Possibilities of creating meaningful encounters in anesthesia nursing

Patient and nurse anesthetist interaction before general anesthesia

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BY
KARIN AAGAARD

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AALBORG UNIVERSITY
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CV

Karin Aagaard became a registered nurse in 2000. She has a background in cardiology and oncology nursing. In 2012, she graduated as a Master of Science in Nursing from Aarhus University and was enrolled as a PhD student at Aalborg University in April 2013. Using focused ethnography, her research focuses on nursing in the highly technological environment of Anesthesia Nursing. During her work in clinical practice, Karin has always been particularly interested in the complexity of the nurse/patient relationship. This interest has resulted in an exploration of nurse anesthetist and patient interactions before general anesthesia.

ENGLISH SUMMARY

Anesthesia nursing is performed in a highly technological environment with restricted time for interaction with patients. Patients are in a vulnerable position, which can be characterized by anxiety regarding the anesthetic and surgical procedure. The bedrock of effective nursing care is to facilitate the execution of patients' basic care needs in a respectful, competent, empathic and personal way. This is achieved by establishing a relationship with the patient, integrating the individual patient's care needs and making sure that the setting is responsive and committed to these core tasks of nursing. The purpose of this dissertation is to explore the interactions between patients and nurse anesthetists before general anesthesia. Moreover, it will explore the professional identity of nurse anesthetists, in relation to the situation of preparing patients for general anesthesia.

The research design of this dissertation is focused ethnography, containing participant observation, interviews and photographs. Grounded Theory provides the inspiration for the analysis. The dissertation is based on three articles, with the following results. Article 1 focuses on the interaction between patients and nurse anesthetists when preparing patients for general anesthesia. *Creating emotional energy* emerged as the core variable and is an integral component when nurse anesthetists interact with patients and perform highly technological procedures. Moreover, motivations for patient interaction are a central ingredient in developing anesthesia care.

Article 2 focuses on the patients' perspectives of interacting with nurse anesthetists while being prepared for general anesthesia. The core variable of this article is *betwixt and between worrying thoughts and keeping focus*. The core variable demonstrates that there is a certain complexity and ambiguity in patients' psychosocial needs and feelings when being prepared for general anesthesia. Patients' psychosocial needs are related to coping strategies and care needs.

Article 3 focuses on nurse anesthetists' professional identity, their expectations towards their professional self and expectations from the interdisciplinary team members. The core variable emerged as *identifying the professional self*. The hallmark of nurse anesthetists' professional self consists of downsizing patients' psychosocial and relational needs of care in favor of performing highly technological procedures. Moreover, nurse anesthetists find great value in professional independence when performing technical routines.

A joint discussion of the three core variables from articles 1-3 leads to the conclusion of the dissertation. A micro-substantive theory is developed regarding the opportunities for creating meaningful encounters between patients and nurse anesthetists. The concepts of the theory can be used to explore the complex interactions between patients and nurse anesthetists in a highly technological

environment. The theory is based on three dominant motivations for patient interaction in anesthesia nursing and indicates that the context of care is not committed and responsive to the core elements of a nurse anesthetist-patient relationship. This results in focus on production-centered care instead of patient-centered care when preparing patients for general anesthesia.

DANSK RESUME

Anæstesisygepleje bliver udført i et højteknologisk miljø med begrænset tid til interaktion med patienter. Patienterne er i en sårbar position, som kan være karakteriseret af angst for den anæstesiologiske og kirurgiske procedure. Fundamentet for effektiv sygepleje er at fremme udførelsen af patienters grundlæggende behov for omsorg på en respektfuld, kompetent, empatisk og personlig måde. Dette gøres ved at etablere en relation med patienten, integrere den individuelle patients omsorgsbehov og at sikre sig at omsorgsmiljøet omkring patienten er imødekommende og engageret over for disse kerneopgaver i sygepleje.

Formålet med denne afhandling er at undersøge anæstesisygeplejerskers og patienters interaktion før generel anæstesi og ydermere at undersøge anæstesisygeplejerskers faglige identitet relateret til situationen, hvor patienten forberedes til generel anæstesi. Afhandlingens forskningsdesign er fokuseret etnografi, indeholdende deltager observation, interviews og fotografier. Analysen er inspireret af Grounded Theory. Afhandlingen er baseret på tre artikler med følgende resultater.

Artikel 1 fokuserer på interaktionen mellem patienter og anæstesisygeplejersker under forberedelse af patienterne til generel anæstesi. *At skabe emotionel energi* fremkom som en kernevariabel og er en integreret komponent af anæstesisygeplejerskens interaktion med patienten og under udførelsen af højteknologiske procedurer. Ydermere er motivationerne for patientinteraktion en central del af udviklingen af anæstesisygepleje.

Artikel 2 fokuserer på patientens perspektiv på interaktionen med anæstesisygeplejersken under forberedelsen til generel anæstesi. Kernevariablen i denne artikel er *midt imellem bekymrende tanker og at holde fokus*. Kernevariablen viser, at der er en særlig kompleksitet og ambivalens i patienters psykosociale behov og følelser under forberedelserne til generel anæstesi. Patienternes psykosociale behov er relaterede til mestringsstrategier og omsorgsbehov.

Artikel 3 fokuserer på anæstesisygeplejerskernes professionelle identitet, deres forventninger til det professionelle selv og forventninger fra tværfaglige gruppemedlemmer. Kernevariablen fremkommer som *identificering af det professionelle selv*. Kendetegnet ved anæstesisygeplejerskers professionelle selv består af en nedprioritering af patienters psykosociale og relationelle behov til fordel for udførsel af højteknologiske procedurer. Derudover finder anæstesisygeplejersker stor værdi i professionel selvstændighed i udførelse af tekniske rutiner.

Konklusionen på denne afhandling udledes af en samlet diskussion bestående af de tre kerne variabler fra artikel 1-3. Der udvikles en mikro teori om mulighederne for at skabe meningsfulde møder mellem patienter og anæstesisygeplejersker. Begreberne i teorien kan anvendes til at undersøge den komplekse interaktion mellem patient og anæstesisygeplejerske i et højteknologisk miljø. Teorien er baseret på tre dominerende

motivationsfaktorer for interaktion i anæstesisygepleje og viser at omsorgsmiljøet ikke er imødekommende og engageret i kerneelementerne af anæstesisygeplejerske-patient relationen. Dette resulterer i et fokus på produktionscentreret omsorg i stedet for patientcentreret omsorg under forberedelse af patienter til generel anæstesi.

ACKNOWLEDGEMENTS

Conducting this PhD study has been an exciting and challenging grand tour of research in so many ways. This journey would not have been possible without the outstanding support of so many people. A special thanks to Anders Schou Olesen and Ragna Larsen for supporting and encouraging me at the very beginning of this journey.

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LIST OF PUBLICATIONS

Article 1

Interaction between nurse anesthetists and patients in a highly technological environment. Aagaard K, Laursen B S, Rasmussen B S, Sørensen E E. *Accepted for publication in Journal of PeriAnesthesia Nursing.*

Article 2.

Patients scheduled for general anesthesia. Betwixt and between worrying thoughts and keeping focus. Aagaard K, Rasmussen B S, Sørensen E E, Laursen B S. *Submitted for publication in Journal of PeriAnesthesia Nursing*.

Article 3.

Identifying nurse anesthetists' professional identity. Aagaard K, Sørensen E E, Rasmussen B S, Laursen B S. *Submitted for publication in Journal of PeriAnesthesia Nursing.*

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INTRODUCTION

Doing research in the Department of Anesthesiology and focusing on certified nurse anesthetists (CRNAs) engendered a feeling of entering a new world and opening up a new perspective on acute and highly technological nursing. In my years of nursing in various medical wards, the anesthetic department has been a peripheral collaborator in specific clinical situations. The type of nursing I have experienced in performing can be characterized as a combination of therapeutic and instrumental nursing. The new area I was entering can be characterized by acute and highly technological procedures where the period for creating a relationship with the patient was shorter.

My exploration of the field of anesthesia nursing was affected by observations and various comments from patients and CRNAs, which created a preliminary image of the experiences I would have and the challenges I would meet on my way into what, for me, was the unknown field of nursing. I discussed the issues with a CRNA who expressed that she thought that 'health professionals needed to have a particular personality to like working in this environment. They [the interdisciplinary team in the operating room (OR)] work closely together both physically and mentally. Sometimes they work in action-packed and very tense situations where they need to work fast, and often involved, brusque commands, curt messages etc. The CRNA thought that 'either you like working in this environment or you do not fit in this special way of working'. This comment aroused my curiosity and respect of the environment with which I was about to become acquainted. During the initial planning of this research study, I often felt like an outsider when visiting the Department of Anesthesiology. I was unfamiliar with the work culture, the clinical setting and the daily routines of CRNAs. Furthermore, I was also unaccustomed with how I was allowed to move and what not to touch in the OR. However, over the course of time in the field, I became more familiar with the specific situation under study, in which CRNAs prepared patients for general anesthesia. Furthermore, I became interested in how the preliminary impression of this working environment would affect the interaction between patients and CRNAs and the preparation of patients for general anesthesia. Throughout my time in the field, I met many dedicated CRNAs who often expressed how happy they were in their position. Some were convinced that by the end of this study, I would end up wanting to become a CRNA myself.

The CRNAs I met during the period of data collection expressed how relevant they considered a focus on interaction between patients and CRNAs, thus describing a

central part of anesthesia nursing, to be. As one claimed, 'It is a gift to us that you will come and explore this area of anesthesia nursing'. Field notes from an information meeting with CRNAs underpinned this statement: 'It is important to illuminate this part of anesthesia nursing. There is no obvious time set aside for this in daily practice. In daily practice, we talk about time for knife incision and when the surgery ends. It is thus relevant to highlight CRNAs' actions, which are performed before patients are inducted to be able to justify the time spent on a proper admission of each patient'. During informal conversations, CRNAs told me that they have discussed the issues raised in the research project for many years and a significant proportion of nurses training to be a CRNA were very interested in this area of anesthesia nursing when writing their final assignment. The reaction to the research focus from one of the first included patients was that the period of patients' arrival at the OR and until induction was very limited and not much could happen during this period.

With these initial personal reflections and reactions from clinical practice in mind, my preliminary impression of the chosen research focus was that caring in anesthesia nursing was an important, yet perhaps invisible, part of the anesthetic procedure.

CONTENT OF DISSERTATION

The dissertation consists of one qualitative, ethnographic study with four data collection phases. It is an article-based dissertation, which contains 12 chapters. The chapters connect the methodological presentation with the theoretical frameworks and a collective discussion of findings from the three articles. The three articles comprise a presentation of findings related to data collection phases 2, 3 and 4 (Figure 1).

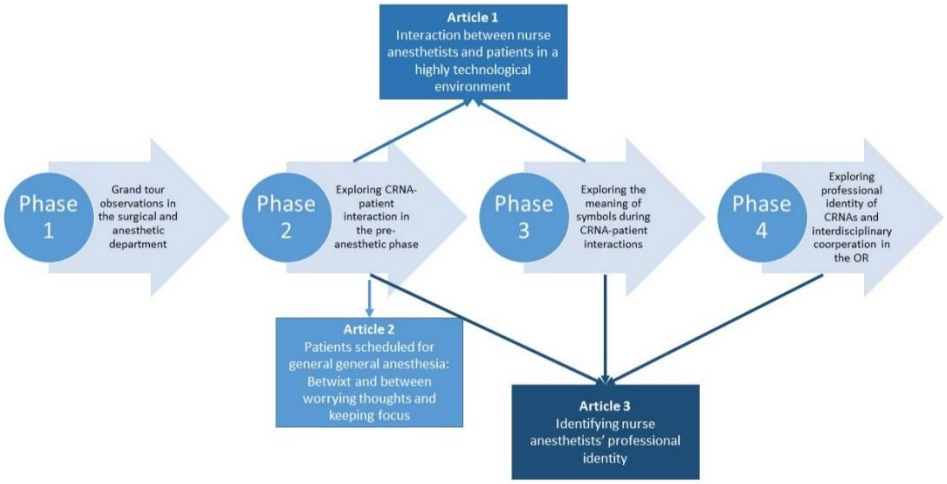


Figure 1: Relationship between data collection phases and articles

2.1 CONTENT OF CHAPTERS

Chapter 1 is an introduction of the researcher's individual journey into the field of anesthesia nursing and a presentation of the initial research focus, which constitutes the basis for the dissertation and the three articles.

Chapter 2 is a short presentation of the content of the dissertation's chapters.

Chapter 3 is a presentation of the literature, which forms the basis of the dissertation. The literature presented relates to the specific social situation of CRNAs' interaction

with patients during the preparation of patients for general anesthesia and CRNAs' professional identity.

Chapter 4 is a presentation of the dissertation's purpose and the related research questions.

Chapter 5 is a presentation of ethnography as the research methodology in the context of nursing. Furthermore, symbolic interactionism is introduced as a means of exploring the meaning of symbols in the specific social situation. This presentation leads to the epistemological stance of the dissertation.

Chapter 6 is a description of methods used in each of the four phases in the collection of the empirical material.

Chapter 7 is a presentation of the analytical method in which methodological concepts of Grounded Theory are used to navigate the empirical data and examine the findings.

Chapter 8 is a presentation of the theoretical frameworks used to discuss the findings. The theoretical approaches of nursing and sociology are chosen to complement each other and thus offer a nuanced and more comprehensive description of the findings.

Chapter 9 is a short presentation of findings related to the three articles.

Chapter 10 is a joint discussion of the relations between findings from the three articles, which is presented as a micro-substantive theory of CRNAs' motivations for interaction with patients.

Chapters 11 and 12 present the dissertation's conclusion and perspectives for future research.

BACKGROUND

3.1 THE SOCIAL SITUATION OF THE PATIENTS AND CRNAS' INTERACTION BEFORE GENERAL ANESTHESIA

Patients admitted for surgery are in unfamiliar territory and during the perioperative period they are in a vulnerable and stressful situation (1). General anesthesia is an event where patients are entirely dependent on the group of health professionals in the OR (2). In this highly technological environment patients often express a need to surrender themselves and the decisions to the health professionals (3). Accordingly, it is a situation where patients experience an ultimate loss of control and the period surrounding the day of surgery may also be anxiety producing (4) because of the waiting period, thoughts of the diagnosis, the outcome of the surgery and the future (5). According to Meleis et al. (6) changes in health status may trigger a process of transition because of patients' opportunities for either enhanced wellbeing or increased risk of illness. Transition related to surgery may result in changes in the patient's life, health and relationships.

Nurses are often primary caregivers to patients undergoing transitions and preparing patients for the impending transition during surgical procedures (6). In Denmark, CRNAs often both provide the anesthetic procedure and patient care in the peri-anesthetic period. The peri-anesthetic period primarily comprises three phases in which pre-, intra- and post-anesthetic nursing are performed (4). During this period, patients move through a series of specialized clinical areas and interact with multiple healthcare professionals, practicing specific roles related to various procedures. Through the anesthetic continuum nurses rarely have time to form a relationship with the patient or identify patients' needs and concerns (7). CRNAs play an important role in providing a supportive and caring setting for surgical patients during the peri-anesthetic period (3). In the pre-anesthetic phase, CRNAs have a key role in insuring that every patient has any concerns addressed regarding the anesthetic and surgical procedure. Furthermore, CRNAs are trained in assessing any physical changes in the patients' status relating to surgery and anesthesia as well as assessing the patients' emotional wellbeing prior to the anesthetic procedure (8). Throughout the surgical procedure and until the handover of the patient to nurses in the recovery room, CRNAs are responsible for safeguarding and supporting patients' wellbeing (9).

As a researcher in anesthesia nursing, I have a specific interest in the pre-anesthetic phase, as this is the time where CRNAs have the opportunity to interact with conscious patients before they are anesthetized. In the pre-anesthetic phase CRNAs

have restricted time for interaction with patients and thus restricted time for meeting patients' concerns and explicit and implicit expectations and needs for care in relation to general anesthesia (9). Despite time restrictions, CRNAs have an important job in ensuring that patients feel safe and relaxed before the anesthetic procedure. This feeling of security will influence the patient's vital signs, which will be more stabilized and result in a smoother anesthetic course and a better outcome (10).

CRNAs work in a highly technological and sterilized environment. When patients arrive at the OR, they experience a change of environment and loss of control (11). Consequently, it is important to explore how CRNAs interact with patients in the pre-anesthetic phase and the relationships between technology and anesthesia nursing. Barnard and Sandelowski (12) argue that there is a need to reconsider the ways of understanding the relationships between technology, humane care and nursing. It is not technology per se that determines the patients' experiences of feeling objectified but rather how the various technologies are operated in the specific user context of anesthesia nursing.

3.2 THE HISTORICAL AND EDUCATIONAL CONTEXT OF CRNAS

In 1977, the first uniform national education in anesthesia nursing was introduced in Denmark. Anesthesia nursing may therefore be characterized as a relatively young nursing discipline. In the 1950s and 1960s, nurses with a special interest in anesthesiology received practical training at the local hospital, but no theoretical training. Because of the shortage in anesthesiologists and lack of theoretical and uniform training, certified education in anesthesia nursing was established (13). This consists of an introduction period of 6 months in clinical practice followed by 18 months of both practical and theoretical training (14). The latest revision of the curriculum for the certified education to become a CRNA was revised in 2015 and contains a description of the physiological, pharmacological and technological content of the theoretical part of the training (15). There are international differences in the training to become a CRNA and in the areas of CRNAs' competency (16). A CRNA is defined as a registered nurse with certified education in anesthesia nursing, who is working independently on delegated responsibility from an anesthesiologist. This type of CRNA is located in the Scandinavian countries and USA (17).

3.3 PROFESSIONAL IDENTITY OF CRNAS

Education is critical to nurses' professional identities, as they become professionals through education. There is an ongoing identity construction throughout the education for becoming a registered nurse (RN) (18). Accordingly, CRNAs begin their development of a professional identity when they study to become a RN and this development continues through the training, because the conception of professionalism among CRNAs is dynamic, lifelong, and situated in practice. CRNAs also grow as professionals when practicing and reflecting on their profession in everyday practice. CRNAs are a part of a socialization process as they are working in a specific culture in the discipline of anesthesia nursing with its own distinct rules, standards and values to follow (19).

CRNAs daily interaction with patients in the social context of anesthesia also influences CRNAs' professional identity. Rules, virtues and ethics of a highly technological environment impact upon professional identity and thus affect patient care. Moreover, patient care is influenced by how CRNAs think about themselves (18). In general, nurses' perception of self and the influence of the organization are interrelated with how they manage to hold a holistic view of patients (20). The skills, commitment and abilities of the individual nurse affect the quality of the nurse-patient relationship as well as the wider contextual factors within the healthcare system (21). In daily practice, CRNAs work closely with anesthesiologists and operation nurses (OR nurses) when preparing patients for general anesthesia. Being a member of this interdisciplinary team and creating an understanding of what defines this team and the way CRNAs define their sense of belonging to this team is a means of constructing the identity of a CRNA (22). Being a part of this team is also a contextual factor influencing the CRNA-patient relationship.

3.4 ANESTHESIA NURSING IN THE PRE-ANESTHETIC PHASE

To sum up, anesthesia nursing is characterized as being performed by specially trained nurses working in a highly technological environment with restricted time for interaction with patients scheduled for surgery. Furthermore, anesthetic procedures and care are performed during the patient's transition from a life before to a life after surgery and the effect of the surgery on the patient's diagnosis and future life.

The bedrock of effective nursing care is for nurses to facilitate the execution of the patient's basic needs in a competent, respectful, personal and empathic way. This is achieved through a conscious alignment of three core elements, which establish a relationship with the patient, integrating the patient's care needs and ensuring that the

context is committed and responsive to these core tasks (23). The focus of this dissertation is to explore and describe CRNAs' interactions with the surgical patient in the pre-anesthetic phase, taking the three core elements of effective nursing into account. Moreover, the focus is on how these core elements affect the professional identity of CRNAs.

AIMS OF DISSERTATION

The aims of this dissertation are:

1) To explore CRNAs' interaction with patients in the pre-anesthetic phase and how CRNAs are able to establish a relationship with the patient in a highly technological environment.
2) To explore surgical patients' experience of interaction with CRNAs in the pre-anesthetic phase.
3) To explore the professional identity of CRNAs, and to explore CRNAs' image of their professional self and the expectations CRNAs encounter from the interdisciplinary team members in relation to preparing patients for general anesthesia.

The three aims lead to the following research questions relating to the pre-anesthetic phase:

- In what way does the highly technological environment in a department of anesthesiology influence the relationship between patients and CRNAs and the integration of patients' care needs?
    - What characterizes the relationship between surgical patients and CRNAs?
    - How are CRNAs able to integrate patients' care needs?
    - What characterizes the patients' perspectives of being prepared for general anesthesia?
    - How do patients describe their experience of interacting with CRNAs?
- What impact does CRNAs' ways of interacting with patients in the pre-anesthetic phase have on CRNAs' professional identity?
    - How is CRNAs' professional identity influenced by the teamwork of interdisciplinary colleagues in the OR?

RESEARCH METHODOLOGY

5.1 DESIGN

The aim was to explore a specific situation of clinical practice in anesthesia nursing where CRNAs interact with patients; therefore, the voices of patients and CRNAs were very important as empirical data. Ethnographic research in today's nursing primarily focuses on a distinct problem within a specific context of one's own society and is therefore labeled focused ethnography (24). Focused ethnography is concerned with action, interactions and social situations and still relies on observation, but is supported by technologies such as use of camera and audio recordings. In order to focus the researcher requires knowledge of the field being studied, which will inform the research questions of the study (25). This focused ethnography consists of observations of patients and CRNAs' interactions, interviews of patients, CRNAs, anesthesiologists and OR nurses. Photographs were taken by a hospital photographer of central objects in the OR and used in a selected number of the interviews of patients and CRNAs.

5.1.1 FOCUSED ETHNOGRAPHY AND SYMBOLIC INTERACTIONISM

Focused ethnography can be seen as complementary to conventional ethnography (25). The origins of conventional ethnography are situated in nineteenth-century anthropology (26), where ethnography is the work of describing culture and learning from people and their way of life (27). Generally, the culture or community was located outside West. From the 1920s to the 1950s, many sociologists from the University of Chicago developed an approach for studying human social life in western cities (26). Focused ethnographers have a background knowledge of the field they study and they dispose of this knowledge before they go into the field to collect data (25). The researcher's role in the field will be elaborated in section 6.1.2.

With an ethnographic inquiry, it is possible to promote the pursuit of an intersubjective informed and activity-based study. Through the Chicago school of sociology, ethnographic research has systematically developed as an interpretive tradition by the symbolic interactionists (28). Reeves emphasizes that the theory of symbolic interactionism and the methodology of ethnography is a classic example of linkage between theory and methodology (29). An important factor of symbolic interactionism is that the empirical world is indicative of the researcher's way of representing human interaction with the social world (30). Spradley (27) observes that cultural knowledge exists on both an explicit and a tacit level of our

consciousness, which both involve interaction with cultural artifacts. The explicit knowledge is knowledge that people are able to communicate relatively easily. Tacit knowledge, however, remains outside of people's awareness. In this study, the focus is to explore the explicit and tacit knowledge of CRNAs and patients in the period before induction with general anesthesia. Culture as acquired knowledge is related to symbolic interactionism in many ways. Symbolic interactionism is a way of understanding a social reality (31) and of explaining human behavior in terms of the production of meaning. Therefore, the interest is not only on the empirical content of interviews and observations, but also on context and actions (32).

Blumer (30) highlights three premises when describing the nature of symbolic interactionism: The first premise is that 'human beings act toward things on the basis of the meaning that the things have for them' (30). In relation to this project's context of anesthesia nursing, it was relevant to explore the different technological and instrumental objects in the operating room. Moreover, it was relevant to explore how CRNAs derive meaning from the daily interaction with these objects. The second premise is that 'the meaning of such things is derived from, or arises out of, the social interaction that one has with one's fellows' (30). CRNAs' social interactions with patients and colleagues in the interdisciplinary team in the operating room are explored with a focus on the symbolic meaning of eye contact, touch, CRNAs' bodily postures and movements, language and tone of voice. The third premise is that 'these meanings are handled in, and modified through an interpretive process used by the person in dealing with the things he encounters' (30). This interpretive process may become more clear if culture is thought of as providing principles for interpreting and finding meanings, thus culture is different ways to navigate in different encounters and contexts (27). CRNAs and patients interpret and navigate differently in their mutual encounters relating to the preparation of the anesthetic procedure.

Ethnography has a complex history and thus does not have a precisely defined meaning. Moreover, it has been influenced by various theoretical ideas such as pragmatism, symbolic interactionism and constructivism (26). The research tradition of symbolic interactionism is related to the epistemological stance of pragmatism (33). Human action and experience is central in pragmatism. Human beings are active participants in the social world, which they form and affect through different practices. All knowledge begins with a sensory perception and is achieved through the interpretation of signs. Pragmatism focuses on the consequences of human actions; thereby it is possible to understand the meaning of the actions. The intention of human beings is considered procedural, relational and situational. Consequently, the intention is simultaneously both individual and social. In pragmatism actions do always take place in a particular situation where each individual draws on a wide

range of experiences on symbolic meanings, social roles and acting directions from previous situations in order to handle the current situation (33). These characteristics are in line with the nature and the three premises of symbolic interactionism presented above (30). In this study, the interactions between patients and CRNAs are the social situation in focus. The purpose is to observe and interview both groups of participants and explore their social interaction, the meaning of symbols in the specific social situation, the behavior and actions of patients and CRNAs.

The most common way of drawing an inference in pragmatism is neither induction nor deduction, but instead abduction. Abduction is an inference to the best explanation and the best explanation is often a question of interpretation. A way of obtaining knowledge for explanation is to borrow methods and models from other areas, such as nursing borrowing from sociology. This will be further elaborated in section 8.1, which will elaborate on the theoretical frameworks used in this dissertation. The researcher's theoretical understanding of the chosen theoretical frameworks will be this dissertation's interpretative context of the collected data (34).

5.1.2 FOCUSED ETHNOGRAPHY IN NURSING RESEARCH

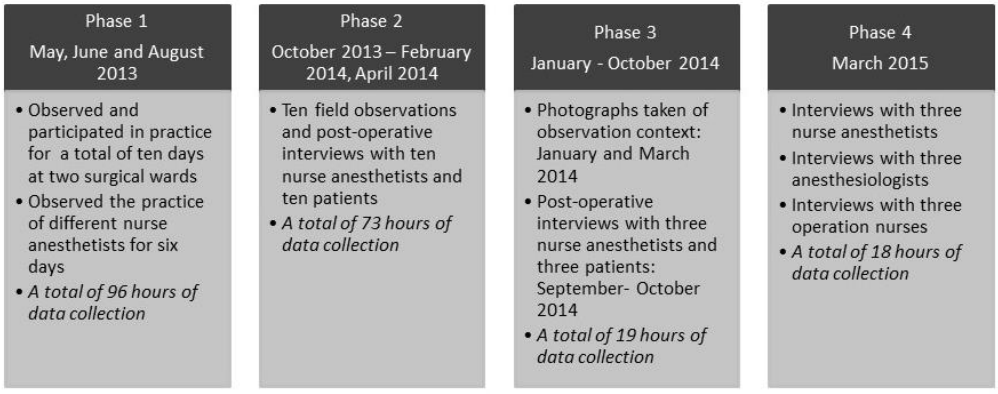
In relation to nursing research, Roper and Shapira (24), note that ethnography is about discovering the meaning that observed patterns of behavior have for group members within a specific culture. The research motive in nursing is often with a specific question in mind and a clear purpose, which is to develop nursing knowledge and practice (35). Focused ethnography is particularly adopted in applied research disciplines such as nursing. In contrast to conventional ethnographers traveling to other cultures, focused ethnographers have an implicit and explicit knowledge of the field they are studying. Knoblauch (25) points out that focused ethnography is complementary to conventional ethnography, particularly in contemporary society, which is socially and culturally differentiated. A hospital may be considered a differentiated society with different departments and specialties, which may lead to a variety of cultures. Rather than study CRNAs clinical practice as a field, as it is done in conventional ethnography, this project focuses on the question of how CRNAs interact with patients before general anesthesia. According to Cruz and Higginbottom (36) focused ethnography enables nurses to better understand specific social issues that influence specific areas of clinical practice.

To sum up, the specific situation of interaction between patients and CRNAs before general anesthesia is explored by using focused ethnography with inspiration from the three premises of symbolic interactionism, which makes it possible to achieve a deeper understanding of the interaction between patients and CRNAs.

DATA COLLECTION

Data collection was divided into four phases (Figure 2), during which episodic data collection took place (37). The field visits were intermittent and purposeful, guided by the inclusion of surgical patients. The participants in the study held in-depth knowledge and experience of the topic being studied, which is one of the hallmarks of focused ethnography (38).

In the following section, each of the four phases will be presented separately. Phases 1 and 2 was the starting point of the data collection. As the data collection evolved, important new questions were raised. This resulted in the planning of phases 3 and 4 of the data collection. Phase 1 consists of grand tour observations (27) to elicit the broad picture of surgical and anesthetic settings related to patients scheduled for surgery and to map the social situations of these settings. Phases 2-4 represent the focused data collection.



6.1 GRAND TOUR OBSERVATIONS

6.1.1 ACCESSIBILLITY TO THE SURGICAL AND ANESTHETIC DEPARTMENTS

The setting of this study was Department of Anesthesiology at a university hospital in Denmark. The Department of Anesthesiology consisted of several medical sub-specialties, for example gastrointestinal anesthesia and cardio-thoracic anesthesia. Two units representing two different sub-specialties were chosen. Breast cancer

surgery represented minor cancer surgery and gastrointestinal cancer surgery represented major cancer surgery.

Lofland and Lofland (39) present an 'access ladder' that is relevant to consider when accessing a social setting. Four settings of public, quasi-public, and private and quasi-private are presented and differentiated in terms of accessibility. Negotiating access to a surgical ward and an operation and anesthetic unit is characterized by entering a private and closed setting. In these settings, access is not granted to anybody outside clinical staff due to safety reasons. The negotiation of initial access to a social setting is dependent on the researcher being a known or an unknown investigator. In this case, the researcher is a RN and thus it can be argued that the research is done in a well-known setting. The fact that the researcher is not a CRNA makes the researcher an outsider. As an outsider, the researcher informed and established connections to the leading doctors and head nurses of the involved departments. The head nurses were considered to be important gate-keepers to the field of interest (26). In cooperation with the head nurses, a plan for informing the entire group of nurses at the surgical ward and CRNAs in the two anesthetic units was discussed. The purpose of the written and oral information was to foster collaboration and to make the intentions of the researcher known to potential participants (39). The collaboration with the head nurses also consisted of planning the inclusion of, and informing, potential participants, which included both patients, CRNAs, anesthesiologists and OR nurses.

In the following sections, the data collection phases from 1-4 will be presented, starting with a description of the researcher's role in the field, then a description of the grand tour observations in the surgical wards and anesthetic units followed by sampling procedures and participants. Hereafter, there is a description of the focused data collection in phases 2-4.

6.1.2 THE RESEARCHER'S ROLE DURING DATA COLLECTION

In focused ethnography, although the field observations are short-term, it is possible for the researcher to create a brief relationship with the participants. The relationship with the patient was established on the day of surgery and until the patient was followed to the OR and again on the first or second post-operative day when conducting the interview. The researcher's relationship with the CRNAs began during the information sessions in the two chosen units in the Department of Anesthesiology and continued during observations in the OR, and later when conducting the interview.

During observations in the OR, the researcher withdrew from interacting with the patient and the interdisciplinary team. The researcher was an outsider according to the interaction ritual between the CRNA and the patient (40) during the short period of time where it was crucial for the CRNA to focus on patient safety and to gain the patient's trust and offer care for the patient. Both patients and CRNAs were informed about the researcher's observer role in the OR. The researcher's motive for this choice was the desire to obtain as many nuances of the patient and CRNA's interaction as possible. Accordingly, the role of the researcher can be characterized as being an observer-as-participant, which typically involves brief and highly formalized interactions between researcher and participants (41). Focused ethnography will typically use this specific role, as it is not as time-consuming as the participant-as-observer role. Furthermore, active participation in the OR was not allowed, as the researcher was not trained as a CRNA (38). The researcher is a RN and not a CRNA, which is seen as both a limitation and a strength in relation to being an outsider to anesthesia nursing and an insider as a nurse. The insider/outsider distinction has the ability to offer important perspectives of the research area, relating to the different roles of being both an insider and an outsider (26). As a nurse, the researcher is educated in the same clinical environment and shares a basic knowledge of nursing. This means that the researcher can more easily understand the orientation of the participants (25) and yet still be able to ask naïve and obvious questions in order to be sure not to misunderstand the behavior being observed (26).

6.1.3 BECOMING FAMILIAR WITH THE DIFFERENT SOCIAL SITUATIONS

Planning the data-collection began with grand tour observations of both the surgical and anesthetic departments. Conducting grand tour observations means that the researcher becomes familiar with the major features of the social situations appearing in the chosen settings for observation. A social situation can be identified by the three primary elements of place, actors and activities (27). The social situations in the clinical setting of patients scheduled for surgery were identified as information from the surgeon, information from surgical nurses, anesthetic supervision from the anesthesiologist, escort of patient by the hospital porter and preparation for general anesthesia by CRNA (figure 3). The social situations presented in figure 3 all consist of the three major features of places, activities and actors. The patient is included as the central actor in all six situations.

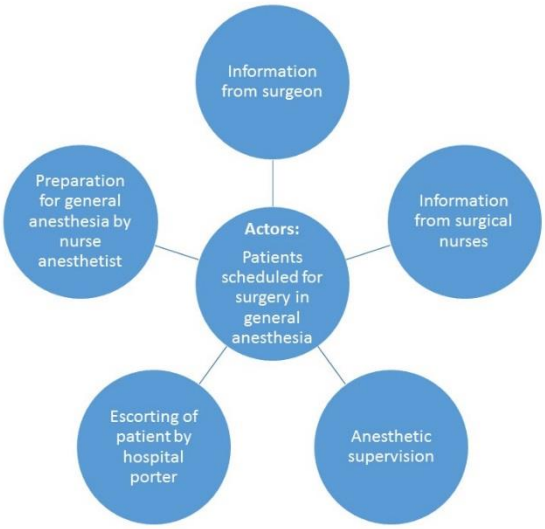


Figure 3: Social situations in the clinical setting of a patient being scheduled for general anesthesia. The situations all consist of actors, place and activities.

During the grand tour observations, the researcher became familiar with the different social situations, groups of patients, clinical activities of nurses working in the surgical wards and the CRNAs working in the two units of Department of Anesthesiology. The researcher accompanied the surgical nurses in charge of the chosen groups of patients when making their daily rounds and informing patients before and after surgery. The researcher accompanied nurses in the outpatient clinic, during information being provided to patients about the surgical procedure and physical post-operative conditions. Furthermore, patients were accompanied during the pre-operative information by the surgeon and the anesthesiologist. Through these field observations, the researcher gained knowledge of patients' hospitalization plans. The researcher also accompanied CRNAs from the involved units at the Department of Anesthesiology in their daily practice. The researcher's clinical nursing experience is not related to anesthesia nursing. Thus, the first days of observation were used to become familiar with the CRNAs and the different context of nursing and work culture. These grand tour observations contributed to a more focused data collection during the mini-tour observations (27) in phases 2-4 and consequently the choice of focusing on one particular social situation, which is the CRNA's interaction with the patient during preparation of the patient for general anesthesia in the OR. The primary actors were the patient and CRNA, but also OR nurses and anesthesiologists were

actors influencing the situation. Gaining knowledge of the specific nursing field under study made it possible to focus and understand the orientation of the participants (25), which also resulted in knowledge on how to plan the inclusion of participants.

6.2 SAMPLING PROCEDURES AND PARTICIPANTS

The inclusion criteria for patients in this study was their being 18 years or older and admitted for elective colorectal cancer surgery or breast cancer surgery. All patients were thoroughly informed about the aim and procedure of the data collection. Information was given both orally and in writing. Patients for colorectal surgery received Paracetamol R 2g, Gabapentin 600mg and Dexometazon 8mg as pre-medication. Patients for breast cancer surgery received Paracetamol 2g as pre-medication according to local hospital guidelines. The patients' ages ranged from the mid-50s to the late-70s. The CRNAs in charge of the patients during the anesthetic procedure all agreed to be observed and to participate in subsequent interviews. The CRNAs are all registered nurses with 1½ years of anesthesia training, compromising both theoretical and practical education (15).

The sampling strategy for data collection in phases 2-4 can be ranged under the broad term of purposeful sampling (Figure 4). In phases 2 and 3, the patients were sampled based on logistics and convenience (42) in relation to when patients were scheduled for surgery, time for observation and interviews. The sampling strategy for CRNAs in phases 3 and 4, and anesthesiologists and OR nurses in phase 4 can be characterized as purposeful random sampling (42). This sampling strategy was based on an agreement between the researcher and head nurses and chief anesthesiologists of asking their employees if they were interested in being interviewed. Two of the CRNAs from phase 2 volunteered to be interviewed in phase 4. The value of interviewing the same CRNAs twice was to compare the reflections they have had during the first and second interview order to identify patterns in their reflections (26).

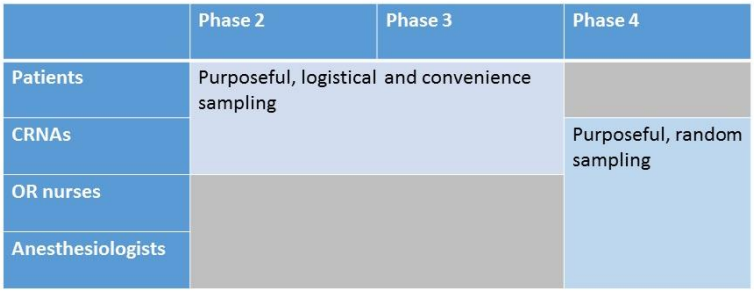


Figure 4: Sampling Strategies in data collection phases 2, 3 and 4.

CRNAs, anesthesiologists and OR nurses were either working in the gastrointestinal unit or in the cardio-thoracic unit. The anesthesiologists were specially trained consultants in anesthesiology. The OR nurses were assisting surgeons while performing breast cancer surgery or gastrointestinal cancer surgery.

6.3 EXPLORING THE RELATION BETWEEN PATIENT AND NURSE ANESTHETIST BEFORE GENERAL ANESTHESIA

In phase 2, patients were observed on the day of surgery until induction with general anesthesia. The researcher attended the surgical ward during the nurses' morning shift and sat by the patients who had been prepared for surgery. The focus of the participant observation was verbal and nonverbal interactions between patients and healthcare professionals on the ward. Furthermore, the three primary elements of a social situation were observed (27). In relation to these elements, the researcher observed how many actors were involved in the situation, the division of roles among the actors, the kind of activities taking place and how the actors moved or placed themselves in the OR during preparation for the anesthetic procedure. Field notes were written following each observation. After the anesthetic and surgical procedures, patients and CRNAs were interviewed separately. CRNAs were interviewed on the same day as the observation, and patients were interviewed on the first or second postoperative day, depending on their level of post-operative discomfort. Hammersley and Atkinson (26) highlight that there are distinct advantages in combining participant observations with interviews. The data from each can be used to illuminate the other. The researcher prepared a semi-structured interview guide based on field notes from the observations of CRNAs and patients' interactions **(**appendix 1). This was a way of illuminating the findings from the observations and sharpening the focus of the interviews. Furthermore, the individual

patient's and the CRNA's reflections on the situation were a focus point. The verbal and non-verbal actions and the placement of actors observed by the researcher during the time of observation were used as triggers to stimulate the participants into discussing and reflecting upon the specific social situation (26).

The researcher was aware that the interviewing of CRNAs and patients could vary in how freely they would speak, and how reflective they were when talking and answering questions. Interview variations required a certain flexibility from the researcher regarding how to use the interview guides (39). These variations can be related to the two different perspectives of being: a CRNA, who has agreed to let a researcher into their professional domain; or a patient, who has accepted to be observed in a vulnerable situation with a minimum of control. Ten CRNAs and ten patients are included in phase 2. The duration of the interviews ranged from 20 to 60 minutes, and they were audio recorded and verbatim transcribed.

6.4 EXPLORING THE SYMBOLIC MEANING OF OBJECTS IN THE PRE-ANESTHETIC PHASE

The data in phase 3 was collected to further explore the social situation of CRNAs' preparation of patients for general anesthesia and to illuminate how the meaning of the context of the OR - the symbols of the interaction and the CRNAs' routines in performing highly technological procedures - influenced patients' and CRNAs' interactions. The identification and illustration of the objects in photographs was based on preliminary analysis of observations and interviews from phase 2. Accordingly, the importance of the objects in the social situation under study became clear from the descriptive accounts of the participant observations and interviews (30) with CRNAs and patients. Furthermore, the intention of using the photographs in the interviews was to validate the description of the objects as the participants saw them (30), and to identify the specific objects' symbolic meaning related to the social situation of patients being inducted with general anesthesia. A symbol can be defined as a sign, object or action, which has a particular meaning according to the group of people who make use of the symbol (31).

Photographs in this study were used as 'images as writing' and 'creative use of images'. Images as writing present photographs as visual evidence in the written text. Creative use of images related to the researcher's work with participants, asking them to consider and discuss the meaning of the photographs taken of the context (43). Interviewing with photographs was a way of co-creating and making knowledge with the photographs. The participants were engaged in interpreting the researcher's visualization of reality (44). Photographs were taken of the observation context and

instrumental procedures in the OR by a hospital photographer (45). In this phase, during the interviews, photographs were shown to CRNAs and patients in order for the researcher to facilitate further reflections on the content of the photographs. Moreover, the photographs were used as a method for mapping patterns in the observations and interviews of patients and CRNAs (46). Blumer's three premises of symbolic interactionism (30), presented in section 5.1.1 in this dissertation, were used to identify the symbolic meaning of the objects related to the social situation. The specific meaning of, for example, a hand on the shoulder takes place in the social interaction with the CRNA, when she is placing the face mask just before the induction of anesthesia. This meaning is interpreted by the individual patient and is related to the patient's coping strategies and care needs.

Three patients and three CRNAs were interviewed, and each group of participants was presented with the same set of photographs (Appendix 2). After an analysis of these six interviews, the findings were compared to findings in phase 2. The findings showed that no new nuances in the participants' interpretation of the photographs appeared. This resulted in saturation of the categories and variables and it was decided that further data collection would not contribute to further development of variables and categories (47). The interviews and photographs were a way of ensuring that no further codes or categories were emerging. The duration of the interviews was from 20 to 60 minutes. Interviews were audio recorded and transcribed verbatim.

6.5 EXPLORING NURSE ANESTHETISTS' PROFESSIONAL IDENTITY

The data collection in phase 4 was based on the questions raised from the analysis of the previous phases of data collection. Phases 2 and 3 focused on the interaction between patients and CRNAs, clinical practices in the OR and symbols of the context. In ethnography, the researcher needs to understand people's actions and why they act in this way. This is related to people's interpretation and evaluation of the situation they face and their identities (26). Interviews and observations are a way of identifying the participants' social identity and roles in the social setting. The intention is to explore how identities are constructed through social practice and social relations (32). The interdisciplinary team members in the OR are important actors in the social situation under study and thus played an important part in the way CRNAs planned and performed their daily work and interactions with patients. Therefore, it was relevant to explore anesthesiologists, OR nurses and CRNAs' ways of describing the distribution of tasks and professional roles in the interdisciplinary teamwork. Moreover, it was relevant to explore how CRNAs' clinical practice and distribution of professional roles influenced the construction of their professional identity when preparing patients for general anesthesia. Another relevant perspective

was to explore how CRNAs perceived their mono- and interdisciplinary colleagues image of them and through this constructed an image of themselves as CRNAs (48). Based on previous knowledge from phases 2-4, a semi-structured interview guide for CRNAs, anesthesiologists and OR nurses was prepared (Appendix 3).

6.6 ETHICAL CONCIDERATIONS

The study was reported to the Danish Data Protection Agency (Journal no. 2008-58-0028). All participants were informed about the purpose of the study, both verbally and in writing (Appendix 4). All participants gave their written consent (Appendix 5). The ethical guidelines for nursing research in Scandinavia was fulfilled (49). Head nurses at the Department of Surgery and Department of Anesthesiology were appointed gatekeepers, granting the researcher access to conduct participant observations and to contact and include participants (26). Head nurses and CRNAs held scheduled meetings with the researcher at the unit to keep abreast of the research and to elaborate on their part in the data collection. Anesthesiologists and OR nurses received written information about the study.

Observing and interviewing CRNAs' interactions with patients may involve sensitive topics. The professional actions and identity of the CRNA are exposed during field observations. Furthermore, patients before surgery are in a vulnerable situation, about to relinquish control and leave responsibility for their life in the hands of the nurse anesthetist. Respect of the participants' boundaries of sensitive topics during interviews and taking due account of the researcher's own values and goals of the interview are very important ethical considerations (26), and were taken into account during data collection in this study. The participants' feelings were respected. Signs of emotions in participants were acknowledged and articulated and the individual participants' limitations on interview subjects were respected. At the end of each interview, participants were asked to provide the researcher with their feelings on being observed and interviewed. This was a way for the researcher to, together with the participants, articulate how they felt being researched and to modify the future interview style and settings accordingly. Moreover, it was a way to summarize the content of interviews and of considering participants' feelings before the researcher left them (26).

DATA ANALYSIS

Each of the phases 2-4 were analyzed separately using the same analytical approach. This analytical approach utilizes methodological concepts of Grounded Theory and will be presented below in general terms followed by a presentation of the analysis process of phases 2-4. The main findings are named core variables. Core variables emerged across the data collection phases 2-4.

7.1 ANALYTICAL APPROACH INSPIRED BY GROUNDED THEORY

There is no formula or recipe for the analysis of ethnographic data. Data are materials to promote thought and it is important to go beyond data and develop the ideas that will illuminate them. Ideas are used to make sense of data and data are used to form and change the researcher's ideas. This is an iterative process of linking ideas together in the data material, and it is important to test the ideas' fit with further data. This way of collecting and analyzing data is closely related to Grounded Theory (26). O'Reilly (43) also considers Grounded Theory to have a great deal in common with the ethnographic approach and offers transparent and stringent guidelines for analysis when needed. For these reasons, the methodological concepts of Grounded Theory are used to structure the analysis of data in the present study.

Three core variables emerged throughout the data collection process, which were related to the CRNA/patient interaction (50), patients' perspective of being prepared for general anesthesia (51) and CRNAs' professional identity (52). These represent three individual coding processes and are each related to the three articles of this dissertation, presented in figure 1.

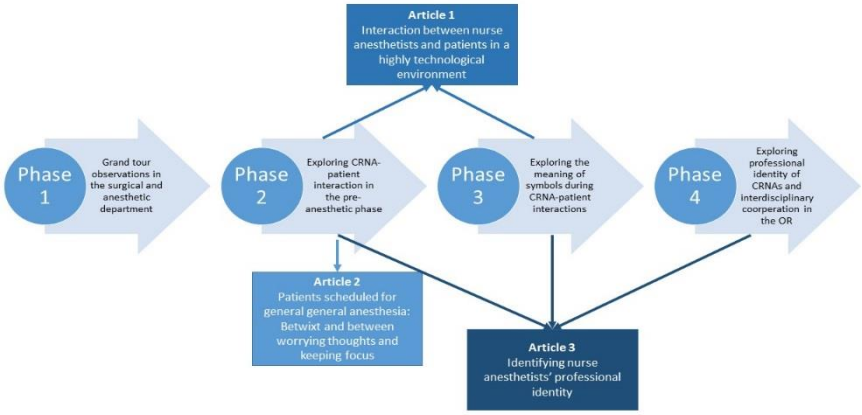


Figure 1: Relation between data collection phases and articles

The analytical concepts used were open, selective and theoretical coding and constant comparison. As ideas emerged during the coding process, memos were written consisting of ideas concerning the content of the codes and the relationships between them. This process led to subsequent theorizing (47). Field notes and audio recordings were transcribed consecutively. The researcher iteratively went from data to analysis, coding the data inductively. Each phase of data collection was coded before collecting new data.

Open coding was used to find a number of organizing principles to clarify the data (43). Two types of coding developed. In vivo codes were developed from the data itself. Other codes emerged through the meanings embedded in the transcribed observation and interview texts (53). The data collection in this study was situated in the social situation of preparing patients for general anesthesia. Therefore, it was relevant to code the data relating to the routine activities of both patients and CRNAs. Moreover, it was relevant to describe if there were rituals and patterns of action relating to the interaction between patients and CRNAs. Focusing on routines, rituals and patterns of action was a way to understand general norms or rules that guided everyday conduct in the pre-anesthetic phase (26). Open coding ended when the researcher directed attention to the core variable of the data (47) related to each coding process.

Data collection and analysis developed through phases 2-4 and led to selective coding. Selective coding focuses on developing the core variable and specifying the main relationships to the emerging categories (47), which entailed sorting data and developing the core variables and categories related to the three coding processes, each presented by a core variable. The key relationship between each of the three core variables and their categories is presented as a hypothesis, which will be elaborated in chapter 9. Through the coding processes, different chunks of data relating to the variables and categories were compared and memos written regarding how the data interrelated. In this way the basis of an emerging theory was developed (47) and similarities and differences in the collected data were explored (53).

The software program Nvivo was chosen for data management (54). The program stored diary notes, field notes, transcriptions of interviews, photographs, records of ideas and memos connected to codes. Nvivo helped to create order and an overview of the data and codes. Organizing codes into hierarchies created a clarity of ideas and patterns in the data. Coding trees were a useful tool for ensuring thoroughness in the coding process and for building a coding structure. Nvivo was a useful tool in the initial coding phase. When coding developed into selective coding it was necessary to complement the coding trees in Nvivo with the development of various models and figures and visually illustrate patterns and connections between selected codes.

Different combinations of sampling, that is, collecting data through the three aforementioned phases, coding and writing memos, resulted in a saturation of the emerging categories and variables, meaning that collecting more data would not contribute to the further development of emerging categories and variables (47).

7.2 THEORIZING IN ANALYSIS

In ethnographic analysis, it is not only very important to think about one's data, but also to think with and through the data. Theory is used as a resource to make sense of data (26) and to help to understand the phenomenon in question. There may be a need to adapt existing theories or adopt new theoretical ideas developed by the researcher (43). In relation to this the researcher need not to be limited to a single theory as a framework to analyze the data. It is possible to approach data from multiple perspectives. Well-founded theoretical ideas may provide significantly greater knowledge regarding why events occur in the patterned ways they do (26).

Integrating literature and theory in Grounded Theory is a controversial aspect. It is important to prioritize the data and core variables to be developed before the literature is incorporated(47). In contrast, in ethnography, literature and theories are used to

help to understand the phenomenon in question and in clarifying what is seen and heard (43). It is important that the data fits the theory and theory is a guide to understand the data (55). Theory of relevance for analysis in this dissertation appeared in the iterative process of collecting data and analyzing. The researcher was aware of the preunderstanding relating to the context of nursing and the developing theoretical knowledge appearing from the foreshadowed problems in the field of interest and an ongoing literature search (43). Inspired by Grounded Theory, the researcher found it important to primarily analyze data in a inductive manner, presenting the content of the core and sub-core variables before including further theoretical discussions (47). Accordingly, multiple theoretical perspectives were used when discussing the connection between the findings in each phase of data analysis. Furthermore, theoretical perspectives were also used to discuss the connection between the three core variables from phases 2, 3 and 4. This ethnographic study can be characterized as micro-focused research concerned with analyzing a particular face-to-face encounter between CRNAs and patients. The discussion of the connection between the three core variables with extant theory will, in the following sections, lead to the development of a micro-substantive theory on a particular situation in anesthesia nursing (26).

THEORETICAL FRAMEWORK

The use of theory in this study is primarily inspired by the approach of using theory after data collection and data analysis. The researcher entered research field with an open mind but not with a clean slate, as is done in traditional Grounded Theory. Adopting methodological concepts from Grounded Theory allows data outside a theoretical frame to emerge (56). Therefore, it has been important to use this inductive method of analysis. In the steps of designing, performing and analyzing, the researcher has periodically performed systematic literature searches in the area of empirical and theoretical interest. The literature is therefore used to make sense of data (26). The literature and theories used in this study are applied as 'lenses' to study the findings of core variables and the connection to sub-core variables and categories. The chosen theoretical frameworks allowed for new and different ways of looking at what may seem to be ordinary and familiar (57). Furthermore, theory takes description of data to a higher level of abstraction by integrating categories around the core variables (56). In this study, theory offers a comparative context and a framework for the interpretation and representation of data (58).

8.1 PRESENTATION OF THE CHOSEN THEORETICAL FRAMEWORKS

Throughout nursing history, there has been an ongoing discussion regarding whether to use theories from other disciplines to explore the holistic perspectives of nursing. Nursing scholars, who rejected the idea that nursing should rely on borrowed theories from other disciplines, argued that, in order to become a discipline in its own right, nursing should develop its own theories. Opponents to this argument argued that coherence is enhanced when questions from one discipline are answered with theories from another discipline (59). Consequently, the theoretical frameworks of this study are related to nursing (presented in section 8.2) and sociology (presented in section 8.3). The Fundamentals of Care have been chosen as the framework related to nursing (21). The framework is used as a lens to study the relationship between CRNAs and patients in the specific situation of preparing patients for general anesthesia with a focus on the relational dimension, integration of care and the contextual dimensions, which may influence the relationship of patients and CRNAs (21). The sociology of emotions is chosen with the purpose of exploring the nurse/patient relationship in an anesthetic context with a focus on emotions related to the interaction, actions, routines and rituals. The theory of emotion used in this study takes its starting point in Hochschild's book on emotion culture in societies (60). To explore routines and rituals further, Collins' theory on Interaction Ritual Chains (40) is used with an emphasis on the concept of emotional energy.

The two theoretical approaches of nursing and sociology have been chosen with the purpose of being able to support each other. Accordingly, they offer a deep and nuanced description of both anesthesia nursing relating to interaction with patients, patients' perspectives on being prepared for general anesthesia and CRNAs' professional identity.

8.2 THEORETICAL FRAMEWORK OF NURSING

8.2.1 FUNDAMENTALS OF CARE

An international group related to nursing and/or education was established to focus on the fundamental aspects of patient care. In spite of innovations in nursing practice and research, this group of researchers found that there is a gap in our understanding of what is important to patients and nurses working in complex contexts of care (61). Patient-centered care is a conceptual framework, which can be used to explore Fundamentals of Care in clinical practice (21). Three themes were identified in a narrative review of literature on patient-centered care: 1) The importance of patient participation and involvement, 2) Having and maintaining a relationship between the patient and the health professional, 3) The importance of having the right context where the care is delivered (62). The framework of Fundamentals of Care consists of three different levels formed as circles with the core relationship between nurses and patients in the center. The second level is the integration of care, which contains the actions concerning the individual patient's physical, psychosocial and relational needs. The third level, which is the outer circle of the framework, reflects the interdependence of the nurse-patient relationship and the wider system and political level of the healthcare system (Figure 5). Caring is defined as more than doing things to people and encompasses the nurse's ability to deconstruct and reconstruct a caring situation in order to assess and act on the patients' care needs. All this has to be performed instantly (21). This framework can contribute to a pertinent discussion of the findings in this study relating to patient-centered care in anesthesia nursing and how CRNAs are able to integrate the individual patient's care needs in a context characterized by highly-technological procedures and limited time for interaction.

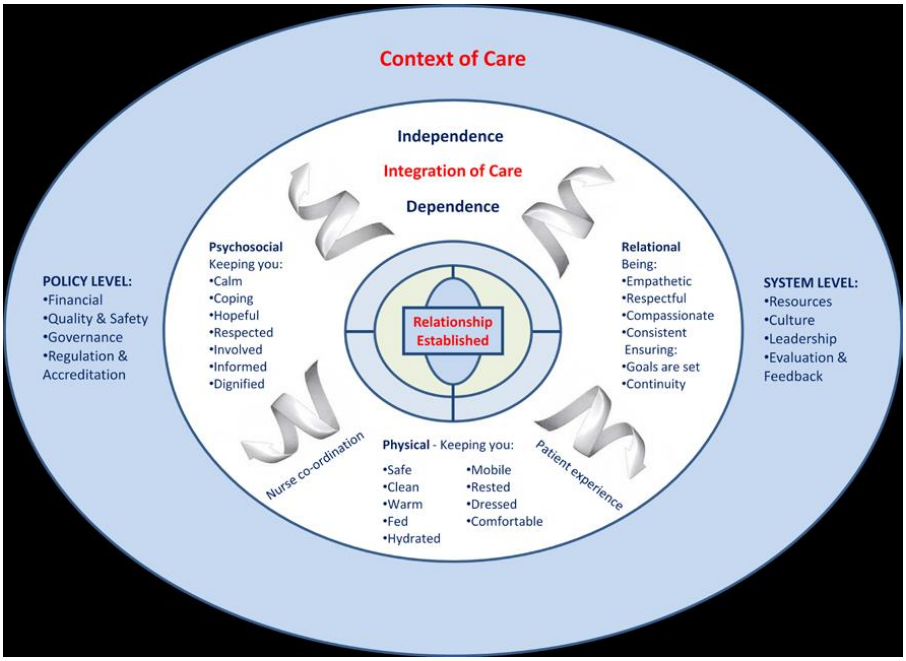


Figure 5: Fundamentals of Care represented by the three levels: Context of care, Integration of care and, in the center, the relationship established between patient and nurse. The figure is reproduced with permission from authors Kitson, Alison; Conroy, Tiffany; Kuluski, Kerry; Locock, Louise; Lyons, Renee. Printed in 'Reclaiming and redefining the Fundamentals of Care: Nursing's response to meeting patients' basic human needs' p. 17 (2013).

8.3 THEORETICAL FRAMEWORK OF SOCIOLOGY

8.3.1 EMOTIONAL LABOR

Arlie Hochschild, an American sociologist, first invented the term emotional labor in 1983 (60). The focus of her research regarded the emotional labor of flight attendants in the airline industry. In addition to performing physical and mental work, the flight attendants are doing something more, which is defined as emotional labor. This labor is characterized by 'the induction or suppression of feelings in order to sustain an outward appearance that produces the proper state of mind in others of being taken care of in a convivial and safe place' (60). Feelings are related to emotion and

Hochschild defines feeling as a sense like the sense of sight. Feelings are experienced when bodily sensations are joined with what the individual imagines or sees. Feeling is a way of discovering the viewpoint of the world (60) and signals the unconscious perspective of what the individual sees. This is a way of reflecting the 'me' that is put into seeing the person in front of you (60).

Jobs that require emotional labor have three characteristics in common:

'First, they require face-to-face or voice-to-voice contact with the public. Second, they require the worker to produce an emotional state in another person – gratitude or fear for example. Third, they allow the employer, through training and supervision, to exercise a degree of control over the emotional activities of employees' (60).

Feeling rules represent the emotions people are expected to express. These emotional expressions are guided according to their social roles in a specific context. Feeling rules can be characterized as a set of social guidelines whereby the individual compares and measures experience against the motivation for feeling. Motivation is mediated between feeling rules, which represents what one should feel, and emotion work, which represents what one tries to feel (63). Emotion work refers to the act of evoking, shaping or suppressing feeling in oneself. Hochschild mentions two ways for people to manage their feelings when performing emotion work, which is through surface and deep acting. Surface acting can be described as 'putting on the expression on my face or the posture of my body'. It is not a part of me (60). It is a way of deceiving others about how we really feel without deceiving ourselves. Deep acting is an exchange of emotion work and a conscious mental work whereby feelings are expressed spontaneously by pretending deeply and thereby altering oneself. In deep acting, the individual is deceiving him or herself as much as they are deceiving others (60).

8.3.2 EMOTIONAL LABOUR IN NURSING

Building on Hochschild's term of emotional labor, Theodosius applies the term to nursing (64). She argues that nurses' emotional care is different from flight attendants in several ways. Feeling rules in nursing are based on the ideal of nurses being naturally caring, which operates as a moral guideline, and thus makes it possible for patients to let nurses care for them in an intimate and personal way, where patients can share their thoughts and feelings about life with the nurse. This is an important and integrated component of nurses' emotional labor. Flight attendants' emotional labor are consumer oriented unlike the feeling rules between patients and nurses, which are an emotional exchange indicative of private emotional work. The power

balance between patients and nurses are negotiated through a freely given emotional change. Compared to flight attendants' controlled and scripted emotional labor, nurses' emotional labor is an exchange and involves an interactive process based on a relationship with the patient. Theodosius finds that patients require emotional labor because they feel vulnerable. Understanding the balance between trust and power is vital to be able to understand emotional labor in nursing. It is important to understand what the emotions are in order to understand the nature of emotional exchange between patients and nurses (64). Based on empirical research, Theodosius found that emotional labor was fully integrated within nursing care in the three primary functions of therapeutic emotional labor, instrumental emotional labor and collegial emotional labor. Therapeutic emotional labor is characterized by a process of promoting the health and wellbeing of patients towards independence and psychological and emotional wellbeing. Instrumental emotional labor is a direct result of a clinical nursing intervention; therefore, the motivation for the labor is instrumental. Collegial emotional labor is related to the relationships nurses have with both intra- and interdisciplinary team members (64).

8.3.3 EMOTIONAL MANAGEMENT IN THE WORKPLACE

Inspired by Hochschild's concept of emotional labor, Bolton (65) has developed a typology of workplace emotion. She focuses on the term emotion management, which is a way of examining the complexities of emotions in organizations from both the employer and the organization's perspective. Bolton presents a typology of workplace emotion, which contains four types of emotion management: pecuniary, prescriptive, presentational and philanthropic. Pecuniary emotion management is performed in frontline customer service in accordance with commercial feeling rules and is instrumentally motivated. Prescriptive emotion management contains many of the instrumental motivations of pecuniary emotion management, but can be much more complex because motivations are also related to altruism and professional status. Presentational and philanthropic emotion management rely on social feeling rules and the complex associated motivations. These feeling rules derive from conception of the maintenance of the interaction order. This interaction order contains a moral commitment to maintaining rituals of deference and demeanor that provide a sense of stability and security to the social actors in the situation.

The framework of emotional labor will contribute with further nuances and depth to the discussion of fundamentals of care in anesthesia nursing with a specific focus on characterizing the emotional labor, and the types of feeling rules in anesthesia nursing. The focus of Theodosius' three primary functions will be on the function of instrumental emotional labor, which is justified by the instrumental and high-

technological context of anesthesia nursing. Bolton's typology will primarily be discussed in relation to CRNAs' professional identity and the organizational influence of Department of Anesthesiology.

8.3.4 INTERACTION RITUAL CHAINS

Collins has developed a theoretical model of interactional situations with a focus on rituals and emotions. 'An interaction ritual is an emotion transformer, taking some emotions as ingredients, and turning them into other emotions as outcomes' (40). Rituals can be referred to as natural or formal rituals. Formal rituals are built up by mutual focus and emotional entrainment with formally stereotyped procedures (40). The ritual ingredients are a group assembly of two or more people that are physically assembled in the same place. There are barriers to outsiders. In this way it becomes clear who is participating in the ritual and who is excluded. There is a mutual focus of attention between the participants of the ritual and these participants share a common emotional experience or a common mood. The ritual outcomes are a feeling of membership and group solidarity. Furthermore, emotional energy such as confidence, strength and initiative in taking action is created in the individual. Participants also have experience of symbols representing the group such as words, gestures and visual objects. This leads to feelings of morality in the group, which consists of respecting symbols and defending the group from transgressors.

Emotions are a central ingredient and outcome of interaction rituals. In the interaction ritual theory, emotions are transformed in the process of interaction. The ritual begins with emotional ingredients, emotions are intensified into shared excitement and, as outcomes, they produce other forms of emotion (40), (Figure 6). The concept of emotion is broadened by introducing the concept of emotional energy. Emotional energy primarily consists of long-lasting emotional tones, but also dramatic and short-term emotions. The emotional ingredients of an interaction ritual are transient; however, the outcome is a long-term emotion with feelings of attachment to the group related to the ritual (40).

The theoretical model of interaction rituals and the concept of emotional energy contributes to further exploring the patterns of action and interaction in the relationship between CRNAs and patients in the pre-anesthetic phase.

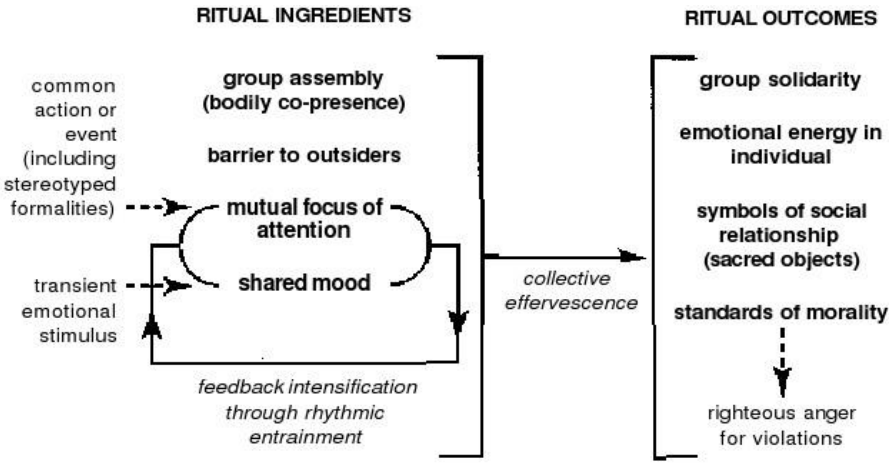


Figure 6. The interaction ritual consisting of ritual ingredients and ritual outcomes. The figure is reproduced by permission of the publisher from p. 48 of *Interaction Ritual Chains* by Randall Collins. C_2005 Princeton University Press.

8.3.5 RITES OF PASSAGE

Van Gennep (66) has developed the concept of 'Rites de Passage' in 1909, which is a transitional rite marked by three phases. The first is the phase of separation, which consists of symbolic behavior that indicates the individual's detachment from a fixed point in the social structure. During the next phase of liminality, the state of the individual is ambiguous. The individual passes through a state where there are little or no attributes from the first phase or the coming phase. In the third phase, the individual returns to society at another level. Turner (67) has focused his attention on the liminal phase. In the liminal phase the transition takes place, and Turner therefore sees this phase as the most crucial in the transitional rites (66). The individual in this phase of transition can be thought of as structurally invisible. The transitional being is defined by a set of symbols and a specific name (67). In the liminal phase, the social structure of *communitas* in presented. This structure means that the individuals are separated from society, do not own anything, their status is erased and the usual order is subverted (66). Van Gennep's and Turner's way of thinking about transition rites and liminality are very open and simple, allowing the model to be applied in many different settings (66). The concept of liminality in the setting of an OR is used to explore the nuances of patients' perspectives of being in a transitional phase on the day of surgery and to describe what characterizes this specific phase.

8.3.6 PROFESSIONAL IDENTITY

Nursing professionals can be described as persons who profess to be member of the nursing discipline and have individual characteristics and qualities that inform and motivate them to make good moral choices (68). According to Hoeve et al. (69) professionalization of nursing involves three interrelated areas: the development of nursing theory, nursing research and nursing practice. Ideally, these three areas are closely related. In this dissertation, the primary focus is on the nursing practice in the OR when CRNAs prepare patients for general anesthesia and how this practice can influence the professional identity of CRNAs. The nursing practice manifests itself through observations and interviews and will be discussed with the above presented theory of emotional labor, with a specific focus on the concept of feeling rules when CRNAs interact with patients and cooperate with interdisciplinary team members.

Cooley (48) introduced the concept of the social self, which he termed the looking-glass self. By understanding and interpreting others' perceptions of us, we are imagining how other people see us, and through this, we create an image of our self (31). The social self consists of three components: 1) the imagination of our appearance to the other person; 2) the imagination of their judgment of that appearance; 3) and some form of self-feeling, such as pride or mortification (48). Consequently, these three components can be used to create a deeper understanding of CRNAs' own imagination of their appearance toward interdisciplinary team members and the imagination of the team members' judgement of CRNAs' appearance.

PRESENTATION OF FINDINGS

In the process of analyzing and sorting data, it became clear that data could be collated into in three main groups relating to interaction between CRNAs and patients, patients' perspective on being scheduled for general anesthesia, and CRNAs' professional identity and cooperation with interdisciplinary team members. In figure 7 below, the phases in the analysis inspired by methodological concepts of Grounded Theory are presented.

Phases in analysis	Purpose	Memo writing	Findings – Interaction between nurse anesthetists and patients in a highly technological environment	Findings – Patients scheduled for general anesthesia	Findings – Identifying nurse anesthetists' professional self
Open coding	Capturing the substantive content of the area under study. Related codes were conceptualized into categories.	Researcher's reflections and ideas with the purpose of linking codes with the core variable	Context near coding - Nvivo coding - Coding emerging from meanings embedded in the data	Context near coding - Nvivo coding - Coding emerging from meanings embedded in the data	Context near coding - Nvivo coding - Coding emerging from meanings embedded in the data
Selective coding	A core variable emerged from the content of the categories	Asking questions, posing problems, suggesting connections and patterns	Creating emotional energy. Instilling trust. Performing embodied actions.	Betwixt and between worrying thoughts and keeping focus. Being a number or a person. Relaying on professional expertise.	Identifying the professional self. Gliding between tasks and structures. Depending on independence.
Theoretical coding	Developing the hypothetical relationship between the categories	Patterns and connections between core variable, sub-core variables and categories	Awareness of motivation in patient care leading to higher emotional energy between nurse anesthetists and patients	The greater the experience of being kept in focus the less worrying thoughts and feelings of being a number	The greater focus on professional status the greater risk of compromising fundamentals of care

Figure 7: Coding strategies in analysis related to the three articles, ending up with the hypothetical relationship between variables and categories in each article.

In the following sections, each of the main groups of findings will be presented in more detail. Each group is related to one of the three articles submitted as a part of this dissertation (50–52). The findings presented in the three articles are illustrated in similar figures (Figures 8-11). At the top of the figures, the core variable is presented, followed by the sub-core variables and categories. The arrows illustrate the interrelatedness of sub-core variables and categories at all levels in the figures.

9.1 INTERACTION BETWEEN NURSE ANESTHETISTS AND PATIENTS IN A HIGHLY TECHNOLOGICAL ENVIRONMENT (ARTICLE 1)

The findings in this article are from data collection in phases 2 and 3. Here, the focus is on interaction between CRNAs and patients and the meaning of symbols in the observation context. The main finding of the core variable *Creating emotional energy* is related to how CRNAs engaged in a relationship with patients during their preparation for general anesthesia. Furthermore, the core variable encompasses CRNAs' way of integrating patients' physical, psychosocial and relational needs before induction. Figure 8 illustrates the connection between the core variable and the sub-core variables of *Instilling trust* and *Performing embodied interactions*. The CRNA and the patient's mutual focus on the procedure and the CRNA's attention on the patient's care needs involves *instilling trust*, while *performing embodied actions* is a description of CRNAs' tacit and embodied ways of acting while preparing patients for general anesthesia. The categories related to each sub-core variable were *Offering a lifeline* and *Controlling interaction*, *Depending on routines in interaction* and *Integrating technology and humane care*.

Blumer's three premises for symbolic interactionism (30) inspired the researcher's interpretation of symbols in the OR when patients are prepared for general anesthesia. This is not elaborated in article 1(50) due to the word limitation and content priorities of the group of authors and thus will be further elaborated in the following section. According to Blumer's first premise, patients and CRNAs act in relation to the meaning held by objects in an OR. These objects could be anything that both CRNAs and patients notice in the OR environment, including physical objects, instruments and technical equipment and health professionals in the OR. Blumer's second premise, which is the meaning of an object or a symbol in the perspective of CRNAs and patients, appears in the specific social environment (30). The findings in phase 2 show that CRNAs perform specific routines, verbal and embodied actions when interacting with patients. When preparing patients for general anesthesia, these routines and actions are of great importance for CRNAs and patients, which were expressed through the emotional energy created between them (50). Blumer's third premise (30) is an interpretive process of exploring and validating the symbolic meanings on the photographs together with CRNAs and patients. In this process, each photograph's relevance became clear, as did the correct order of the actions and routines in the photographs. Technical instruments, medication for the anesthetic procedure and social interactions between CRNAs and patients were characterized as the social objects in the OR (50). A photograph presents each finding and they are placed in a circle with a beginning and an ending, illustrating a linear process in patients being prepared for general anesthesia along with arrows going in both

directions conveying the dynamic process of interaction between CRNAs and patients (figure 9). Words are symbols. They are meaningful and are used to create and communicate physical occurrences or objects, feelings, ideas and assessments. The meaning of words as symbols is social and dependent of the definition of the specific situation (31). CRNAs used particular sentences in the last minutes before patients were inducted with general anesthesia. Typical phrases included 'Sleep well', 'I will take care of you' and 'Try to think of something nice'. In conjunction with these reassuring terms, CRNAs also lowered their voice. This combination of tone of voice, particular sentences and embodied actions was a way to instill feelings of trust in patients (50).

9.1.1 CONCLUSION

Creating emotional energy is an integrated part of establishing a relationship with the patient in a highly technological environment. CRNAs' awareness of their motivation for interacting and caring for patients may lead to higher emotional energy between CRNAs and patients, thus resulting in patients feeling confident and secure. Words, actions and objects are symbols, which are an important part of the interactions between patients and CRNAs in the OR. The hypothetical relationship between variables and categories being that awareness of motivation in patient care lead to higher emotional energy between CRNAs and patients (Figure 7).

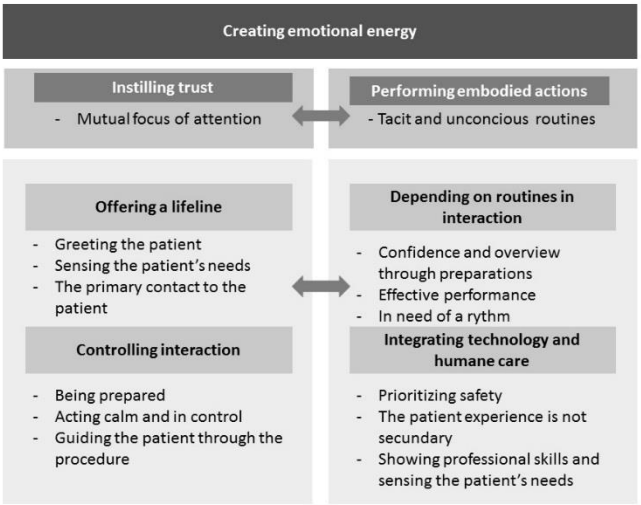


Figure 8: Findings in article 1: Interaction between nurse anesthetists and patients in a highly technological environment

Figure 9: Dynamic patterns of creating emotional energy when preparing patients for general anesthesia (50).

9.2 PATIENTS SCHEDULED FOR GENERAL ANESTHESIA: BETWIXT AND BETWEEN WORRYING THOUGHTS AND KEEPING FOCUS (ARTICLE 2)

The findings in this article are from an analysis of data collected in phase 2 with a focus on patients' perspectives of being prepared for general anesthesia. The core variable is *Betwixt and between worrying thoughts and keeping focus* and is a way to describing patients being in an intermediate position on the day of surgery, not knowing the outcome of the anesthetic and surgical procedures. The core variable is further elaborated through two sub-core variables *Being a number or a person* and *Relying on professional expertise* (Figure 10). *Being a number or a person* represents patients' coping strategies when being in a vulnerable situation. *Relaying on professional expertise* describes patients' need for care in this situation. Findings show that there is a specific kind of ambiguity in patients' experiences of being prepared for general anesthesia. Patients' coping strategies are a balancing act between a wish to distance themselves from the seriousness of the situation, as illustrated by the use of humor, and a desire for seriousness from the CRNA. Equally, patients' need for care is, on the one hand, a desire for professionalism on the part of

the CRNA and, on the other, a desire to be treated as an individual. The categories related to each sub-core variable are *Being put away* and *Senses are changing*, *Being guided and informed* and *Losing control.*

9.2.1 CONCLUSION

There is a certain complexity and ambiguity in patients' psychosocial care needs before general anesthesia. A mutual dependence exists in CRNAs' and patients' interactions in order for CRNAs to accommodate these care needs. If patients have an experience of being kept in focus, they may experience fewer worrying thoughts. Being kept in focus represents each patient's oscillation between coping strategies and caring needs. The hypothetical relation between variables and categories being that, the greater experience of being kept in focus, the fewer worrying thoughts and feelings of being a number (Figure 7).

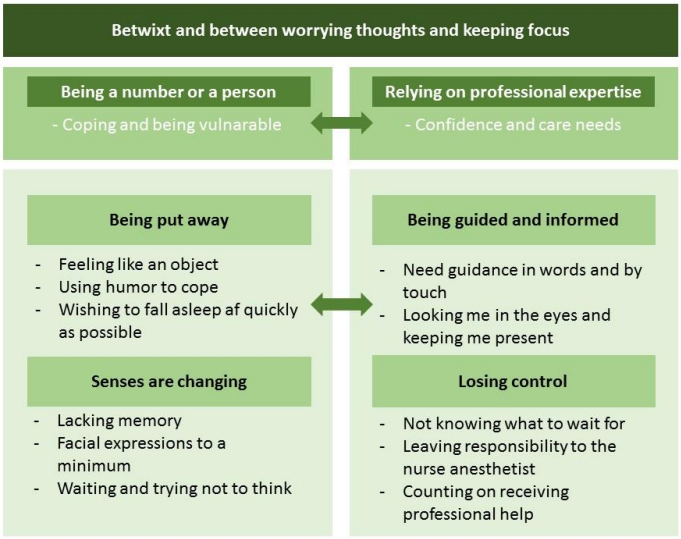


Figure 10: Findings article 2: Patients scheduled for general anesthesia: Betwixt and between worrying thoughts and keeping focus

9.3 IDENTIFYING NURSE ANESTHETISTS PROFESSIONAL SELF (ARTICLE 3)

The findings in this paper are from analyzing and sorting data in phases 2-4 with a focus on CRNAs' professional identity and collaboration with the interdisciplinary team members. The core variable is *Identifying the professional self*, which describes duality in CRNAs' focus on patient safety and taking care of patients' psychosocial needs. Moreover, anesthesiologists highlight two different expectations of CRNAs of being a reflective nurse or a semi-doctor. The core variable is further elaborated through two sub-core variables of *Gliding between tasks and structures* and *Depending on independence* (Figure 11). *Gliding between tasks and structures* describes the dynamic hierarchy between CRNAs, anesthesiologists and OR nurses. *Depending on independence* describes the CRNAs' own expectations and imaginations of their professional identity and how these imaginations are challenged by anesthesiologists and OR nurses' perceptions. CRNAs describe an independence in performing procedures and anesthesiologists describe an interdependence in the teamwork with CRNAs. The categories related to each sub-core variable are *Being a piece in puzzle* and *Being a juggler of time and production, Being important in an essential moment* and *Being a co-pilot or following recipes.*

9.3.1 CONCLUSION

CRNAs are balancing a challenging and ambiguous field of tensions in their efforts to describe a part of their professional identity. CRNAs have a wish to be independent and in charge of patients airways on the one hand and, on the other, a desire to control and secure a trusting relationship with the patient. Findings show that the greater the focus on interdisciplinary hierarchy, the greater the risk CRNAs have of compromising the psychosocial and relational aspects of fundamentals of care for patients. The hypothetical relation between variables and categories being, the greater focus is on professional status the greater risk of compromising fundamentals of care (Figure 7).

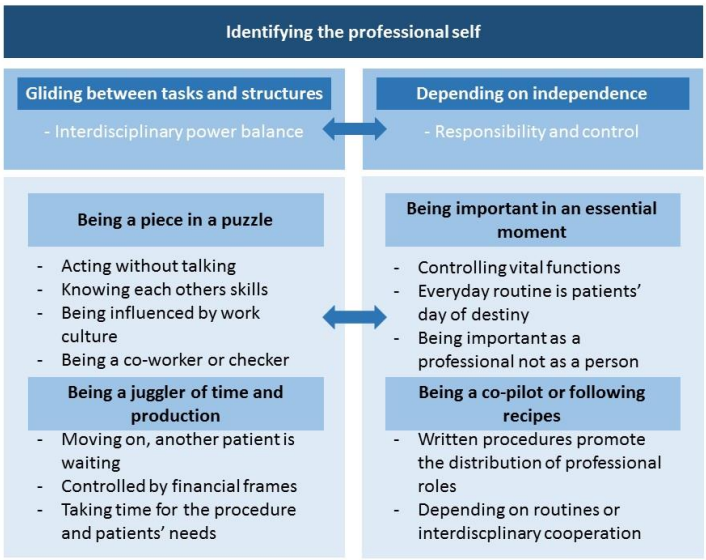


Figure 11: Findings article 3: Identifying nurse anesthetists' professional identity.

DISCUSSION

This study aimed to explore anesthesia nursing during the preparation of patients for general anesthesia. The focus was to: 1) explore the interaction between patients and CRNAs, 2) to explore patients' perspectives of the situation and, 3) to explore CRNAs' professional identity. In each of the three articles, the discussions were based on the article's individual focus. The intention of the present discussion is to discuss the findings of all three articles in a more general perspective. The discussion includes the following sections: A) a discussion of the findings from the three articles from a theoretical perspective and, B) a discussion of methodological considerations.

10.1 CONNECTION BETWEEN FINDINGS

Based on findings presented in the three articles, analytical variables and categories are discussed according to the theoretical framework presented in chapter 8. Three different motivations for interaction emerged from the variations and relationships between the core variable *Creating emotional energy* and the two sub-core variables *Instilling trust* and *Performing embodied actions* (50). These motivations involved focusing on the patient and not on which health care professional offers a lifeline, CRNAs being the primary lifeline, and time and operating turnover time. These motivations for interaction can also be described as Patient-centered Interaction, Profession-centered Interaction, and Production-centered Interaction, respectively. The CRNA's professional self is closely related to the motivations for interaction. Motivations are attached to the CRNAs professional performance when interacting with patients and interdisciplinary team members. The professional performance is the individual CRNA's presentation of the professional self (65), which has great influence on how creating a relationship with the patient is valued and thus what type of patient care is being performed (52). The CRNA's assessment of the individual patient's care needs and the professional performance toward the patient has great consequences on patient's predisposed confidence to the CRNA during the technical procedure (51).

The following discussion will consist of a discussion of the CRNAs' three different motivations for interaction, followed by a discussion of the microstructures of the relationship between the CRNA and the patient. The last part of the discussion concerns the interaction outcome related to the patients' experiences.

10.1.1 MOTIVATION FOR INTERACTION

Motivations for interacting and establishing a relationship with the patient are embedded in the social situation of preparing patients for general anesthesia, interdisciplinary relationships, institutionalized practices and interdisciplinary hierarchies in the OR. Motivations for interactions are dynamic and constantly emerging and changing through the process of interaction (65). Consequently, CRNAs fluctuate between the three types of motivation according to the work culture in the anesthetic unit and the organizationally prescribed demeanor of the hospital. Furthermore, a complex web of socially and professionally embedded motivations of the individual CRNA affects the CNRA's performance when interacting with each patient. The three types of motivation are different ways to enact feeling rules. According to Hochschild (63) 'It is left for motivation (what I want to feel) to mediate between feeling rule (what I should feel) and emotion work (what I try to feel)'. Feeling rules are influenced by the hospital's organization and the professional education to be a nurse and furthermore to be a CRNA. Emotional work is characterized by the CRNA trying to evoke, shape or suppress feelings in her/himself. There is a cognitive focus of evocating or suppressing feelings relating to the type of patient interaction and feelings relating to meeting the hospitals and interdisciplinary team members' expectations of time, production and type of patient care. The concepts of emotion work and feeling rules will be further elaborated during each presentation of each motivation for interaction.

The three types of motivation for patient-centered interaction, production-centered interaction and profession-centered interaction range between the dichotomy of nursing care and doctors' approach to cure and treatment. Caring for patients, treating, and curing them are not separate actions. Both types of work are needed to restore the health of patients. However, while curing is highly valued and perceived as the province of physicians, caring is associated with nursing and is assigned a lesser value (70). The dichotomy of care and cure can further be explored by including a short presentation of the biomedical and biopsychosocial models' influence in the healthcare system and thus patient care. In 1977, Engel (71) published a paper featuring a biopsychosocial model with the purpose of challenging the existing biomedical model. Engel believed that to understand patients' suffering in an adequate way it was important simultaneously to focus on the biological, psychological and the social dimensions of illness. The biopsychosocial model can advantageously change the health professionals' stance from objective detachment to reflective participation in a relationship with the patient. Furthermore, it is important to focus on the underlying emotional climate in the clinical relationship. The emotional tone imbues the relationship with caring, trust and openness (72). Patient-

centered interaction can be associated with the biopsychosocial model, while Production-centered interaction can be associated with the biomedical model, with its focus on objectiveness and a duality in mind and body.

Production-centered interaction is characterized by time and operating turnover time controlling the interaction with patients (50). The priority is on planning and performing anesthetic and surgical procedures with the goal of curing and supporting patients' vital signs in a time-effective way. This type of motivation is influenced by a task and time-driven culture and thus by a biomedical approach to the specific procedure (73). Feo & Kitson (73) present three propositions on why fundamentals of care are rendered devalued and invisible in clinical practice. It can be argued that these three propositions reflect the motivation of production-centered interaction. The first proposition is that 'The biomedical model continues to dominate over more patient-centered biopsychosocial models'. To achieve high production, the focus in the Department of Anesthesiology is on how to perform the anesthetic and surgical procedures in a time-effective way to secure productivity and efficiency. The second proposition is that 'Healthcare systems do not value the delivery of fundamental care'. The third proposition is that 'Nurses themselves do not (or cannot) value fundamental care'. In relation to the second and third proposition, CRNAs value relying on doctors' discipline and find it prestigious to be able to perform some of the same tasks as the anesthesiologists (52). Reading the curriculum for the theoretical part of the training to become a CRNA evidences that nurses participate in 200 theoretical lessons with a particular emphasis on physical, anatomical and pharmacological subjects. Fewer than 10 lessons are related to the fundamentals of care in anesthesia nursing (15). This clearly indicates that the education system of the CRNA and clinical practice does not value fundamental care to patients undergoing anesthetic procedures. One may wonder if the reason for this is that nurses are required to undertake two years of clinical practice before applying to become a CRNA, and are therefore expected to have experience in performing fundamental care. Furthermore, nurses are trained in fundamental care during their education for becoming a RN. Is the conclusion then that no further skills in fundamental care are required? Feo & Kitson (73) argue that there is evidence to suggest that nursing education contributes to a devaluation of fundamental care in nursing students. This evidence makes it an imperative to embed fundamental care throughout the entire nursing curricula. This evidence can be related to the curricula of future CRNAs in Denmark. Findings show that CRNAs in clinical practice are downsizing the psychosocial and relational aspects of fundamentals of care in favor of performing highly technical procedures (52). This is a strong indication of the need for fundamentals of care being systematically embedded in the education in anesthesia nursing. The present education of CRNAs indicates that the education system is

encouraging CRNAs to be reliant on the biomedical model, which relates to the discipline of anesthesiologists.

Patient-centered interaction is characterized by CRNAs valuing the interaction with each patient. CRNAs prioritized the organization of the technological procedures and cooperation with OR nurses to be able to accommodate patients' individual care needs in order to instill feelings of trust and safety (50). The motivations for patient-centered interaction are associated with the biopsychosocial models. The biopsychosocial model proposes that arriving at a correct biomedical diagnosis and the treatment of this is only a part of a clinician's job (72). Caring is an integral part of the healing process, which consists of the integration of patients' physical and psychosocial needs. Moreover, CRNAs assess which type of relationship to establish with the patients in order to be able to meet patients' care needs (23). Patient-centered interaction is closely related to the concept of patient-centered care. Patient-centered care includes patient participation and involvement, the relationship between the patient and the healthcare professional, and the context where care is delivered (62). During the preparation of patients for general anesthesia, CRNAs and the other healthcare professionals in the OR are challenged by the context limitations such as time, production and efficiency. However, it is possible to involve patients in the procedure by guiding and informing them about the course of actions, while assessing and taking patients' coping strategies into account (51). Care is delivered in a context influenced by the biomedical model with a focus on efficiency and productivity, which may require a certain form of creative and reflexive thinking to utilize time with the patient in the best way. Performing care in an anesthesia environment is closely associated with the invisibility of caring activities while performing technical procedures. The CRNAs' way of working with the technical instruments and at the same time interacting with patients can be termed invisible work, which is characterized by verbal and symbolic expressions, body language and ways of using material objects (74). This invisible work is also related to Blumers' three premises of symbolic interaction (30), elaborated in section 9.1, and the tacit meaning of objects in the OR and CRNAs' actions related to technical procedures in combination with specific sentences and touch.

The profession-centered interaction is influenced by the work culture of the Department of Anesthesiology and by the interdisciplinary hierarchy - mainly between CRNAs and anesthesiologists, but also between CRNAs and OR nurses (52). The division of professional roles between CRNAs and OR nurses is challenged in relation to who is going to be the primary contact and thus offer trust and confidence to the patient during preparation for the anesthetic induction. CRNAs value having the primary contact with patients when preparing them for the anesthetic procedure

and being able to control the interaction taking place (50). CRNAs and anesthesiologists experience a dynamic hierarchy between them due to gliding tasks and structures where CRNAs are able to perform some of the same clinical routines as anesthesiologists (52). Working closely together as an interdisciplinary team in the OR when preparing patients for general anesthesia results in different imaginations, expectations and judgements of each other's professional skills. Exploring these in relation to CRNAs, anesthesiologists and OR nurses' professional skills are a way of describing CRNAs' professional identity. Cooley (48) mentions three components in the theory of the looking-glass self, which is a way to describe a person's social self. In relation to the context of CRNAs, the first component is CRNAs' imagination of their appearance towards colleagues in the interdisciplinary team in the OR. The second component is CRNAs' imagination of interdisciplinary colleagues' judgement of the CRNA's appearance. The third component is that these imaginations result in a form of self-understanding in CRNAs. The thing that moves CRNAs to pride or shame is the imagined effect of the reflection upon another's mind (48), in this case it is the reflection upon OR nurses' or anesthesiologists' minds. These three components can be used as a framework for creating a deeper understanding of the different imaginations and judgements primarily experienced by CRNAs. Through the CRNAs' perceptions and interpretations of interdisciplinary colleagues and patients' imaginations of the CRNAs, CRNAs form an image of themselves (31).

CRNAs' imagination of how they act towards anesthesiologists are influenced by their certified education in anesthesia nursing and CRNAs find themselves influenced by the natural sciences and lean toward the biomedical tradition of the anesthesiologist. Thus, they are moving away from the fundamental care of patients. Being independent in routines requires that CRNAs are able to meet the responsibilities placed in the anesthesiologists' delegated responsibility of the anesthetic procedure. This results in CRNAs placing specific value in their performance of technical skills due to patient safety (52). CRNAs imagination of how they act towards OR nurses are influenced by how they value the contact and interaction with the patient and their need for being in control of the patient interaction to be able to sense the patient's need for care (50). CRNAs' professional self appears to be influenced by a dynamic hierarchical order relating to both anesthesiologists and OR nurses in the division of technical and caring tasks. The dynamics in the hierarchical order is influenced by knowing each other's professional skills (52) and the experience of professional status. Professional status is elaborated in section 10.1.2. CRNAs' imagination of anesthesiologists' and OR nurses' judgement of them is therefore related to their performance of technical skills and the distribution of patient contact between OR nurses and CRNAs, respectively.

Anesthesiologists' imaginations and expectations of CRNAs are ambiguous toward an expectation of CRNAs as being either semi-doctors or a desire for them to be reflective nurses. In Cooley's terms (48), what moves CRNAs to pride or shame is the balance between feeling independent and responsible for securing patients' airways and administering complex medications, thus performing highly specialized procedures, or being the anesthesiologist's assistant, performing fundamental care to patients. CRNAs' imagination of anesthesiologists and OR nurses' judgements of them is related to the pride they feel of being responsible for highly specialized procedures. Nurses providing physical care for patients are shown to have lower status than more skilled and educated nurses, who are able to move above the fundamental and physical care of a patient's body. Therefore, performing fundamental care is less prestigious than performing biomedical-directed acts (75). CRNAs' self-feeling is dependent on a feeling of independence and professional status when performing highly specialized procedures and feeling in control of the situation (52).

Cooley's components of the looking-glass self are also interesting to discuss in relation to CRNAs' interaction with patients and the way this interaction influences CRNAs' professional self. CRNAs' imagination of how they act toward patients is characterized by a certain trust in their own clinical skills, which they gain during their training to become a CRNA and through clinical practice. This trust is closely related to routines of preparation before the patient arrives (50). During the technical preparation, CRNAs also prepare themselves mentally to be able to assess the individual patient's care needs and guide them through the procedure. In the technical preparation of the patient, a feeling of trust in being able to assess patients' care needs during the performance of technical procedures is needed. This can be described as CRNAs experiencing a double confidence within their clinical skills related to patient preparation and interaction (76).

Characteristic for CRNAs' imagination of patients' judgement of them is CRNAs' division in thinking themselves as being important as a person or as a professional, which is related to the individual CRNA's way of valuing personal involvement in the interaction with the patient (52). CRNAs' double confidence in their clinical skills facilitates their performative skills in efficiently carrying out the technical procedure (64). In the category *being a juggler of time and production* a CRNA stresses how important it is for her to have everything prepared before the patient arrives (52). This is also expressed by a CRNA in article 1, who points out that the picture of the medical trolley symbolizes being prepared, which is prerequisite for being able to assess patients' care needs (50). Being prepared is a signal to the patient of control, safety and professionalism, which can facilitate a calm and receptive mind in the

CRNAs. This enables both the CRNA and patient to relax and promotes the patient's confidence in the CRNA's clinical skills (64).

The findings presented in article 2 (51) on the patients' perspective can also add to the description of CRNAs' professional self. Patients are predisposed to trust the CRNA's professional expertise in preparing them for general anesthesia in a safe way. Patients' expectations of care when being prepared for general anesthesia are, for CRNAs, to be in control of the situation and with a certain professional rapidity perform the technical preparations while simultaneously guiding the patient through the procedure. Patients' confidence is placed in the CRNAs' technical skills and in the way in which these technical skills are performed. Furthermore, patients need to have confidence in themselves, their personal understanding of the situation and their ability to cope with uncertainties related to the anesthetic and surgical procedure. The feeling of confidence in CRNAs' actions and in the patient's own judgement of CRNA is the basis of trust (77). Consequently, patients also experience a double confidence in the particular situation (51).

Trust between patients and CRNAs is related to an asymmetrical relationship, where the patient has accepted the involved dependency of the CRNA. Moreover, trust is a strategy to bridge the gap between the present situation of being prepared for general anesthesia and the anticipation of a successful result for both the anesthetic and surgical procedure (76). Therefore, trust is a fundamental ingredient for patients when being in the liminal position of being betwixt and between worrying thoughts and keeping focus (51). The context of the OR and the interaction between patients and CRNAs are both part of the trustworthiness of CRNAs (77). Violation of the trust between patients and CRNAs may take place when the context is dominated by the biomedical work culture and the value of establishing a relationship with the patient is downsized in favor of technical skills. The CRNAs' confidence in the specific situation of preparing patients for general anesthesia may by violated due to loss of control in the interaction with the patient if another colleague takes over. This may result in difficulty in being able to assess the patients' care needs during the procedure. Not having the time to prepare for the technical procedure before the patient is in the OR may also influence CRNAs' confidence in performing a patient safe procedure (52). What moves CRNAs to pride or shame in relation to patient interaction is their professional performance of technical skills, the value they place in their role when interacting with patients (52) and their feeling of compromise due to the influence of context of care (21).

10.1.2 FEELING RULES IN ANESTHESIA NURSING

Derived from the three types of motivations for interaction with patients before general anesthesia, feeling rules in the Department of Anesthesiology are complex. Motivations and feeling rules are seen to have an impact upon the presentation of CRNAs' professional self and thus to have influence on the social situation in the OR and the social and organizational world (65) of the Department of Anesthesiology. Bolton's presentation of the typology of workplace emotion (65), consists of four types of emotion management mentioned in section 8.3.2. The Department of Anesthesiology can be described by the prescriptive emotion management. Here CRNAs act out a prescribed performance that contains instrumental motivations, motivations of status and altruism. Professionals have to balance the feeling rules of their profession against the public organization which provides them with employment. CRNAs' influence of the biomedical model both during education and in clinical practice dictates feeling rules imposed by the hospital as an organization and each unit in clinical practice. Therefore, emotion work of CRNAs is dominated by prescriptive emotion management, which includes instrumental motivations associated with the production-centered and time-limited interaction. CRNAs also balance the feeling rules of their profession against the instrumental demands of the hospital. In the ambiguity of imagining themselves as being important as a person or being important as a professional performing, a technical procedure (52) is placed the multifaceted nature of caring. The CRNAs' skills do not only lie in accomplishing technical tasks, but also in creating the right emotional context of care (65). Doing a little extra emotion work by performing creative altruism is challenged by production. Thus, finding an extra few minutes to ease the patients is becoming more difficult (78). Philanthropic emotion management is characterized by offering care as a gift, which also represents the genuine quality of care (63).

CRNAs are working in a field where feeling rules are dominated by status relating to the biomedical approach to treatment and task performance. The prestige lies in the performance of high technical procedures and not in fundamental care, which is perceived to have no currency and therefore is rendered invisible and devalued (73). CRNAs are at risk of detaching themselves from the caring role in favor of performing technical procedures. The organization and the work culture of Department of Anesthesiology have a tendency to demand routine compliance rather than feeling rules (65). This tendency includes the priority of saving time between operations at the expense of patient-centered interaction and professional values (52). However, organizational demands of efficiency and influence of the biomedical model do not negate the individual CRNA's subjectivity. The way CRNAs prepare for the technical performance of general anesthesia is influenced by each CRNA's

subjectivity and professional values. The way CRNAs perform embodied actions and take time to ensure that patients have a lifeline during the procedure (50) is an attempt to meet each CRNA's subjectivity. Emotion management can be demanding and skilled work. It is about action and reaction in each nurse/patient situation. The CRNA is expected to respond to the patient in a personal way and is shaped by the specific situation, such as preparing a patient for general anesthesia. Like performing technical procedures, emotion management in dependent upon how skillfully a situation is managed (79). Conflicting feeling rules occur when pecuniary feeling rules meets prescriptive feeling rules. This happens when CRNAs are having to be jugglers of time and production (52) and embedded in the professional feeling rules of CRNAs is a desire to offer care and instill trust in patients in a vulnerable situation (50). Conflicting feeling rules lead to CRNAs feeling compromised and in conflict with professional values of being a nurse when the context of care is not designed to, and does not value, fundamental patient care (23). The individual CRNA varies between altruistic and patient-centered motivations on the one hand and instrumental motivations connected to professional status on the other. CRNAs have to balance the feeling rules of the context of care against the feeling rules of their profession. This balance of feeling rules has a great influence on patients' experiences of being cared for in a trusting environment.

10.1.3 ESTABLISHING A NURSE/PATIENT RELATIONSHIP IN ANESTHESIA NURSING

The previous section illustrated that care performed in anesthesia nursing has special conditions, which vary in types of care being performed in, for example, a medical ward. The cause of medical patients' hospitalization is different from a patient scheduled for an elective surgery in a surgical ward. Theodosius presents three different purposes of performing therapeutic emotional labor (TEL) and instrumental emotional labor (IEL). An important part of nursing is the therapeutic part of listening to patients' concerns and problems and providing a safe place where patients can express their feelings and talk about the changes taking place in their lives. In surgical and anesthesia nursing, patients are admitted to hospital to have physiological procedures performed. The type of nursing relating to these procedures differs from creating a relationship and listening to patients' concerns of being ill by being more instrumental (64). The purposes of TEL are: 1) the establishment and/or maintenance of the therapeutic relationship between nurse and patient, 2) To facilitate patient cooperation with care offered, 3) to encourage the patient to take responsibility for their own health and wellbeing (64). The purposes for IEL are: 1) To minimize patient discomfort and pain due to an invasive procedure, 2) To facilitate patient cooperation with clinical procedures, 3) To facilitate the nurse's clinical competency (64).

Accordingly, anesthesia nursing can be characterized as being mainly instrumental in its focus on CRNAs instrumental skills when performing technical procedures and the patients' physical body and safety. There is no time or place for therapeutic nursing that consists of talking to patients about their concerns for the future and the life changes that the diagnosis may provide.

Feo and Kitson (73) present a table of working definitions of the fundamentals of care, which consist of physical, psychosocial and relational elements of care. When scrutinizing the table with the context and findings of anesthesia nursing in mind, it provides a clear image of the type of care CRNAs provide and in which elements of care they are challenged. The type of physical care that CRNAs perform is related to the patient's respiration, circulation and temperature. In collaboration with the OR nurse, each patient is carefully placed on the operating table to prevent pressure ulcers and that the sterile principles are respected. The majority of these physical elements are related to highly technological procedures, CRNAs' clinical competencies and patient safety; all of which are closely connected to a specific responsibility and thus leave no room for compromise (17). The psychosocial and relational aspects of fundamentals of care are influenced by the context of care in Department of Anesthesiology and by CRNAs' motives for patient interaction. Therefore, these two aspects are in risk of being downsized in favor of time, production and professional status. As discussed in the third article (52) a greater awareness of IEL and the possibility to interact with patients while performing technical procedures are a way of uniting care and technology and to personalize patients' experiences of being prepared for general anesthesia. This may also result in patients feeling less like an number and mitigating their worrying thoughts (51).

The day of surgery is characterized by patients being in a liminal position in their lives and also in relation to hospital admission (51). In this context, being in a liminal position means that a person becomes a patient and this indicates a change in identity. Patients can roughly be characterized by being separated from society, everyday life and social positions. People from different social backgrounds and with different diagnoses become part of a single social structure - being a patient (66). The liminal position indicates the risk of patients being treated like an object and this feeling can be enhanced when patients enter a highly technological environment. Patients value eye contact and embodied actions when being guided and informed during the pre-anesthetic procedures (51), which is a way of minimizing patient discomfort and facilitating patient cooperation during the clinical procedures (64).

CRNAs are working in an environment characterized by clinical routines with the purpose of ensuring patient safety. These routines of preparing for and performing

the technical procedures are specific performances that can be assimilated into rituals (26). During the CRNA's performance of the specific ritual related to a technical procedure, the interaction with the patient is also taking place. In the following section, the importance of CRNAs' rituals and patient interactions will be discussed.

10.1.4 LEVEL OF EMOTIONAL ENERGY DURING CRNA AND PATIENT INTERACTION

The discussion of emotional energy is inspired by Randall Collins' figure of an interaction ritual's ingredients and outcome (40), (Figure 6). As presented in section 8.4, an interaction ritual is an emotional transformer, taking some emotions as ingredients, and turning them into other emotions as outcomes' (40). In the context of anesthesia nursing, the ritual is expressed through the preparing procedures for general anesthesia before patients arrive at the OR and during the actual preparation of the patient. This ritual is expressed in the finding of category *Depending on routines in interaction* (50). The routines associated with the preparation of general anesthesia fits with Collins' definition of the interaction ritual. The health professionals in the OR and the patient affect each other by their bodily presence (40). This is also one of the characteristics of jobs that call for emotional labor, which are presented by Hochschild (60). Another ritual ingredient is the mutual focus of attention between the CRNA and the patient in the preparation of the patient for general anesthesia. The individual attention of the CRNA and the patient, respectively, can be divided between different objects, actions and a specific need for human interaction. The sub-core variable *Being a number or a person* describes the variations of attention (51). Patients' attention alternates between wishing the procedure to be as quick as possible, which is shown by patients closing their eyes and not engaging in talk. Other patients verbally ask for a hand to hold and thus human interaction. CRNAs attention can be divided between a focus on performing technical procedures and showing individual considerations when assessing a patient's physical, psychosocial and relational needs (50). These differences in attention will influence the level of emotional energy between patients and CRNAs.

Sharing a common mood is essential to create emotional energy. Activities and emotions have their own micro-rhythm and pace. If the focus of attention between patients and CRNAs becomes more attuned, they will anticipate each other's rhythms (40). The varying individual focus of attention during preparation of patients for general anesthesia has great influence on patients and CRNAs succeeding in sharing the same mood, becoming attuned to each other and thus affecting the emotional outcome. The emotional exchange between patients and CRNAs may vary in duration and degree of intensity (40). Patients often feel anxiety relating to the

anesthetic or surgical procedure or to the future (51). In regard to whether patients and CRNAs succeed in mutual focus of attention and shared mood; the emotional energy may result in patients feeling confidence and trust despite anxiety before being inducted. The aim of the technical procedure is to relax the patient's body in order for the procedures to be successfully carried out. Relaxing the patient will also facilitate the CRNA's performative skill in efficiently carrying out each task relating to the preparation of general anesthesia (64). Low energy may be the outcome when the patient does not want to interact and the CRNA's focus is on professional status and technical procedures, thus affecting the possibility to interact with the patient. A middle level of emotional energy is associated with the flow of energy in social situations, which allows everything to proceed normally. This type of energy is often taken for granted even though social interactions could not take place without this emotional energy flow (40). This level of energy may be associated with the invisibility in the caring activities in IEL. The feelings linked to IEL are often pre-reflexive among experienced nurses (64). This pre-reflexivity can be linked to CRNAs' performances of embodied actions during a technical procedure. When they were newly trained, CRNAs consciously reflected on how to perform a technical procedure while interacting with the patient and, as an experienced CRNA, it became routine (50).

The level of emotional energy is also dependent on the type of motivation for interaction with patients and feeling rules of the Department of Anesthesiology. Patient-centered interaction may be characterized by high or normal levels of emotional energy between patients and CRNAs and the interdisciplinary team members who cooperate in assessing each patient's need for care. Conscious reflection on patients' individual care needs is a central part of succeeding in performing patient-centered care. The sharing of mutual focus is a central part of nurses' commitment to care (23) and an important ritual ingredient in creating emotional energy (40). Profession-centered interaction may lead to both high and low emotional energy depending on the priority of interaction with the patient and the influence of the context of care relating to professional status and efficiency. A low level of emotional energy and thus a low level of reflection on the meaning of patient interaction is characterized by production-centered interaction. There is a minimum of integration of technology and human care, which may lead to CRNAs failing in instilling trust in patients and a lack of reflection on how to use embodied actions. The findings of the categories *Depending on routines in interaction* and *Integrating technology and humane care* play a central role in establishing a relationship with patients and creating emotional energy in interaction. This is due to the level of CRNAs' sensitivity towards patients when performing technical routines. The level of sensitivity is associated with the level of integration of technology and care (50).

The social interactions between CRNAs and patients have unconscious components and are expressed through the focus of attention upon collective objects of interaction such as an IV cannula and a facemask or upon symbols derived from them. Patients' attention is defocused from the social process while being entrained in the action of placing an IV cannula (40). Symbols derived from these actions are CRNAs' use of touch, voice and eye contact (50). Touch is recognized as being central to the nurse/patient relationship, since touch is routinely involved in many tasks performed in nursing. Touch can be divided in two categories: *expressive touch*, also referred to as comforting and caring touch, and *instrumental touch*, which can be referred to as task-oriented touch (80). Instrumental and expressive touch may be combined during the placement of an IV cannula (50).

CRNAs interaction with patients is characterized by performance of technical procedures with the specific purpose of preparing patients for general anesthesia. Consequently, technology and care are closely intertwined, as 'the intention of IEL is to promote health and wellbeing of patient's physical body by creating a psychological feeling of security' (64). IEL is invisible and hidden in the technical task but the outcome is visible. CRNAs perform embodied actions when making intravenous access or putting on the facemask with the purpose of signaling professional competence and trust (50). When performing technical procedures, patients are predisposed to rely on CRNAs' professional expertise (51,64). Emotional labor is often hidden from sight when being successfully accomplished. Maintaining the professional façade when CRNAs are performing various procedures and prescriptive emotion management (65) does not demand extraordinary effort from CRNAs as it is an integral and invisible part of each ritual in the job (50,81). However, being an integral and invisible part of a ritual may challenge the CRNAs' ability to stay sensitive toward the individual patient's needs of care. This sensitivity may also influence CRNAs' reflections on and ability to integrate technology and care (52).

10.1.5 INTERACTION OUTCOME

The interaction outcome of the interaction ritual of preparing patients for general anesthesia reflects the conditions of the social interaction between patients and CRNAs, which are production-centered patient care. This is justified by the value that the context of care and the certified education CRNAs are putting into the biomedical model and a task- and time-driven culture (82) of the Department of Anesthesiology. Moreover, this is supported by the invisibility of CRNAs' ritual behavior when interacting with patients during technical procedures. Downsizing the psychosocial and relational aspects of fundamentals in patient care in favor of

performing highly technological procedures and the great value in professional independence in technical routines is the hallmark of CRNAs' professional self. This specific context of care and the professional identity of CRNAs does not facilitate an acknowledgement of the inherent tension between the task- and time-driven approach to getting the job done and the necessary consciousness of personalizing patients' experience of hospital admission by linking activities into meaningful encounters (82). According to Collins (40), ritual outcomes consist of group solidarity, emotional energy in individuals, symbols of social relationship and standards of morality. Group solidarity is a feeling of membership between patients and the interdisciplinary team members in the OR. The focus in this dissertation is on how CRNAs can facilitate a feeling of membership in patients when they are being prepared for general anesthesia. This can be achieved by way of using humor and the way patients are being guided and informed during preparations (51).

Patients express complex and ambiguous feelings and psychosocial needs relating to the procedure of being prepared for general anesthesia, which is encapsulated in the core variable *Betwixt and between worrying thoughts and keeping focus* (51). Caring for patients in this liminal position of their illness trajectory demands an understanding and a way of managing the dynamics of the CRNA-patient relationship. CRNAs' motivation for interaction influence the level of emotional energy created between the CRNA and the patient. The level of emotional energy can influence the interaction outcome of production-centered patient care in two directions, which will support patients' feelings of being a subject kept in focus or feelings of being a number. CRNAs are in need of an integrated way of thinking about the fundamentals of patient care in a highly technological environment. To support this way of thinking there is a need for a change in values in both the system and policy level of the context of care in anesthesia nursing. Collaborative care between CRNAs and anesthesiologists has been found to be a perquisite for optimal patient care (70). The CRNA-patient relationship will benefit from a consistency between CRNAs' position of focus on being independent and performing highly specialized procedures and the anesthesiologists' position of valuing the interdependence between CRNAs and anesthesiologists. This is supported by Kitson (21) who stresses that *'the quality of the nurse-patient relationship is as dependent upon the wider contextual factors within the healthcare system as it is upon the skill, commitment and abilities of the individual nurse'*. Furthermore, all patients regardless of clinical condition or context of care require the physical, psychosocial and relational aspects of fundamentals of care (73). When the physical aspect of care is not combined with the psychosocial and relational aspects of care, patients are more likely to feel like a number and less like a human being (51), and their experience of a meaningful encounter with the CRNA is challenged. There is also a risk of turning

predisposed trust into reticent trust. This means that there is a difference in standards of morality between CRNAs and patients relating to CRNAs' motivation for interaction. CRNAs are breaking standards of morality during interaction with the patient when downsizing the psychosocial and relational aspects of fundamentals of care. Additionally, standards of morality are broken if CRNAs do not live up to the contextual factors of keeping production running and respecting the time restrictions of interacting with patients. These standards of morality are closely related to CRNAs' reflections on the conscious use of symbols when interacting with patients. Being conscious of performing technical procedures in combination with embodied actions and the use of words and sentences when CRNAs are informing and guiding the patient through the procedure has a great influence on the opportunity to support patients' predisposed trust in CRNAs and establishing a relationship with the patient (51). The last photograph in figure 9 illustrates a CRNA standing at the headboard and holding the facemask ready to induct the patient. This photograph represents the key object of the findings of this dissertation, since the photograph is both illustrating CRNAs way of *Integrating technology and humane care* and from the patients' perspective, it is illustrating *Being put away*. Moreover, this photograph is also an important illustration of the core variable in article 3 (52), which is *Identifying the professional self.* The relation between the core variable and the photograph is supported by the quote from CRNA 14: 'We [CRNAs] are very much aware that we want the responsibility for the patient's airways. If we are not to stand at the headboard, well what is our job then?' (CRNA 14).

10.2 DISCUSSION OF METHODOLOGY

This section of the discussion will focus on the strengths and limitations of using focused ethnography to explore the interaction between CRNAs and patients before general anesthesia. Furthermore, using symbolic interactionism as a means of exploring more nuances and depths in the situation under study will be discussed. The methodology of this qualitative research is discussed using the verification strategies presented by Morse et al. (83). The verification strategies consist of *methodological coherence, appropriated sampling strategy, collecting and analyzing data concurrently, thinking theoretically, theory development*. Moreover, the *responsiveness of the researcher* will be discussed.

10.2.1 METHODOLOGICAL COHERENCE

Focused ethnography was found to be an appropriate means of exploring the nuances and correlations of a complex and central situation in anesthesia nursing. Literature and knowledge of clinical practice of nursing helped to determine the focus of the

study (38). The research questions in focused ethnography are related to describing participants' experiences within the chosen environment and the interaction in specific groups or situations. The questions are often first-level questions with focus on the 'what'. In relation to the present study, the what questions are concerned with the characteristics of CRNAs' and patients' interaction and their perspectives on this interaction. Secondary questions related to how CRNAs engage with patients and how the interdisciplinary team in the OR influences CRNAs' identity (38). Ethnography as methodology is able to generate transferable accounts of the perspectives and practices of interaction between patients and CRNAs (26). The basic social process of interaction between patients and CRNAs is presented here in sufficient detail for other researchers to explore how widespread this way of interaction in highly technological environments is.

10.2.2 APPROPRIATE SAMPLING

To ensure effective and efficient saturation of categories, sufficient data was collected to encompass all aspects of the social situation between CRNAs and patients before general anesthesia. Participants from two different units of the Department of Anesthesiology were included to obtain variation and nuances of both patients and CRNAs. In the two different units, patients of both genders were included. The included patients were all diagnosed with cancer, which may have influenced the findings. Patients diagnosed with a benign illness have different thoughts about the anesthetic procedure and the surgical outcome (84). Therefore, this study is limited through only including patients diagnosed with cancer. CRNAs performing the anesthetic procedure to the participating patients were included. They were all female, which is also assumed to limit the data. The work culture in other units of the Department of Anesthesiology may also have influenced the findings. However, data collected from the two included units was saturated because of replication in the categories and additional data collection would not have developed the variables and categories any further (47).

10.2.3 COLLECTING AND ANALYZING DATA CONCURRENTLY

Data was collected through participant observation and further validated through interviews of both CRNAs and patients. Each observation and interview provided directions for future data collection (38). Photographs were also used as a way of supporting and validating both observations and interviews (43). The combination of participant observation, interviews and photographs resulted in a specific type of data intensity (25).The focus on the microstructures of the interactions between CRNAs

and patients and the CRNAs' motives for their actions and their way of interacting with patients and interdisciplinary team members created a large amount of data.

The characteristics of focused ethnography are that it is problem-focused and context-specific. The researcher performed episodic observation and participants usually held specific knowledge (35). These characteristics influence the type of data being collected. Performing episodic observation will influence the relationship to the participants. Unlike conventional ethnography, knowledge is not obtained by creating a relationship with the participants (25). This is a limitation regarding to gaining knowledge on the specific work culture of CRNAs and the Department of Anesthesiology, which has an important influence on the particular situation under study. Exploring the specific situation of preparing patients for general anesthesia opens up many questions relating to the wider work culture in the Department of Anesthesiology. Anesthesia nursing performed in a specific situation behind the closed doors of the OR was explored in this dissertation. However, outside these doors other situations and a specific work culture that also influence what was happening between the CRNA and the patient during preparation for general anesthesia could be found. The exploration of the specific situation under study raised new questions relating to CRNAs' professional identity and the work culture's influence on the performance of tasks and procedures when preparing a patient for induction. Professionalization in nursing is a lifelong process of educational learning, practicing their profession and reflecting on practice for each individual nurse (19), thus the questions raised in the dissertation relating to professional identity of CRNAs only describe a limited part of the area.

The time spent getting familiar with the environment of the Department of Anesthesiology was important because the researcher was a nurse and not a CRNA. Performing focused ethnography typically means that the role of the researcher is observer-as-participant. This role is suitable when collecting specific information in settings where active participation is not allowed. It is not possible to be an active participant without being a CRNA with legal rights to practice in the specific unit. These circumstances created distance to the field and CRNAs. The specific field role can be described as the researcher having a novice role and incompetence in the field of anesthesia nursing. However, being a nurse and having particular knowledge on nurse-patient relations in general was a specific value in the setting. This resulted in a role of having selective incompetence. During the interviews the researcher's role varied between being a researcher with acceptable incompetence in the field and a researcher who needed to be taught, which was socially acceptable among CRNAs (39). Including patients on day one, having short informal conversations and observing the patient and having informal conversations on the second day was a way

of creating a trusting relationship during a short hospital admission. This trusting relationship may additionally be supported by the fact that the researcher is a nurse and has clinical knowledge of patient care (64) and thus was the foundation of the interview with the patients.

When observing CRNAs and patients' interaction with each other there may be a risk of both groups appearing differently from their usual selves (85). Each interview ended with a debriefing of CRNAs' and patients' experiences of participating in the study. The general experience of the patients was that being accompanied to the OR was comforting. Patients were informed of the researcher's observer role when entering the OR in order not to interfere in the interactions between the CRNA and the patient. The aim for this particular situation was to be as natural as possible. The patients often reported that they forgot the presence of the researcher. Prior to the interview, some CRNAs expressed a feeling of being examined, but that the feeling disappeared during the actual observation.

The interaction between CRNAs and patients when preparing patients for general anesthesia took place within limited time with many events simultaneously taking place. This may have caused observer bias. The bias is caused by the observer not being able to collect all the important micro-structures of the particular situation under study, such as verbal and nonverbal interactions of CRNAs, patients and the interdisciplinary team members. However, due to the growing knowledge of routines and patterns of interaction and the number of similar situations being observed, the researcher became more experienced in observing and writing down nuances of interactions. An interesting way to collect data in this specific situation would be to use a video camera. This would capture other nuances of interaction, language use, bodily movements and sounds in the OR as it is done in Hindmarsh and Pilnick's (86) study on interactional organization of collaborative work in the field of anesthesia.

In the data collection photographs were used in interviews with patients and CRNAs as evidence to support the researcher's findings of symbols during participant observation and thus support the written analysis (44) and trigger the participants' memories (87). The use of photographs in data collection could have been explored in more depth in this study. Another creative use of photographs would have been to ask CRNAs to take their own pictures of important objects and symbols relating to the situation of preparing patients for general anesthesia. This would challenge CRNAs in reflecting on their clinical practice and provide the researcher with other nuances during interviews (87).

Grounded theory inspired the analysis. However, ethnographic analysis can look very similar to approaches to grounded theory. One of the differences is that ethnographic analysis allows the use of one or more existing theories to make sense of the data (26,43). Grounded theory offers stringent strategies in approaching data (43) and is useful in the process of thinking about, with and through data in order to produce fruitful ideas (26).

10.2.4 THINKING THEORETICALLY

Ethnographic research is an iterative-inductive approach formed like a spiral or helix. Analysis and writing up can lead to new questions and more data collection (43). The approach in the dissertation is primarily inductive, albeit informed by both ideas emerging from data and ideas from existing theories presented in literature. An adaptive theory approach includes attention to theory that emerges in conjunction with a research project, but also includes attention to theory that exists prior to the research project. Consequently, it is simultaneously possible to combine prior theoretical concepts and models with emerging data. In this way, the researcher is able to acknowledge that all research is, to some extent, influenced by theoretical assumptions. Furthermore, dealing with prior theoretical ideas in an open and systematical manner is a way of giving focus to the data collection and analysis (88). According to Layder, it is impossible to start analyzing from a 'clean slate'. To ensure objectivity in theorizing in the analysis it is advisable to start with a systematic order of prior theoretical ideas. This may be a way of organizing the data and stimulating the process of theoretical thinking (88). In this dissertation, the researcher's priority was to be aware of the theoretical knowledge of extant theory prior to data collection and analysis to maintain the inductive and iterative process. However, as the process proceeded, theory was used to think with and through data (26). Extant theory, such as theory of emotions (60) and Fundamentals of Care (21) has been a source of inspiration when planning the data collection and particularly during the phase of selective coding of data. Through the initial and open phase of coding, the researcher has strived to code contextually as a way of ensuring objectivity and being open to the empirical findings.

In pragmatism, abduction is used as a way of creating an inference to the best explanation and this is often a question of interpretation (34). In this dissertation, theory from nursing and sociology was used to interpret and discuss the findings presented in the three articles (50–52). The various theories were all concerned with interaction and the context of interaction, which provided an in-depth understanding of the many important nuances and microstructures in the social situation of CRNAs' preparation of patients for general anesthesia.

10.2.5 THEORY DEVELOPMENT

The discussion of findings presented in section 10.1 in the dissertation describes the connections between the three core variables *Creating emotional energy* (50), *Betwixt and between worrying thoughts and keeping focus* (51) and *Identifying the professional self* (52). This discussion of findings falls into micro-formal research on a particular type of situation, which can be characterized as a micro-substantive theory (26) consisting of an iterative interaction between the three components of CRNA/patient interaction, patient experience and professional identity of CRNAs. The theory is named: *The possibilities of creating meaningful encounters in anesthesia nursing*. This theory is developed as an outcome of the research process and as a template for comparison and further development of the theory (83).

CONCLUSION

The aimss of the study were to explore CRNAs' interaction with patients in the pre-anesthetic phase and to explore surgical patients' experience of interaction with CRNAs in this specific phase. Furthermore, the aim was to explore the professional identity of CRNAs. Based on the findings, the following conclusions can be drawn:

- Development of the micro-substantive theory: *The possibilities of creating meaningful encounters in anesthesia nursing* provides concepts for exploring the complex social interaction between CRNAs and patients in a highly technological environment.
- In theory, three dominant motivations influence anesthesia nursing and thus interaction outcome related to patients' experiences of care. The motivations are patient-centered interaction, profession-centered interaction and production-centered interaction.
- Workplace emotion in Department of Anesthesiology is dominated by prescriptive feeling rules of the organization related to the task- and time-driven culture and the biomedical model. The professional feeling rules of CRNAs are influenced by professional status and independence, and being a reflexive nurse with a specific sensitivity in routines.
- The context of care in anesthesia nursing is not committed and responsive to the core tasks of CRNAs establishing a relationship and integrating the patients' physical care needs with the psychosocial and relational care needs when preparing patients for general anesthesia. CRNAs' actions and interactions are limited by time and production and the technological procedures are discrete elements of various anesthetic routines. This is reflected in the interaction outcome, with a focus on production-centered care instead of patient-centered care.
- Caring in anesthesia nursing is found in the invisible and instrumental emotional labor of CRNAs when they perform tasks and procedures. However, virtues and ethics relating to these actions are greatly challenged by feeling rules of the work culture and CRNAs professional status and feeling of independence in the performance of routines.

PERSPECTIVES AND FUTURE RESEARCH

The findings of this dissertation are considered an important contribution to a more detailed description of anesthesia nursing and some of the important characteristics and challenges of being a CRNA. Further research is needed for a more nuanced identification and description of CRNAs' professional identity. The complexities of describing CRNAs' professional identity are based on the historical background and development of anesthesia nursing and cultural values in the highly technological environment of the Department of Anesthesiology. The education practice of CRNAs is also an important area to explore. It would be relevant to describe the virtues and ethics of the theoretical and practical education and how these virtues and ethics are further developed through the clinical career of CRNAs.

At the end of this dissertation a question remains when reflecting on interventions for a change of virtues and behavior in anesthesia nursing to develop and support fundamentals of care adapted to this specific context with the primary goal of creating meaningful encounters for patients (82). This question is what are the CRNAs' motivations for such a change in the light of the major influence from the biomedical model, both in the education to become a CRNA and through the work culture of the Department of Anesthesiology? An immediate thought is that a change in virtues and behavior offers the best opportunity to succeed if the virtues are supported by the entire work culture in the Department of Anesthesia. To begin a process of changing a work culture takes time and it is advantageous to involve the interdisciplinary health professionals in the different units of Department of Anesthesiology. Furthermore, there may be a need for strengthening the skills of the clinical managers and adding resources to be able to implement the new culture changes (89).

Crigger and Godfrey (68) present two paradigms of professionalism to reveal what the concept professional means to nurse professionals: sociological and psychological. The sociological paradigm addresses behavior of the professional and is aligned with principled and outcome based traditions. The nurse does what is expected by societal standards and meets the different role expectations in life. The internal world is separated from the social roles and actions. In the psychological paradigm, the nurse is internally driven and strives to live up to personal and professional ideals. The professional is viewed in total, as a whole person who strives to be a good person and a good professional who does a good job. According to Crigger and Godfrey (68), the sociological paradigm is currently dominant in professionalism. In the social paradigm, professional nurses become empty uniforms with values placed in actions rather than who they are. This paradigm can give a

supplementary picture on CRNAs' professional identity. Character development in nursing education is crucial for being able to meet both the social and personal expectations of a professional nurse (68,73). However, developing character in RNs during their training to become CRNAs is assumed as crucial in order to support the professional life and identity of CRNAs. Therefore, it would be interesting to plan a research project, which focus on RNs' character development and development of RNs' professional identity throughout their certified education for becoming a CRNA. In close relation to this, it would be interesting to explore the virtues in nursing expressed by teachers responsible for the theoretical and practical education of future CRNAs. Another way of exploring the work culture of the Department of Anesthesiology could be to include clinical leaders in the different units. The focus should be on their virtues and visions for anesthesia nursing and the divisions of tasks and roles between CRNAs and anesthesiologists. In relation to division of tasks and roles, it would be interesting to include each unit's clinical guidelines as data. Furthermore, it would be interesting to explore how the clinical leaders wish and have the ability to influence the work culture of the Department of Anesthesiology.

The above-mentioned research topics are generally relevant and important and imparts new perspectives on this dissertation's research focus. Studies on professional identity and interactions in clinical practices are essential in the current and future health care system, as an increasing number of actors on both a policy and system level influences the context of care.

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APPENDICES

Appendix 1: Semi-structured interview guide phase 2

Appendix 2: Photographs from interviews phase 3

Appendix 3: Semi-structured interview guide phase 4

Appendix 4: Participants information

Appendix 5: Written consent

APPENDIX 1

APP 1A. INTERVIEW GUIDE CRNAS

Anæstesisygeplejerske data:

- Hvor længe har du været uddannet sygeplejerske
- Baggrund for valg af anæstesiuddannelse
- Hvornår blev du uddannet anæstesisygeplejerske
- Kan du beskrive dine faglige interesser
- Anden faglig uddannelse

Kontakten med den inkluderede patient:

- Kan du beskrive din oplevelse af at skulle modtage og bedøve patienten i dag?
- Kan du beskrive de faglige overvejelser du gør dig før mødet med denne patient?
    - I forhold til patientens diagnose
    - Patientens tidligere erfaring med anæstesi
    - Patientens alder
- Hvordan er dit første indtryk af patienten og hvilke faglige overvejelser gør du dig i den allerførste kontakt?
- Kan du beskrive de procedure der skal gennemgås før patienten kan blive bedøvet?
- Hvordan vil du beskrive interaktionen og relationen med patienten inden generel? anæstesi?
    - Placering i rummet
    - Stemmeføring
    - Verbale/nonverbale udtryk
    - Øjenkontakt
    - Berøring
    - Humor
- Vil du beskrive anvendelsen af overvågningsudstyr, anlæggelse af venflon, brug af maske
- Hvad har indflydelse på interaktionen?
- Hvilke overvejelser gør du dig om samarbejde og rollefordeling i forhold til andre kolleger?
- Hvordan er din bevidsthed om den tid du har til rådighed?
- Hvordan forholder du dig til ro/uro og afbrydelser i kontakten til patienten?
- Hvordan var dit indtryk af patientens niveau af velbefindende inden generel anæstesi?

- Hvad er dit overordnede faglige mål i mødet med patienten før anæstesi?

Emotioner:

- Hvad er det mest tilfredsstillende ved dit job?
- Hvad er særligt udfordrende?

- Hvem anser du for at være ”lette/gode” patienter?
- Hvem anser du for at være ”svære/besværlige” patienter?

- Hvad er de vigtigste ting/aspekter af en anæstesisygeplejerskes job?
- Hvor vigtigt synes du det er at en anæstesisygeplejerske optræder omsorgsfuldt?
- Hvordan optræder hun omsorgsfuldt?

- Når du er følelsesmæssigt langt nede på jobbet og skal klare ”svære/besværlige” patienter eller situationer – hvad gør du så?
- Hvordan har du det efterfølgende?
- Hvem har lært dig at gøre sådan?
- Tror du der er en forventet måde at anæstesisygeplejersker skal opføre sig følelsesmæssigt på?

Generelle spørgsmål om den præanæstesiologiske kontakt:

- Fortæl om en episode hvor indledning til anæstesien gik rigtig godt/lykkedes for dig
- Fortæl om en episode hvor det ikke lykkedes for dig

- Hvordan oplever du situationen, hvor jeg er med som observatør og står i baggrunden og skriver noter?
    - Er situationen forstilt, nærmere beskrivelse
    - Hvordan er oplevelsen af at der er fokus på både din faglighed og på patienten
    - Hvordan oplever du situationen, at patienten får følgeskab af mig fra sengeafdelingen og ned til operationsstuen?

APP 1B. POSTOPERATIVE INTERVIEW GUIDE - PATIENTS

- Kan du beskrive din oplevelse af indlæggelsesforløb og modtagelse i sengeafdelingen
- Kan du beskrive din oplevelse af at skulle bedøves

  - Tankerne inden du bliver hentet af portøren
  - Oplevelsen af at blive modtage på operationsgangen

- Kan du beskrive om/hvordan du oplevede tryghed og sikkerhed i forhold til at skulle bedøves
- Hvordan oplevede du kontakten til personalet i forberedelsesrummet og på operationsstuen
- Kan du beskrive anæstesisygeplejerskens professionalisme
  - Hvordan udførte hun sit håndværk
- Hvordan var din oplevelse af personalets
  - Stemmeføring
  - Berøring af dig fx hånd på skulder
  - Samarbejde tværfagligt

- Kan du beskrive hvad der var vigtigst for dig i forbindelse med bedøvelsen og kontakten til anæstesisygeplejersken for at føle tryghed og velbefindende

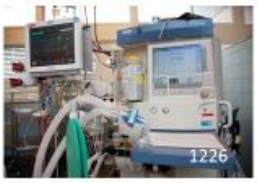
- Har du været bedøvet før og havde det betydning for dine tanker om forløbet
- Hvilke tanker havde du gjort dig forinden om at skulle bedøves
- Har dine tanker om at skulle bedøves ændret sig i dagene op til operationen
- Kunne du mærke en effekt af præ-medicinen (træthed, svimmel, hjertebanken)

- Hvad tænker om det at have følgeskab af mig til operationen

- Havde det nogen betydning for din oplevelse af forløbet

- Hvad tænker du om følgeskab generelt ned til operation i forhold til oplevelse af større tryghed

APPENDIX 2 INTERVIEW GUIDE PHASE 3



Ventetid på operationsgangen/Første kontakt med patient (1256)
Patientens oplevelse af ventetid og kontakt til personalet på gangen.
Lyde, snak og travlhed
Forskelligt hvem der henter patienten ind på operationsstuen, afhænger ofte af hvem der har tid
Skabe relation til patienten, hvem skal have den primære kontakt

Operationsrum (TV-anæstesi 1246)
Konteksten for observation
Det tværfaglige personales pladser og placeringer i rummet
Narkosebøjlen adskiller rummet mellem anæstesi og operationspersonale
Patientens synsfelt og fokus punkter

Forberedelse (1238), Anæstesimaskine (1226)
Instrumentel, teknologisk forberedelse sikrer mentalt overskud til at anæstesisygeplejersken kan være modtagelig for patientens signaler og behov

Lejring og varmt tæppe (1214)
Sikre patientens mobilitet og temperatur
Indgang til relation – berøring, øjenkontakt, toneleje, humor

Samarbejde om sikkerhedsprocedure (1275)
Rollefordelinger mellem operationssygeplejerske og anæstesisygeplejerske, rutiner og ritualer.

Holde i hånd (1295)
Manglende tid til at prioritere at tilbyde patienterne en hånd (ændring over dataindsamlingsperioden).
Verbalt italesætte patientens behov for at holde i hånd.
Nogle patienter ønsker ikke en hånd, andre overraskes af at blive holdt i hånden, nogle tredje italesætter ønsket om at holde i hånd og dette bliver ikke prioriteret

Hånd med venflon (1278)
Mange måder at anlægge venflon på, måder at berører patienterne på
Indgangsvinkel til at vurdere patients fysiske og psykiske tilstand
Indgangsvinkel til relation
Arbejdsfordeling mellem anæstesisygeplejerske og hendes hjælper.

Hånd på skulder (1291), Anæstesi sygeplejerske med iltmaske (1203),
Iltmasken ledsages ofte ubevidst af anæstesisygeplejerskens hånd på patientens skulder
Symbolske sproglige vendinger
Stemmeføring – bevidst/ubevidst.

APPENDIX 3 SEMI-STRUCTURED INTERVIEW GUIDE PHASE 4

Generelt til alle tre grupper:
Hvis jeg spørger de andre hvad vil de så sige om dig/din faggruppe?

Interviewguide anæstesisygeplejerske
Hvor er du ansat?

Hvor længe har du været anæstesisygeplejerske?

Fagidentitet

Fortæl hvordan din arbejdsdag ser ud, hvad laver du

Hvad er det vigtigste du gør – hvad lægger du vægt på

Hvad er det du har lært som anæstesi sygeplejerske, der gør at du handler som du gør.

Og hvad vil du ikke gøre – hvad er ikke dine opgaver

Hvad er en god anæstesi for dig?

Hvad er dine overvejelser i forhold til patienten i det teknologiske felt, du befinder dig i?

Og hvad gør det ved dig, når det lykkes/går godt

Og hvad gør det ved dig, når der er noget, som ikke går som forventet

Prøv at beskrive ændringen af din sygeplejerolle efter du blev uddannet til anæstesisygeplejerske
Hvor og hvornår finder du monofaglig sparring

Hvis jeg spørger de andre hvad vil de så sige om dig/din faggruppe?

Anæstesilægen som samarbejdspartner
Hvad er dine opgaver i forhold til anæstesilægen?

Hvordan fordeler I rollerne/opgaverne? Er det noget der er givet på forhånd eller aftales det fra anæstesi til anæstesi?

Prøv at beskrive en dag/situation hvor samarbejdet går godt og en hvor det ikke er gået så godt og prøv at beskrive hvorfor du tror det gik godt/skidt

Hvordan ser du dig selv som anæstesisygeplejerske i forhold til anæstesilægen?

Hvordan vil du beskrive et velfungerende/ikke fungerende samarbejde med anæstesilægen?

Påvirker samarbejdet med anæstesilægen din opfattelse af hvordan du planlægger og udfører dine opgaver fremadrettet?

Hvordan bruger du anæstesilægen som sparringspartner?

Operationssygeplejersken som samarbejdspartner

Hvordan er din rolle i forhold til operationssygeplejersken, har I veldefinerede roller

I gråzonen mellem jeres arbejde - Hvad gør hun, som du ikke gør og hvad gør du som hun ikke gør – hvordan finder I ud af hvem der gør hvad?

Prøv at give eksempler på at godt samarbejde og en situation hvor du fandt det vanskeligt

Hvordan ser du dig selv som anæstesisygeplejerske i forhold til operationssygeplejersken?

Hvad adskiller de to fagområder i forbindelse med klargøring af patient til generel anæstesi?

Hvem skal have patient kontakten?

Har patientkontakt betydning for din faglige identitet?

APPENDIX 4 PARTICIPANTS' INFORMATION

APP 4A PARTICIPANT INFORMATION PHASE 1

AALBORG UNIVERSITETSHOSPITAL

Feltobservationer

Comfort: en undersøgelse af begrebet i anæstesisygeplejerskers kliniske praksis.

Klinik Anæstesi

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Som led i et forskningsprojekt undersøger jeg voksne patienters niveau af fysisk, psykisk og social velbefindende før generel anæstesi og anæstesisygeplejerskers strategier for at øge patienters velbefindende før bedøvelse med generel anæstesi.

Denne dimension på patient og anæstesisygeplejerskens interaktion før generel anæstesi er et forholdsvis uudforsket område både nationalt og internationalt. Undersøgelsen har til formål at skabe ny udvikling og faglige viden for anæstesisygeplejersker i forhold til vurdering af patienters niveau af velbefindende både fysisk, psykisk og socialt før generel anæstesi og medvirke til udvikling af interventioner til at højne patienters velbefindende før generel anæstesi.

Projektet er et etnografisk studie og består af observationer og interviews af patienter på operationsdagen og observation og interviews af anæstesisygeplejerskers interaktion med patienten før generel anæstesi i forhold til begrebet "comfort" (fysisk, psykisk og social velbefindende).

Forud for disse observationer og interviews vil jeg gerne undersøge et bredere udsnit af den kontekst som undersøgelsens patientgruppe er en del af. Herved håber jeg på at få en større viden og forståelse for hvilken information patientgruppen har gennemgået inden selve indgrebet og kontakten med anæstesisygeplejersken. Denne viden vil indgå som en del af forskningsprojektet og vil kunne bidrage til mere fokuseret og selekteret feltobservationer i forhold til projektets formål.

Jeg vil gerne have lov til at følge og observere planlagte operationspatienters kontakt med kirurgiske sygeplejersker, på sengeafdelingen; anæstesitilsyn til disse patienter; og anæstesisygeplejerskers modtagelse og bedøvelse af patienterne i generel anæstesi.

Oplysninger der gives videre til mig vil efter en analyse og fortolkning indgå som en del af forskningsprojektet. Alle oplysninger vil blive behandlet anonymt.

Jeg er uddannet sygeplejerske og har en kandidatgrad i sygepleje (cand. Cur.). Jeg er ansat som ph.d. studerende i Klinik Anæstesi på Aalborg Universitetshospital.
Denne undersøgelse er en del af mit ph.d. projekt, som forventes afsluttet april 2016. Har du spørgsmål til projektet er du velkommen til at kontakte mig.

Med venlig hilsen

Karin Aagaard

REGION NORDJYLLAND

APP 4B PATIENTS' INFORMATION PHASE 2

AALBORG UNIVERSITETSHOSPITAL

Dette er en forespørgsel på, om du vil deltage i et forskningsprojekt, der skal undersøge interaktionen mellem patient og anæstesisygeplejerske før fuld bedøvelse.

Klinik Anæstesi

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Som led i et forskningsprojekt undersøger jeg interaktionen mellem voksne patienter og anæstesisygeplejersker før fuld bedøvelse.

Formålet med undersøgelsen er at få et større kendskab til patienters oplevelse af at skulle i fuld bedøvelse og anæstesisygeplejerskers interventioner for at øge patienters velbefindende før fuld bedøvelse.
Denne dimension med fokus på patientens og anæstesisygeplejerskens interaktion før fuld bedøvelse er et forholdsvis uudforsket område både nationalt og internationalt.

Undersøgelsen består i at jeg på dagen for din operation vil være til stede som observatør på patientstuen og jeg vil følge dig til operationsstuen, indtil du bliver bedøvet. Jeg skriver noter om mine observationer undervejs.

Første eller anden dag efter din operation vil jeg gerne have lov til at lave et interview med dig om din oplevelse af at blive bedøvet. Denne samtale tager ca. 30-40 minutter afhængig af hvordan du har det og hvor meget du ønsker at fortælle.

Jeg håber du har lyst til at deltage.

Det er helt frivilligt om du har lyst til at deltage i undersøgelsen og din beslutning får ingen indflydelse på dit behandlingsforløb. Siger du ja til at deltage, kan du til enhver tid trække dit samtykke tilbage og udgå af undersøgelsen. Oplysningerne du giver videre til mig vil efter en analyse og fortolkning indgå som en del af forskningsprojektet. Projektet er i overensstemmelse med patientdataloven og anmeldt til Datatilsynet, alle oplysninger vil således blive behandlet anonymt.

Jeg er uddannet sygeplejerske og har en kandidatgrad i sygepleje (cand. cur.).
Jeg er ansat som ph.d. studerende i Klinik Anæstesi på Aalborg Universitetshospital.
Denne undersøgelse er en del af mit ph.d.-projekt, som forventes afsluttet april 2016.

Hvis du har spørgsmål til undersøgelsen er du velkommen til at kontakte mig.

Med venlig hilsen

Karin Aagaard

REGION NORDJYLLAND

APP 4C CRNAS INFORMATION PHASE 2

AALBORG UNIVERSITETSHOSPITAL

Information om deltagelse i forskningsprojekt:

En etnografisk undersøgelse af interaktionen mellem patient og anæstesisygeplejerske før generel anæstesi.

Klinik Anæstesi

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Som led i et forskningsprojekt undersøger jeg interaktionen mellem voksne patienter og anæstesisygeplejersker før generel anæstesi.

Formålet med denne undersøgelse er at få større kendskab til patienters oplevelse af at skulle i generel anæstesi og anæstesisygeplejerskers interventioner for at øge patienters velbefindende før generel anæstesi.
Denne dimension på patient og anæstesisygeplejerskens interaktion før generel anæstesi er til dato et forholdsvist uudforsket område både nationalt og internationalt.

Undersøgelsen består i observation af både patient og anæstesisygeplejerske og interviews af anæstesisygeplejersker med fokus på interaktionen med patienten før generel anæstesi.
Som afslutning på mine observationer vil jeg gerne have lov til at interviewe dig. Sammen laver vi en aftale om hvornår interviewet af dig skal foregå. Det kan være som afslutning på dagen for observation eller en af dine næstfølgende arbejdsdage.
Jeg skriver noter om mine observationer undervejs. Interviewet af dig vil tage ca. 30-45 minutter.
Patienten interviewes 1. eller 2. postoperative dag.

Jeg håber du har lyst til at deltage.

Det er helt frivilligt om du har lyst til at deltage i undersøgelsen. Siger du ja til at deltage, kan du til enhver tid trække dit samtykke tilbage og udgå af undersøgelsen. Oplysningerne du giver videre til mig vil efter en analyse og fortolkning indgå som en del af forskningsprojektet. Projektet er i overensstemmelse med persondataloven og anmeldt til Datatilsynet, alle oplysninger vil således blive behandlet anonymt.

Jeg er uddannet sygeplejerske og har en kandidatgrad i sygepleje (cand. cur.).
Jeg er ansat som ph.d. studerende i Klinik Anæstesi på Aalborg Universitetshospital.
Denne undersøgelse er en del af mit forskningsprojekt, som forventes afsluttet april 2016.

Hvis du har spørgsmål til undersøgelsen er du velkommen til at kontakte mig.

Med venlig hilsen

Karin Aagaard

REGION NORDJYLLAND

APP 4D PATIENTS' INFORMATION PHASE 3

AALBORG UNIVERSITETSHOSPITAL

Dette er en forespørgsel på, om du vil deltage i et forskningsprojekt, der skal undersøge interaktionen mellem patient og anæstesisygeplejerske før fuld bedøvelse.

Klinik Anæstesi

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Formålet med undersøgelsen er at få et større kendskab til patienters oplevelse af at skulle i fuld bedøvelse og anæstesisygeplejerskers interventioner for at øge patienters velbefindende før fuld bedøvelse.
Denne dimension med fokus på patientens og anæstesisygeplejerskens interaktion før fuld bedøvelse er et forholdsvis uudforsket område både nationalt og internationalt.

Undersøgelsen består i at jeg første eller anden dag efter din operation gerne vil have lov til at lave et interview med dig om din oplevelse af at blive bedøvet. I interviewet inddrages fotos taget af kendte situationer fra anæstesisygeplejerskens forberedelse af patienter til fuld bedøvelse.
Billederne er taget på forhånd, og der indgår sygeplejersker som modeller til illustration af situationerne.
Denne samtale tager ca. 30-40 minutter afhængig af hvordan du har det og hvor meget du ønsker at fortælle.

Jeg håber du har lyst til at deltage.

Det er helt frivilligt om du har lyst til at deltage i undersøgelsen og din beslutning får ingen indflydelse på dit behandlingsforløb. Siger du ja til at deltage, kan du til enhver tid trække dit samtykke tilbage og udgå af undersøgelsen. Oplysningerne du giver videre til mig vil efter en analyse og fortolkning indgå som en del af forskningsprojektet. Projektet er i overensstemmelse med patientdataloven og anmeldt til Datatilsynet, alle oplysninger vil således blive behandlet anonymt.

Jeg er uddannet sygeplejerske og har en kandidatgrad i sygepleje (cand. cur.).
Jeg er ansat som ph.d. studerende i Klinik Anæstesi på Aalborg Universitetshospital.
Denne undersøgelse er en del af mit ph.d.-projekt, som forventes afsluttet april 2016.

Hvis du har spørgsmål til undersøgelsen er du velkommen til at kontakte mig.

Med venlig hilsen

Karin Aagaard

REGION NORDJYLLAND

APP 4E CRNAS INFORMATION PHASE 3

AALBORG UNIVERSITETSHOSPITAL

Information om deltagelse i forskningsprojekt:

En etnografisk undersøgelse af interaktionen mellem patient og anæstesisygeplejerske før generel anæstesi.

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Som led i et forskningsprojekt undersøger jeg interaktionen mellem voksne patienter og anæstesisygeplejersker før generel anæstesi.

Formålet med denne undersøgelse er at få større kendskab til patienters oplevelse af at skulle i generel anæstesi og anæstesisygeplejerskers interventioner for at øge patienters velbefindende før generel anæstesi.
Denne dimension på patient og anæstesisygeplejerskens interaktion før generel anæstesi er til dato et forholdsvist uudforsket område både nationalt og internationalt.

Undersøgelsen består i et interview af anæstesisygeplejersken på en på forhånd aftalt dag. I interviewet inddrages fotos af kendte situationer fra klargøring af patienten til generel anæstesi, med fokus på interaktionen med patienten før generel anæstesi.
Interviewet af dig vil tage ca. 30-45 minutter.
Patienterne interviewes 1. eller 2. postoperative dag ud fra de samme fotos

Jeg håber du har lyst til at deltage.

Det er helt frivilligt om du har lyst til at deltage i undersøgelsen. Siger du ja til at deltage, kan du til enhver tid trække dit samtykke tilbage og udgå af undersøgelsen. Oplysningerne du giver videre til mig vil efter en analyse og fortolkning indgå som en del af forskningsprojektet. Projektet er i overensstemmelse med persondataloven og anmeldt til Datatilsynet, alle oplysninger vil således blive behandlet anonymt.

Jeg er uddannet sygeplejerske og har en kandidatgrad i sygepleje (cand. cur.).
Jeg er ansat som ph.d. studerende i Klinik Anæstesi på Aalborg Universitetshospital.
Denne undersøgelse er en del af mit forskningsprojekt, som forventes afsluttet april 2016.

Hvis du har spørgsmål til undersøgelsen er du velkommen til at kontakte mig.

Med venlig hilsen

Karin Aagaard

REGION NORDJYLLAND

APP 4F PARTICIPANT INFORMATION PHASE 4

AALBORG UNIVERSITETSHOSPITAL

Information om deltagelse i forskningsprojekt:

En interviewundersøgelse af anæstesisygeplejerskens faglige identitet og det tværfaglige samarbejde på en operationsgang.

Klinik Anæstesi

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Som led i et forskningsprojekt undersøger jeg anæstesisygeplejerskens faglige identitet og det tværfaglige samarbejde på en operationsgang.

Formålet med denne undersøgelse er at få større viden om anæstesisygeplejerskers faglige identitet og betydningen af det tværfaglige samarbejde mellem anæstesisygeplejersker, operationssygeplejersker og anæstesilæger.
Dette område er til dato et forholdsvist uudforsket område både nationalt og internationalt.

Undersøgelsen består i individuelle interviews af henholdsvis anæstesisygeplejersker, operationssygeplejersker og anæstesilæger ansat i Klinik Anæstesi, Aalborg Universitetshospital.
Sammen aftaler vi hvornår interviewet af dig skal foregå.
Interviewet vil have en varighed af ca. 45-60 minutter.

Jeg håber du har lyst til at deltage.

Det er helt frivilligt om du har lyst til at deltage i undersøgelsen. Siger du ja til at deltage, kan du til enhver tid trække dit samtykke tilbage og udgå af undersøgelsen. Oplysningerne du giver videre til mig vil efter en analyse og fortolkning indgå som en del af forskningsprojektet. Projektet er i overensstemmelse med persondataloven og anmeldt til Datatilsynet, alle oplysninger vil således blive behandlet anonymt.

Jeg er uddannet sygeplejerske og har en kandidatgrad i sygepleje (cand. cur.).
Jeg er ansat som ph.d. studerende i Klinik Anæstesi på Aalborg Universitetshospital.
Denne undersøgelse er en del af mit forskningsprojekt, som forventes afsluttet april 2016.

Hvis du har spørgsmål til undersøgelsen er du velkommen til at kontakte mig.

Med venlig hilsen

Karin Aagaard

REGION NORDJYLLAND

APPENDIX 5 WRITTEN CONSENT

APP 5A WRITTEN CONSENT PHASE 2 AND 3

AALBORG UNIVERSITETSHOSPITAL

Informeret samtykke til deltagelse i et sundhedsvidenskabeligt forskningsprojekt.

Klinik Anæstesi

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En undersøgelse af interaktionen mellem patient og anæstesisygeplejerske før generel anæstesi.

Undersøgelsen udføres af Karin Aagaard

Erklæring fra informanten:

Jeg har fået skriftlig og mundtlig information og jeg ved nok om formål, metode, fordele og ulemper til at sige ja til at deltage.

Jeg ved, at det er frivilligt at deltage, og at jeg altid kan trække mit samtykke tilbage uden at miste mine nuværende og fremtidige rettigheder til behandling.

Jeg giver samtykke til at deltage i forskningsprojektet og har fået en kopi af dette samtykkeark samt en kopi af den skriftlige information om projektet til eget brug.

Informantens navn: _____

Dato: _____ Underskrift: _____

Erklæring fra den, der afgiver information:

Jeg erklærer, at informanten har modtaget mundtlig og skriftlig information om projektet.
Efter min overbevisning er der blevet givet tilstrækkelig information til, at der kan træffes beslutning om deltagelse i projektet.

Navnet på den, der har givet information: _____

Dato: _____ Underskrift: _____

REGION NORDJYLLAND

APP 5B WRITTEN CONSENT PHASE 4

AALBORG UNIVERSITETSHOSPITAL

Informeret samtykke til deltagelse i et sundhedsvidenskabeligt forskningsprojekt.

Klinik Anæstesi

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En undersøgelse af anæstesisygeplejerskens faglige identitet og det tværfaglige samarbejde på en operationsafdeling.

Undersøgelsen udføres af Karin Aagaard

Erklæring fra informanten:

Jeg har fået skriftlig og mundtlig information og jeg ved nok om formål, metode, fordele og ulemper til at sige ja til at deltage.

Jeg ved, at det er frivilligt at deltage, og at jeg altid kan trække mit samtykke tilbage uden betydning for mine arbejdsmæssige relationer.

Jeg giver samtykke til at deltage i forskningsprojektet og har fået en kopi af dette samtykkeark samt en kopi af den skriftlige information om projektet til eget brug.

Informantens navn: _____

Dato: _____ Underskrift: _____

Erklæring fra den, der afgiver information:

Jeg erklærer, at informanten har modtaget mundtlig og skriftlig information om projektet.
Efter min overbevisning er der blevet givet tilstrækkelig information til, at der kan træffes beslutning om deltagelse i projektet.

Navnet på den, der har givet information: _____

Dato: _____ Underskrift: _____

REGION NORDJYLLAND

SUMMARY

Anesthesia nursing is performed in a highly technological environment with restricted time for interaction with patients. Patients are in a vulnerable position, which can be characterized by anxiety regarding the anesthetic and surgical procedure. The bedrock of effective nursing care is to facilitate the execution of patients' basic care needs in a respectful, competent, empathic and personal way. This is achieved by establishing a relationship with the patient, integrating the individual patient's care needs and making sure that the setting is responsive and committed to these core tasks of nursing. In this dissertation, focused ethnography is used to explore the interactions between patients and nurse anesthetists before general anesthesia. Moreover, it will explore the professional identity of nurse anesthetists, in relation to the situation of preparing patients for general anesthesia. A micro-substantive theory is developed regarding the opportunities for creating meaningful encounters between patients and nurse anesthetists. The theory is based on three dominant motivations for interaction in anesthesia nursing. The context of care is not committed and responsive to the core elements of a nurse anesthetist-patient relationship, which results in focus on production-centered care instead of patient-centered care when preparing patients for general anesthesia.

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