeding. In most observations, the nurses and nutrition assistants provided food during mealtimes and snacks between meals.

The meals were served in the sitting room, where the patients ate together. The nutrition assistants created a domestic atmosphere by setting the table. Nurses and nutrition assistants were available to serve and assist with the meals. In a single case, a volunteer assisted the nutrition assistant in serving the meals. Patients who stayed in bed had their meals served in their rooms. The nurses made sure that the patients were seated upright before the meal.

The nutrition assistant and the nurses communicated about the food intake of patients. The nurses asked the nutrition assistant what the patients' intake was. During the observations, the nutrition assistant did not inform the nurse of what this intake was. The nurses gave instructions about what a patient was allowed to eat or when a patient was ready for breakfast.

Influencing patient-related factors were frequently observed, such as pain, dental problems, and delirious behavior. It was observed twice that dental problems were causing pain and the patient was referred to a dentist during admission. Delirious behavior was observed in most observation sessions, and a nurse stated about one patient that this behavior had a negative impact on food intake. Patients were frequently restless and wanted to go home. The nurses reacted by walking along with the patient, bring the patient back to the sitting room, and offering him a drink.

Step 5: Monitoring: Registration of the food intake in the electronic patient record was observed, but in 4 out of 11 cases the nurse stated that she has no insight into the patient's food intake that day. It was observed that nurses weighed patient's multiple times, but in some cases the nurse planned to do this but had no time to.

During the observations, there were several occasions when the patient did not eat the provided food and the food was thrown out, but this was not reported in the electronic patient record.

Step 6: Outcome management: During the observations, the interventions were evaluated once using the results of the food intake registration. In a multidisciplinary meeting, the supplementary feeding was evaluated. Once, the discharge papers to the healthcare professional in another setting contained information about nutrition.

4.2 Focus group interviews

In total, 14 participants were interviewed in two focus group interviews. One participant was interviewed in both focus groups. The duration of the interviews was 65 minutes (interview 1) and 26 minutes (interview 2). The interviews took place in the hospital. The interview started with a question about how the participants defined good nutritional care. Whereas in the first interview most of the information was about the barriers that the participants experienced, in the second interview the questions focused on facilitators.

Insert table 2 and 3

Six themes emerged from the data representing the barriers and facilitators that the participants experienced in nutritional care: Identification of patients with actual nutritional care demands, boundary conditions, electronic patient records, insight in nutrition intake, multidisciplinary cooperation and priority of nutritional care.

A barrier the participants indicated was the difficulty *of identifying patient with actual nutritional care demands*. Beside the protocol, nurses do not have an instrument to identify patients with actual nutrition problems or patients who need extra care. The nutrition protocol state that all

patients are on high risk on malnutrition but not all patients need extra nutritional care or have an actual nutrition problem.

"We don't separate the patients who have a good nutrition intake and the patients who have not." Participant 1.5

When the patient is admitted to the ward, the anamnesis regarding nutrition is poor. In most cases, the patient is not asked for information about nutrition or nutritional status. Due to the cognitive problems geriatric patients frequently have, the patient cannot always provide reliable information about his nutritional status, and the informal caregivers are not always aware that the patient is malnourished.

Participants mentioned *boundary conditions* for good nutritional care. Boundary conditions are environmental factors that can contribute to nutritional care. The nurses and nutrition assistants ensure that both the environment during mealtimes and the meals are appealing. Participants mentioned nutrition assistants set the tables before mealtimes and patients are encouraged to enjoy the meals together in the living room. Participants indicated this as a facilitator.

In contrast, high workload and frequent changes in staff were mentioned as barriers. Participants indicated that the workload at the ward is high and most of the patients need assistance with eating and drinking. Nutrition assistants are not allowed to assist the patients with eating and drinking which causes a high workload on nurses at mealtimes.

"Unfortunately, the nutrition assistants are not allowed to assist with the meals. I can understand why but I wish they could." Participant 2.6

The frequent changes in staff act as a barrier. Participants stated that staff should have knowledge about the geriatric patient and should be looking at creative ways to stimulate the patients to eat and drink.

"Regularly there are new colleagues who follow the protocol from Food for Care and what the hospital asks them to do. But they lack the competence of customization of the intervention that these patients need." Participant 2.3

Participants noticed that the geriatric ward is changing into a more acute setting with patients with critical illnesses and potential medical crises. The participants stated that the turnover is increasing, and the mean duration of stay is six days. This leads to a greater focus on the acute problems, and to a decreased *prioritization of nutritional care* by nurses.

The *electronic patient record* was mentioned as a barrier because of the complexity of the application to register food intake and the time it takes a nurse to obtain an overview of this intake. A participant stated that it takes too much time to register the food intake in the right place in the electronic patient record. The *electronic patient record* could be a facilitator if it was easy to register food intake and give an overview of the patients' intake.

"The electronic patient record is so complicated that it is not easy for nurses to register the food intake." Participant 1.1

The nurses stated that they had no *insight into the nutrition intake* of most of their patients. In most cases, the patient is discharged from the hospital before the nurses can gain insight into his or her nutrition intake. Lack of insight into nutritional status was experienced as a barrier.

"Sometimes, at the end of my shift, I don't know what my patients' food intake was." Participant 1.2

Nutrition assistants have the most insight into patients' nutritional status, but the transfer of that information depends on the characteristics of the nutrition assistant and the workload of the nurse. Nurses and nutrition assistants both think that nutrition assistants with more experience are more likely to inform the nurses about the patients' food intake. When the nurses have a smaller workload during a shift, they are more likely to ask the nutrition assistant about the patients' intake.

"Or at eight o'clock you ask the nutrition assistant if she has insight in the intake of the patient." Participant 1.6

In the multidisciplinary cooperation, the nurses and dietician rarely work together because of the standardizing of the interventions for all patients in the nutrition protocol. Participants stated that the dietician became less involved with the ward. However, nurses would like to consult the dietician more often and discuss the patients' nutritional status in detail. If nutrition is experienced as the main problem, the dietician is more involved and follows the patient during admission. The dietician and nurses experience these situation as successes. The lack of involvement of the dietician were mentioned as barriers.

"It would help me if you (dietician) and the nutrition assistant would have a meeting with us every week to discuss the patients' nutrition. That would be a reminder." Participant 1.2

5. Discussion

The aim of this study was to gain insight in the current practice of nutritional care and facilitators and barriers nurses experience. The results have shown that nurses are aware of the high risk of malnutrition among geriatric patients, and that they perform various nutritional interventions. The monitoring and outcome management is not commonly executed and is absent in most observations. In the focus group interviews, identification of patients with actual nutritional care demands, high workload, frequent change of staff, electronic patient records, lack of insight in nutrition intake, multidisciplinary cooperation and priority of nutritional care were identified as barriers. An electronic patient record that is easy to use can act as a facilitator. Another facilitator was the attention to environmental factors during mealtimes that stimulate patients to eat and drink.

The electronic patient record is identified as a barrier and facilitator. In current practice it is a barrier because of the complexity but with the right system, it could be changed into a facilitator. It is possible that determinants that are identified as barriers in this study, can act as a facilitator when the circumstances change. Further research is necessary to determine what more facilitators are.

The results of this study are compared to other studies. The Department of Health of the United Kingdom lists 10 factors that are indicators of good nutritional care practice³⁴. Among these factors, availability, provision, environment, and assistance were frequently observed in the geriatric ward. In contrast, the factors planning, implementation, evaluation and revision of care, and monitoring were not. This was confirmed by the participants in the focus group interviews. These results are in line with Bonetti's finding that understaffing and time constraints are barriers for the identification of patients who need nutritional care, and lead to nutritional care being a secondary priority for nurses¹⁵. In contrast to the findings of a study from Eide in 2015, the present study did not find the barrier of a knowledge gap between healthcare professionals³⁵.

In a systematic review of implementation studies Flottorp et al. developed a checklist of determinants that might act as facilitators or barriers in healthcare improvements in general³⁶. The authors describe 57 determinants in seven domains: guideline factors, individual professional factors, patient factors, professional interactions, incentives and resources, capacity for organizational change, and social, political, and legal factors. With regard to this checklist, the determinants found in the present study were concentrated in the domains of patient factors, professional interactions, and incentives and resources.

A strength of this study was the significant number of hours of observations across a broad range of time. The observations were performed during the day and evening shifts and provide a good overview of all the activities of the nurses and nutrition assistants. In the focus group interviews, the researcher had the opportunity to ask about the themes emerged from the observations. The combination of observations and focus group interviews gave the researcher the opportunity to both observe the nurses and nutrition assistants and explore their perceptions of the nutritional care in the geriatric ward. This provided a complete view of this care.

A limitation of the study was that little time available for the second focus group interview. The time restriction due to the workload in the ward limited the researcher in the number of questions she could ask. Furthermore, the study was conducted by a researcher with limited experience in scientific research. This could have had impact on the data collection and analysis. In addition, the study included only one ward at one hospital. More research in different hospitals and wards is needed to get a more detailed insight in the facilitators and barriers nurses experience in nutritional care.

6. Conclusion

The objective of this study was to describe the current practice of nutritional care for geriatric patients in hospitals, and the facilitators and barriers in this care experienced by nurses. The observations showed that the current practice of nutritional care is mostly focused on interventions, with less emphasis on the monitoring and outcome management of nutritional interventions. Seven barriers and two facilitators are identified for good nutritional care in hospitals.

Table 1 Characteristics of participant observations

Level of education of participants	
Vocational level	N = 4
Bachelor level	N = 27
Unknown	N = 4
Total	N = 35

Table 2 Characteristics of participants in the focus group interviews

		Focus group interview 1	Focus group interview 2
participants		N = 7	N=7
Gender	Female	7	7
Age	18-40	3	3
	41-60	3	3
	61-70	1	1
Position	Nurse	4	4
	Senior nurse	1	1
	Nursing student	-	2
	Dietician	1	-
	Nutrition assistant	1	-
Years of experience	1-10	2	3
	11-20	4	2
	>21	1	2
Level of education	Vocational level	1	3
	Bachelor level	6	3
	In-service education	-	1

Table 3 Participants in the focus group interviews

Participant	Occupation
1.1	Senior nurse
1.2	Nurse
1.3	Nutrition assistant
1.4	Nurse
1.5	Dietician
1.6	Nurse
1.7	Nurse
2.1	Nursing student
2.2	Nurse
2.3	Senior nurse
2.4	Nurse
2.5	Nurse
2.6	Nurse
2.7	Nursing student

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Appendix 1 Observation data collection form

Fundamental(s) of care applicable during observation period (use No to ID)

- | | |
|---------------------------------------|----------------------------------|
| 1 Safety, prevention and medication | 8 Communication and education |
| 2 Respiration | 9 Eating & Drinking |
| 3 Elimination | 10 Personal cleansing & dressing |
| 4 Temperature control | 11 Rest & sleep |
| 5 Comfort (including pain management) | 12 Dignity |
| 6 Privacy | 13 Respecting Choice |
| 7 Mobility | 14 Expressing sexuality |
| | 15 Other (describe) |

Activities and interactions (the scenario)

The participants, who is involved? Use codes and identify others as needed

Characteristics and conditions of individuals staff/patient/other

Was patient involved in decision-making? How?

Verbal communication, by whom to whom, what was said, in what manner

Non verbal communication, by whom

Activities and behavior, who did what?

Environmental conditions and the physical setting

Frequency and duration

Precipitating factors

Organisation of the event

Intangible factors (what did not happen?)

Other factors

How and when did nurses obtain information regarding the FOC for their patients? Eg self care assessment, physiological assessment, and environmental assessment

What FOC were delivered during the period of observation? Why these?

Were specific FOC delivered as a result of any observed nurse/patient interaction?

Where and when did nurses record delivery of the FOC?

Were any actions taken as a result the delivery of the FOC?

Appendix 2 Observation form

Afdeling: Datum: Verpleegkundige: HBO/MBO:

Tijd:	Wie:	Waar:	Basiszorg (code):
Tijd:	Wie:	Waar:	Basiszorg (code):
Tijd:	Wie:	Waar:	Basiszorg (code):

Tijd:	Wie:	Waar:	Basiszorg (code):

Appendix 3 Interview guide focus group 1

Welkom

Werkwijze van het interview:

- Toestemming om interview op te nemen
- Vertrouwelijkheid gesprek
- Verschillende meningen geven breder gezichtspunt
- Opnames en transcript alleen toegankelijk voor de onderzoekers

Doel onderzoek:

Voeding heeft een grote invloed op de gezondheid en genezing van patiënten. Er is veel ondervoeding bij patiënten in het ziekenhuis en geriatrische patiënten hebben een nog hoger risico op ondervoeding dan andere patiëntencategorieën.

Er is weinig wetenschappelijk bewijs voor verpleegkundige interventies rondom voedingszorg. De onderzoekslijn Basic Care Revisited verpleegkundige interventies sterker onderbouwen. Een van de stappen in dit onderzoek is in kaart brengen wat verpleegkundigen nu al doen. Dit is gedaan door middel van observaties in het najaar van 2017. Drie hbo-v studenten hebben 120 uur geobserveerd op de afdeling Geriatrie van het Radboud UMC en daarbij vooral gelet op de zorg rondom voeding. In februari heeft een master student nog 3 extra dagen observaties gedaan.

De volgende stap is het in kaart brengen van belemmerende en bevorderende factoren die worden ervaren rondom voedingszorg. Waar lopen jullie tegen aan en wat helpt jullie om goede voedingszorg te bieden? Dat is wat we willen onderzoeken door middel van deze focusgroep interviews.

De focus van de studie ligt op verpleegkundigen, maar voedingszorg is breder en er zijn meer disciplines bij betrokken. Daarom zijn naast een groep verpleegkundigen, ook andere collega's uitgenodigd die voedingszorg leveren. Ook van hen willen we graag horen wat je ervaart als belemmerend en bevorderend bij het verlenen van voedingszorg aan patiënten op de afdeling Geriatrie.

Voorstelrondje: (zodat naam en stem bij transcriberen gekoppeld zijn)

- Naam
- Functie

Soort vraag		Vragen	Wie
Opening	1.	Wat is je naam, je functie en aandachtsgebied?	Allen
Introductie	2.	Wat verstaan jullie onder verpleegkundige voedingszorg?	
Transition	3.	Wat vind je van de voedingszorg zoals deze op dit moment wordt aangeboden op de afdeling? - Interventies	
Key	4.	Wat vind je van de uitvoering van het voedingsprotocol?	
	5	Wie doet wat op de afdeling mbt de voedingszorg? - Samenwerking disciplines - Communicatie tussen disciplines - Belemmerende en bevorderende factoren <ul style="list-style-type: none"> o Welke obstakels worden benoemd? o Wat vergemakelijkt/helps bij de uitvoering van de voedingszorg? 	Alle disciplines
	6.	Wat gaat wel goed en wat gaat minder goed? - Stappen verpleegkundig proces: <ul style="list-style-type: none"> o Screening o Assessment o Diagnose o Behandeling o Monitoren o Outcome management - Randvoorwaarden (werkdruk, aanbod voeding) - Rapportage/overdracht - Beleid en afdelingsgewoonten - Maaltijden - Kennis medewerkers - Patiënt factoren	Alle disciplines
	7.	Zie je ook een rol voor de patient en zijn/haar mantelzorger? Welke rol? - Welke rol heb jij als hulpverlener?	
	8.	Welke kansen/verbeteringen zie je voor het bereiken van de ideale voedingszorg - Voor de verpleegkundige - Voor de arts/PA/dietist/voedingsassistent - Voor de patient/mantelzorger	Alle disciplines
	9	Wat zou je daarbij helpen?	
Ending		Twee flap-overs op tafel leggen voor bevorderende en belemmerende factoren. De groep schrijft in kernwoorden op wat zij als belangrijkste uit de groepsdiscussie aanmerken.	
	10.	Hoe heb je dit gesprek ervaren?	

	11.	Zijn er nog opmerkingen/aanvullingen waar wij rekening mee kunnen houden?	
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Globale tijdsplanning tijdens interview:

Werkwijze/doel onderzoek:	5 minuten	14:00
Voorstelrondje:	5 minuten	14:05
Inleidende vraag:	10 minuten	14:10
Beoordeling voedingszorg	5 minuten	14:20
Voedingsprotocol	5 minuten	14:25
Samenwerking	10 minuten	14:30
Bevorderende en belemmerende factoren:	15 minuten	14:40
Mogelijke verbeteringen	10 minuten	14:55
Rol patiënt/familie:	10 minuten	15:05
Ideale voedingszorg	5 minuten	15:15
Afsluiting	10 minuten	15:20

Appendix 4 Interview guide focus group 2

Welkom

Werkwijze van het interview:

- Toestemming om interview op te nemen
- Vertrouwelijkheid gesprek
- Verschillende meningen geven breder gezichtspunt
- Opnames en transcript alleen toegankelijk voor de onderzoekers

Doel onderzoek:

Voeding heeft een grote invloed op de gezondheid en genezing van patiënten. Er is veel ondervoeding bij patiënten in het ziekenhuis en geriatrische patiënten hebben een nog hoger risico op ondervoeding dan andere patiëntencategorieën.

Er is weinig wetenschappelijk bewijs voor verpleegkundige interventies rondom voedingszorg. De onderzoekslijn Basic Care Revisited verpleegkundige interventies sterker onderbouwen. Een van de stappen in dit onderzoek is in kaart brengen wat verpleegkundigen nu al doen. Dit is gedaan door middel van observaties in het najaar van 2017. Drie hbo-v studenten hebben 120 uur geobserveerd op de afdeling Geriatrie van het Radboud UMC en daarbij vooral gelet op de zorg rondom voeding. In februari heeft een master student nog 3 extra dagen observaties gedaan.

De volgende stap is het in kaart brengen van belemmerende en bevorderende factoren die worden ervaren rondom voedingszorg. Waar lopen jullie tegen aan en wat helpt jullie om goede voedingszorg te bieden? Dat is wat we willen onderzoeken door middel van deze focusgroep interviews.

De focus van de studie ligt op verpleegkundigen, maar voedingszorg is breder en er zijn meer disciplines bij betrokken. Daarom zijn naast een groep verpleegkundigen, ook andere collega's uitgenodigd die voedingszorg leveren. Ook van hen willen we graag horen wat je ervaart als belemmerend en bevorderend bij het verlenen van voedingszorg aan patiënten op de afdeling Geriatrie.

Voorstelronde: (zodat naam en stem bij transcriberen gekoppeld zijn)

- Naam
- Functie

Soort vraag		Vragen	Wie
Opening	1.	Wat is je naam, je functie en aandachtsgebied?	Allen
Introductie	2.	Wat verstaan jullie onder verpleegkundige voedingszorg?	
Transition	3.	Wat vind je van de voedingszorg zoals deze op dit moment wordt aangeboden op de afdeling? - Interventies	
Key			
	5	Wie doet wat op de afdeling mbt de voedingszorg? - Belemmerende en bevorderende factoren <ul style="list-style-type: none"> o Welke obstakels worden benoemd? o Wat vergemakkelijkt/helpt bij de uitvoering van de voedingszorg? 	Alle disciplines
	6.	Wat gaat wel goed en wat gaat minder goed? - Beleid en afdelingsgewoonten - Maaltijden - Kennis medewerkers - Patiënt factoren - EPD	Alle disciplines
	7.	Zie je ook een rol voor de patient en zijn/haar mantelzorger? Welke rol? - Welke rol heb jij als hulpverlener?	
	8.	Welke kansen/verbeteringen zie je voor het bereiken van de ideale voedingszorg - Voor de verpleegkundige - Voor de arts/PA/dietist/voedingsassistent - Voor de patient/mantelzorger	Alle disciplines
	9	Wat zou je daarbij helpen?	
Ending			
	10.	Hoe heb je dit gesprek ervaren?	
	11.	Zijn er nog opmerkingen/aanvullingen waar wij rekening mee kunnen houden?	