NEWLY GRADUATED NURSE ANESTHETISTS’ EXPERIENCES AND VIEWS ON ANESTHESIA NURSING—A PHENOMENOGRAPHIC STUDY

Annika Larsson Mauleon, NA, RNT
Kalmar, Sweden
Sirkka-Liisa Ekman, RN, PhD
Stockholm, Sweden

This qualitative study identifies and describes different ways in which newly graduated nurse anesthetists (NAs) experience and perceive nurse anesthesia. It explains different approaches to nurse anesthesia care and, thus, to clinical nursing care (in an anesthesia and surgical context), provided by new NAs. One month after graduation, all NAs who had completed an anesthesia nursing program responded to 4 open-ended questions. A phenomenographic method was used to analyze their responses. The results were divided into 3 categories, which describe nurse anesthesia from the perspectives of (1) maintaining physical well-being; (2) being protectors and advocates; and (3) ability to perform good nurse anesthesia given all the demands placed on the NAs. The results indicate that, for the new NAs, the nurse anesthesia care situation was largely influenced by context and generated feelings of inadequacy because the NAs could not provide the emotional support that they believed their patients required.

Key words: Nurse anesthesia, nurse anesthetist, nursing context, phenomenography.

In Sweden, the nurse anesthesia profession is relatively young, and the education programs are changing and developing. In 1996, the National Board of Health and Welfare clearly defined, for the first time, the areas of responsibility and authority for the nurse anesthetist (NA). To meet entrance requirements for a nurse anesthesia education program, applicants must have completed a registered nursing program at a university. As members of multidisciplinary teams (including surgical and anesthetic doctors and operating room nurses), NAs participate in anesthesia and analgesia administration, and they care for patients in surgical units. In collaboration with anesthesiologists (and according to unit policies), NAs have independent, professional responsibilities that include nursing, treatment, and medical-technical equipment usage. The same responsibilities apply in other units, such as preoperative and postoperative care units, pain clinics, and accident and emergency units.1

The organization of healthcare is constantly changing in modern society. Patient requirements and nursing are also changing in an increasingly technical environment. Expectations are high when it comes to security, hygiene, management, function, and production. In Sweden, a reward system was set up during the early 1990s; county councils paid the wards for the number of patients who had surgery. So there is a risk of neglecting individuals in environments in which nursing practice focuses on technology and production.2,3 Nurse anesthesia is often described as task-oriented care, which consists of administering drugs, facilitating pain relief, and so on.4 Patients in perioperative situations are described as dependent and vulnerable.2 Factors such as medication, illness, anxiety, type of anesthesia, and planned time impair patients’ capacities to make decisions, communicate, understand, and remember.5 Studies in the United States,6 Finland,7 and Sweden4 have focused on the qualitative aspects of perioperative nursing care behaviors. The perioperative nurse’s encounter with value conflicts has also been described.2,4

Clinical nursing care situations involve knowledge of the following:8

• Human relationships
• Theory and practice
• Human values
• Technical skills8

It is argued that it might be difficult to draw clear distinctions or boundaries between different areas of knowledge, how they affect each other,9–11 and how they affect subjective processes between caregivers and patients in clinical nursing situations.8,12 Professional nursing implies certain standards of nursing education; it also implies that good clinical nursing accounts for the spiritual and physical aspects of human beings.13 To understand nursing situations and how nurses act in their professional worlds, an understanding of how things appear to them in their personal worlds is needed.13,14

Few studies have focused on newly graduated nurses and how they experience and perceive their
clinical nursing situations. Research has concentrated mostly on experienced nurses—what they do and how they provide nursing care.15 This study offers insights into the opinions of newly graduated NAs on the field of anesthesia nursing. Its purpose is to qualitatively identify and describe different ways in which new NAs experience and perceive anesthesia. And it attempts to describe the different approaches to nurse anesthesia care and, thus, to clinical nursing care (in an anesthesia and surgical context), provided by new NAs.

Methods

• Design. Phenomenographic research qualitatively describes different ways in which people experience and view various phenomena in the world around them. The method, developed by a group of researchers,16-19 focuses on differences among individuals and assumes that people vary with regard to what meanings they ascribe to phenomena. The research approach consists of a descriptive, empirical, content-oriented, human-research method.18 The result of a phenomenographic study is a set of categories that describe qualitative variation, with preserved content of each expressed concept in the empirical material.20 The phenomenographic method has been used in nursing research to understand the nature of variation—that is, to understand how differences in background affect the ways in which people perceive their external worlds.14,15,21-23

• Subjects. All RNs (11) in a postgraduate course at the Swedish University College of Health Sciences were asked to participate. Nine NAs participated, all of whom were RNs who had completed the anesthesia nursing program. All were female, 25 to 46 years of age, and all had previous RN experience in surgical and medical wards. Their experience varied from 2 years to more than 10 years.

The NAs had enrolled in a 1-year program, totaling 40 weeks (21 weeks of theoretical training in a university setting and 19 weeks of clinical training, in collaboration with the University College of Health Sciences, in an anesthesia hospital setting). None of the NAs had had any experience of anesthesia nursing at the start of the program. Participants gave informed consent, and anonymity was assured.

• Data collection. In a phenomenographic approach, data are collected through interviews or open questions.20 The responses of the new NAs were written in narrative form and were based on 4 open-ended questions. The concept “good” was used in the questions to emphasize the “ought to be” aspect of nursing—that which is thought to be in the patients’ best interest (objects, actions, persons, and qualities). This concept was explained to the participants. The NAs were asked to give examples from their own clinical situations to illustrate their answers. The following questions were asked:

• Please try to characterize, identify, and narrate your opinion of:
  1. A good NA.
  2. Good perioperative nursing care.

• Do health requirements determine nurse anesthesia care? If so, try to specify.

The questions were distributed to the students just before their graduation as NAs. Their answers were sent to the first author a month later, after they had started working in their new profession as NAs. The main reason for choosing written answers (as opposed to interviews) was to minimize the first author’s influence on the answers, because the subjects knew the first author as a teacher.

• Data analysis. Ninety pages of handwritten text were processed according to a phenomenographic method developed by the Marton group.24 Most subjects’ responses contained supplementary examples from their clinical experiences; they used the examples to explain their responses to the 4 questions. Written responses from each subject were analyzed as a whole; the analysis focused on good nursing as it relates to this study’s purpose: to identify and describe different ways in which new NAs experience and perceive nurse anesthesia care. Data analyses were done by using the 7 steps of a phenomenographic analysis suggested by Dahlgren and Fallsberg.25(p152) The steps were repeated several times. The Table outlines the data analysis method.

• Methodological considerations. The phenomenographic analysis method facilitates identification of differences in approaches to nurse anesthesia care and surgical contexts. The varied content of the responses and the examples from good nurse anesthesia care in clinical situations can provide a picture of different ways in which new NAs deal with nurse anesthesia care problems or situations. Barnard et al21 claim that phenomenographic research has potential for health-care research, particularly when peoples’ understanding of their experiences is the goal.21 Awareness levels among NAs may differ regarding how they think as they are working, how they think in nurse anesthesia situations, and how they handle problems or situations in their professional worlds. But Sjöström et al23(p257) argued that this is not a major concern, because phenomenographic research deals mainly with structural
and content aspects of how phenomena are experienced. They also claim: “The availability of descriptions of how a group of people experience phenomena in professional settings is in itself a resource for enhancing awareness.” The approach of this study is in agreement with Sjöström et al., who argue that the way in which we think about something is expressed through the way we act and is the fundamental reason why we choose to act and do so in a certain way. Bendz 14(p46) proposes that knowledge in clinical nursing situations can be studied from 2 perspectives: the internal and the external. Knowledge in an external context manifests itself in some type of care action, whereas knowledge in an internal context manifests itself as a way of thinking about care in a particular care situation. “Thus a nurse’s practical knowledge cannot be equated with her capacity to perform acts of care. What she intends by such acts and what she thinks about them is of decisive importance with regard to their content and quality.”

**Results**

A total of 250 statements were found in step 2 (condensation). Different focuses emerged in step 6 (labeling), which provided the following 3 main categories, or perspectives, of nurse anesthesia:

1. Maintaining physical well-being
2. The NAs role as protector and advocate
3. Demands on efficiency and care production

Categories 1 and 2 reflect the good (ought-to-be) concept mentioned earlier. Category 3 reflects an inability to carry out good anesthesia nursing care in the desired way. The following sections contain quotes from the NAs’ responses, which support identification of the above categories. Presenting the quotes minimizes the risk of losing the important intentional part of the content when separating the subjects from what they have said through condensing and grouping their descriptions into categories.

- **Maintenance of physical well-being.** In this category, the NAs’ responses clustered around the following subcategories:
  - What constitutes good nurse anesthesia
  - Required nursing actions for maintaining well-being
  - The patient-NA encounter
  - Context influences

The new NAs said that good nurse anesthesia meant that they looked after patients’ physical well-being in a skilled way. They emphasized the importance of maintaining the patient’s physical condition to ensure safety during the anesthesia situation. For example, according to 1 NA:

Nursing is different when you work as a nurse anesthetist; it is more basic. The patient is unconscious most of the time when I am responsible for the care. I must look after the patient in different ways and possibly give drugs and liquids intravenously; prevent damage during anesthesia that is connected with bad judgment, and look after the patient’s positioning.

The role was experienced and viewed as a decision-making role that concentrates on coordination—to set the right priorities in care situations and to foresee situations that can happen during the anesthesia situation.

Nurse anesthesia actions that maintain physical well-being are based on medical and technical tasks that involve abilities to handle drugs and use medical-technical equipment (for example, using monitors to evaluate the patient’s physiological status and to secure and maintain a safe anesthesia situation). For 1 nurse, the following was key:
To have control of the anesthesia situation when using different drugs and to know how these drugs will affect the human body. To have good medical and technical competence and to know how you use all equipment functions and how they work.

Hence, when it comes to nurse anesthesia actions, new NAs focused on physical rather than mental well-being, because the mind is considered less important in a clinical anesthesia situation. The values within clinical anesthesia nursing care that fit into this subcategory were inherited from a rational attitude, which separates body and mind, regardless of whether the patient is conscious or unconscious.

The NAs said that the patient-NA encounter was necessary for exchanging information about the patient's health and for giving the patient information, which included explaining actions performed or to be performed and what equipment is used. As 1 nurse stated:

To be calm and not stressed is necessary in this situation. To take time with patients—for small talks—if they want or need them. You must provide information about all the tubes and instruments and why they are used before, for example, you connect patients to ECG electrodes and tubes. To give patients 5 extra minutes to make them more relaxed.

Giving and taking time in encounter situations was not perceived to be restricted, so long as the time was used for patients or for information that the NAs needed.

The new NAs said that context influences affected and regulated the nurse anesthesia situation because most of their attention was on the equipment, the patients’ physiological status, and maintenance of anesthesia—rather than on the patients’ well-being. They also said that they were unable to anticipate problems directly connected to the patient during the nurse anesthesia situation. “The patient is there, but the equipment dominates in this context, and the nurse anesthetist depends on the equipment.” They experienced a state of dependence on technical monitoring because they didn’t trust their own judgments or abilities to get subjective or objective information from the anesthetized patient.

- **Role of a protector and advocate.** Good nurse anesthesia care was described from the patient’s perspective, from being “in the shoes of the patients.” Patients were thought (1) to be unaware of the risks involved in the anesthesia context and (2) to lack the ability to function independently for themselves in anesthesia and surgical situations. Anesthesia nurses experienced and viewed the patient as being in a vulnerable situation. This meant that nurse anesthesia had to be practiced from the viewpoint of value beliefs and responsibility, in support of the surgical patient. As described by 1 NA:

The patient might be unconscious or she might not be aware of the risks. The nurse anesthetists’ duty is to see to it that the patient’s integrity is not violated! The patient is more vulnerable in the operating theater than when she is in a hospital ward.

The roles of advocate and protector were 2 ways in which NAs could perform their responsibilities for patients’ well-being. The nursing action was experienced and viewed as a mutual emotional dialogue in a vulnerable nurse anesthesia situation. “Good nursing entails focusing on the patient, whereby the patient is participating (if possible) and constantly evaluating nursing.” From the NAs’ perspective, the surgical patient was believed to need empathic and psychosocial support. The NAs said that they had to focus on mental assistance and support to fulfill the individual patient’s human needs while carrying out nurse anesthesia care.

The encounter between the patient and the NA was experienced and viewed as a vulnerable situation, in which mutual nurse-patient understanding could be established. Such a relationship was believed to have been founded on the provision of verbal and nonverbal reassurance, the expression of concern, and the provision of a reassuring presence; the way to do this was through a dialogue. It was also believed to be an obligation that must be fulfilled during the encounter—for example, creating a safe, secure, unstressed milieu. According to 1 NA, it was her duty to

- listen to the patient and try to guarantee continuity within nursing of the patient. I believe that you are broadening your mind as a nurse in this respect. If possible, meet the patient the day before surgery. You must create a safe, secure atmosphere around the patient and follow up the surgical-anesthesia situation afterward. You cannot be stressed; you must listen to the patient with eyes and ears. Speak calmly and objectively. Be close to the patient all the time. Skin to skin makes you feel confident.

The context influences were experienced as having consequences for the outcome of nurse anesthesia in terms of power and time. The patient was believed (1) to be lacking knowledge and understanding of his or her entire intra-anesthesia situation and (2) to be at the mercy of the individual NAs’ decisions. The distribution of power in the relationship was reflected to be unequal during the nurse anesthesia situation, and the NAs’ power was increased. As 1 nurse stated:

What really matters is to create a nursing situation of mutual confidence, because the patient is put into what for him or her is an unusual situation. In a literal sense, patients commit their lives to the nurse anesthetists. In fact, they don’t have much to say about their situation in this environment. In contrast, patients in a hospital ward have a great deal of say and
are more autonomous, and it is more obvious that they must be shown consideration.

The time allotted for each patient was considered inadequate to support the individual patient’s needs, including psychological needs. As one nurse put it, “I believe that the caring part suffers because of pressing schedules. There's not enough time to do the job right—neither for personnel nor the patient.” The limited time for each patient and the NAs’ increased power were experienced as a dilemma in the clinical care situation.

• Demands of efficiency and care production. Nurse anesthesia care was perceived to be practiced with emphasis on financial considerations and pressure to provide care efficiently. The NAs believed they had to follow ward expectations for efficiency, whether they liked it or not, as evidenced in the following:

Nursing care is negatively affected by time restrictions and by, for example, ‘bonus patients.’ The care part suffers because of the tight operation schedule. Both staff and patients need more time, I think. It’s all very negative—not having enough time for every patient.

The nurse anesthesia care situation was experienced and viewed to be difficult and demanding. The desires of the NA and of the patients were believed to be different from the ward’s demanding expectations for efficiency and the ward’s view of good nurse anesthesia. Time restrictions, rewards for “care production” (bonus patients), and demands for efficiency were experienced and viewed to be difficult objectives to achieve. According to one nurse, “Everything is about money and about how many patients you manage to handle per year. It’s incredibly stressful. The patients take second place. Their needs are not attended to.” When choosing between what’s best for the ward and what’s best for the patient, the NAs had personal doubts about the appropriateness of performing anesthesia nursing activities that fulfill efficiency requirements. They said that actions taken in anesthesia nursing care situations were believed to favor the ward, and this was a dilemma for the new NAs.

The patient-NA encounter was considered to be an unsatisfactory situation. The allotted time was believed to be too short. The new NAs experienced efficiency demands as their first priorities and that there was not enough time for human support. One nurse said, “Nursing care suffers because time is short. There is not enough time to do a good job and a job that you can be proud of. It would be better if you met the patient the day before and after.” Frequently mentioned factors that regulate nursing practice according to type of anesthesia and surgery, care, planned time, financial considerations, efficiency, and power contribute to context influences. As another nurse put it, “The NA must be technically competent, speedy, firm, have good medical knowledge, be a leader, have patience, be able to foresee situations, be self-sufficient, have self-confidence, and be sensitive.” The new NAs experienced and viewed the anesthesia nursing situation as complex and difficult to deal with when all the different areas of responsibilities were considered. They also believed that it is impossible to fulfill the interests of nursing care outcome while looking after the interests of the patient and the ward. The new NAs experienced a dilemma and viewed themselves as being trapped in having to choose between acting on behalf of the patient or on behalf of the ward, in an anesthesia care situation.

Reflections

This study showed the great influence of the contextual milieu in the anesthesia care situation and in the ways in which new NAs experienced their abilities and feelings of satisfaction in their new profession.

The study uncovered the following 3 categories that describe ways to approach anesthesia nursing:

1. Maintenance of physical well-being, which stems from a rational (Cartesian) attitude, which separates body and mind.
2. Implementation of the roles of protector and advocate, which stems from the human aspects of nurse anesthesia.
3. Fulfilling efficiency demands and producing care based on the ward’s expectations.

In the category of maintaining physical well-being, the point of departure was task oriented and governed by medical-technical equipment. The NAs mistrusted their own judgments and abilities to get information from the anesthetized patient, which led to dependence on medical-technical monitoring and to being prevented from giving patients first priority. This category indicates that the NAs lacked professional self-confidence in using technology as an aid; instead, technology directed them, which earlier research in a technology-intensive context supports.

In the protector/advocate category, the departure point was what nurse anesthesia meant to the patient and how to fulfill patients’ needs. Here, the NAs had to think about which values they should preserve and which roles they should assume in order to meet patients’ needs. Two faces of advocacy evolved: value preserving and role response to another person’s needs. These results are consistent with advocacy in critical care nursing, which is described as a caring response to another human’s rights.

The NAs’ intentions to guard and look after patients’ spiritual and physical well-being led to a
state of dilemma due to factors such as the NAs’ increased power; insufficient time, and the patients’ vulnerable situations.

The first 2 categories describe nursing care for which the NAs’ nursing approach is related to the patient, even though nursing care perspectives differ. These categories are similar to the nursing approaches of novice (new) and expert nurses in intensive care, described by Benner, who claims that novice nurses emphasize nursing care within an acting and technical perspective, whereas experienced, expert nurses can vary and adjust their nursing care according to the individual patient’s needs. The results in this study indicate that new NAs emphasize 2 nursing care perspectives: maintaining physical well-being or assuming the role of a protector and advocate.

In the efficiency and care production category, the departure point was satisfying efficiency demands that governed the ward. This situation led to a state of personal dilemma and feelings of inadequacy, which was congruent with earlier research. Byrne showed that nurses working in an accident and emergency unit expressed a primary concern for “keeping the department running smoothly.”

Allotted time had different meanings in different categories that emerged from the analysis in this study. But Wichowski claims that nurses working in a technology-intense context experience time as an area of ambivalence; furthermore, Wichowski showed that the nurses were divided as to whether technology provided them with more or less time to spend with patients.

In the maintaining physical well-being category, allotted time in the patient-NA encounter was not thought of as restricted or too short. The NAs said that they could use all the time that they needed to exchange information with patients.

In the protector/advocate category, the allotted time was too short when it came to human aspects of care—from patients’ perspectives. Restricted, regulated time hindered the new NAs when they chose their preferred ways to carry out anesthesia nursing, and it prevented them from offering patients time for emotional support.

In the category of demands on efficiency and production, time was perceived as costly and restricted. Established financial restrictions led to inner conflicts when the new NAs followed efficiency rules, rather than acting in favor of the patients. The inability to provide human and emotional support led to feelings of inadequacy, which is a problem for the individual NA—a problem that should be studied further. The clinical (contextual) milieu can influence the quality and degree of humane support provided to patients.

In some respects, the influence of contextual shortcomings is similar to what Byrne described. Corresponding results were also found in psychiatric care. Berg argues that psychiatric nurses struggle with their professional independence, because they lack self-confidence and because they are not sure of their professional responsibilities and boundaries.

Situations in nurse anesthesia care led to personal feelings of inadequacy and moral conflict, when the new NAs experienced that (1) they had to act against their wills and (2) their freedom to choose had been eliminated. Results from perioperative nurses’ experiences showed that they were prevented from giving the good care they wanted to give. von Post showed that perioperative nurses felt guilt and shame for not having prevented the value conflict. The ways in which the new NAs defined their values and their roles were central in understanding their actions in a nurse anesthesia care situation. But it is not enough that they are aware of these feelings and conflicts, because awareness alone does not benefit patients. When new NAs choose to concentrate on efficiency to get patients through the ward quickly—even if it is against their will (rather than giving the patient assurance and support)—then they also choose to exclude caring in an anesthesia nursing care situation. This is in line with and supports previous results, which show that dilemmas and values can be inherited from contextual conflicts of interests, and the dilemmas and values can influence the person in the contextual situation.

None of the new NAs mentioned, reflected on, or looked for arguments that support their views and opinions from the responsibilities defined by the National Board of Health and Welfare—even though the NA profession and the NAs’ responsibilities and authority were discussed and referred to during their education. Instead, the NAs referred only to clinical aspects, to what they themselves think and experience in clinical situations; their responses did not mention or reflect on the theoretical framework presented in their education. Fagerberg studied how Swedish nursing students developed their reasoning and knowledge about the conditions for, and their conceivable action with, two fictitious patient cases during 3 years of education. The results in our study support the Fagerberg results, which point out that student nurses in the last year of nursing school (during the transition from student to nurse) had trouble combining theory with practice. They lacked reasoning ability and could not reflect on their practical experiences and put them into a theoretical perspective.

When it comes to fulfilling nursing care in an anesthesia and surgical context, one must consider the com-
plexity of concerns, such as efficiency (which keeps the department running smoothly), technical monitoring, actions taken and judgments made to get the patients through the department, and ensuring the patients’ safety and well-being and values within nursing care.

In this study, the new NAs had 3 main approaches to how nurse anesthesia care should be practiced. One approach was favored, but it was clear that the new NAs knew that all approach strategies must be considered when seeing to nurse anesthesia care needs.

In summary, we propose that increased awareness is an important tool for understanding how nurse anesthesia care is experienced and practiced by new NAs. This awareness includes the new NAs’ concerns about nurse anesthesia care actions, concerns about value dilemmas, feelings of inadequacy, and reflections on previous nursing behaviors when approaching new nursing situations. With this understanding, we can then provide direction for new NAs and support them in creating good nurse anesthesia care situations in their new profession.

REFERENCES

AUTHORS
Annika Larsson Mauleon, NA, RNT, is a doctoral candidate in the Department of Clinical Neuroscience, Occupational Therapy and Elderly Care Research, Division of Geriatrics, Karolinska Institute, Stockholm, Sweden, and the Department of Health, Science and Mathematics, Blekinge Institute of Technology, Karlskrona, Sweden.

Sirkka-Liisa Ekman, RN, PhD, is a professor in the Department of Health, Science and Mathematics, Blekinge Institute of Technology, Karlskrona, Sweden, and the Department of Clinical Neuroscience, Occupational Therapy and Elderly Care Research, Division of Geriatrics, Karolinska Institute, Stockholm, Sweden.

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