Swedish student nurses knowledge of health statutes: a descriptive survey

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Title: STUDENT NURSES STATUE AND LAW KNOWLEDGE: A DESCRIPTIVE SURVEY

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Abstract

Background: The nurse's function no matter the working area is guided by ethical approaches as well as grounded in science and well-tried experiences, and has to be conducted according to national laws, statutes and instructions.

Aim: To survey newly graduated Swedish nurses' knowledge about current statutes and laws that govern their health care system.

Method: A questionnaire was elaborated from facts in relevant statutes and laws presented and used in the nursing education programs. Following a pilot study testing the items, a 20-item questionnaire, with mostly open-ended questions, was distributed to student nurses in the last semester of their nursing education program before graduation.

Results: One-hundred and seventy-eight participants answered the questionnaire, giving a response rate of 59 %. Only 29 % correct responses on all questions showed correct knowledge about the different statutes and laws that regulate their work as nurses. The best knowledge was found in the area of documentation (range 35 % to 86 %) and in the area of information (range 16 % to 54 %) on group scores.

Conclusion: This survey concerning novice nurses' knowledge about statutes and laws showed great deficiencies. It was shocking to find that on existing demands regarding nurses delegating medical tasks, not a single respondent presented a correct answer. Evidence-based knowledge was difficult to recognize. Nurses will be more conscious of their own limitations and more prepared to meet the reality of practice if there is emphasis on relevant statutes and laws during their education.

Keywords: Care quality, Competency, Laws, Legal Statues, Patient Safety, Swedish student nurses/registered nurses

Introduction

The nursing programme in Sweden has its focus on the following major functions: nursing care, biomedicine and behavioural aspects of care. During the three-year program nurse students have both theoretical and practical training, each of which consists of around half of the educational time (Ordinance 1998:1003). It is important to make significant improvements to patient safety and the nursing education programme has a key role to play in achieving this goal. Every nursing institute, in the present situation 27 seats of learning, has the possibility to decide the content of the nursing education programme. Hence, in Sweden, the National Board of Health and Welfare (NBHW) authorizes and registers nurses. The NBHW has in cooperation with employers, nursing society and influenced by the World Health Organisation (WHO) European Strategy for Nursing and Midwifery Education (WHO 2001), developed a report stating that the education program for nurses shall be competency-based. The rapid knowledge development in health care and requirements on quality and efficiency also demands that the nursing education program continuously develop. This report includes three main areas of significance for nurses: 1) Nursing theory and praxis, 2) Research, development and education and 3) Leadership/ management. A holistic point of view and ethical approaches should permeate all through the competency areas.

According to Swedish Statue (SFS 1992:1434), to graduate and be awarded the University Diploma in Nursing / Bachelor degree in Nursing, students need to acquire such knowledge and skills as are necessary to enable them to work independently as a nurse. Several statues and laws, as in most countries worldwide, regulate the registered nurse's work in Sweden. The nurse's function no matter the working area and nursing care, is impressed by ethical approaches, grounded in science and well-tried experiences and shall be conducted according to laws, statues and instructions (The NBHW, 2005). Safe patient handling is a

skilled activity, which necessitates a good underpinning theoretical knowledge, no matter in what country the nurses are working. For example, lack of knowledge regarding medications may contribute to administration error (O'Shea, 1999). Further, it can have 'serious consequences for individual patients, their families and health-care staff and will undermine general confidence as a whole' (Page & McKinney, 2007 p.219).

Nursing is a complex combination of theory and practice (Corlett, 2000; Kohl, 2002), and there is a debate on how to assess knowledge and the ability to apply that knowledge to practice (Bradshaw, 1998). The issue seems difficult to answer straightforwardly, for assessing competency is fraught with difficulty (Robb et al., 2002). It is an immense challenge for nurse education programmes to identify research/evidence-based knowledge and to transform it to knowledge and skills for use in everyday practice by the student nurses as well as the registered nurses (Ela et al., 2006). Beginning nursing students have thought of nursing care as 'being', 'doing' and 'professionalism'. 'Being' is when the nurse is present to the patient. 'Doing' is the activity and handling the nurse makes for and with the patient. 'Professionalism' includes knowledge, rules and regulations, ethics and prevention (Kapborg & Berterö, 2003). These nursing students seemed to have a quite clear picture of what it means to be a nurse and what responsibilities there are. There is a challenge to preserve this understanding and knowledge and to deepen it during the nursing education programme in order to maintain evidence based and high quality nursing care.

The study

The aim of present study was to survey newly graduated Swedish nurses' knowledge about current statutes and laws that govern the healthcare system.

Methods

The present study is a descriptive survey study using a self-report approach gathering data in writing by questionnaire.

Elaborating the questionnaire

Information and facts about current national statutes and laws, which govern the health care system and are also included in the 3 year nursing education program at universities and university colleges in Sweden were obtained. The statues and laws, which were judged as relevant, i.e. statues and laws that nurses should have knowledge about, were chosen. Twenty questions (mostly open-ended) were formulated from these statues and law texts.

To obtain a conception about the relevance of the questions, no matter the place of education program, a pilot study was conducted in two steps. First, eight nurses and nursing teachers with experience of working as nurses during the past three years answered the questionnaire and wrote comments about how they comprehended the questions. Based on these answers and comments, the questions were adjusted. Second, 13 student nurses from semester six at another university college, not included in the study, answered the questionnaire. From these answers the questionnaire was considered valid; it was measuring knowledge about health statutes and laws relevant for nurses in Sweden.

Sample and Ethical concerns

The sample consisted of 302 student nurses at the last semester (semester 6), during the last weeks before graduation. A total survey were made at a university in the eastern part of Sweden, at three final semesters comprising about 200 student nurses and at one final semester at one University College in the west side of Sweden, comprising 102 student

nurses. Approval for the study was acquired from each University or University College. Further, the guidelines by Humanities and Social Science Research Council (HSFR, 1999) and Law about ethical considerations regarding research on human beings (SFS 2003:460) and The World Medical Association Declaration of Helsinki (version 2002) were followed regarding information and participants' consent etc. Informed consent was obtained by explaining all aspects of the study both orally and in writing to students. All students were informed that their answers would be treated as confidential and the results were not going to be presented on individual achievement. Students were informed that their participation was voluntary and that they could withdraw at any time. Every researcher has the responsibility to ensure that the design of the study is morally and ethically sound (SOU 1999:4).

Data collection and analysis

Data collection was conducted using a survey design; a self-reported questionnaire was distributed. During a classroom session, at the nursing school programme the student nurses answered the questionnaire. One of the researchers was at each place when the questionnaire was answered, during a period of about 40 minutes. No recall aids were allowed during the answering/writing session.

The answers were interpreted and analyzed by using an alignment model, which has been constructed from valid statutes and laws. These interpretations are made with a kind of content analysis; the open-ended responses are transformed to fixed categories in a post hoc fashion (Berg, 2004). Descriptive statistics have been used to present data, where possible. The data collected from different nurse education programmes are treated as one and presented as a unity, since there were similar responses on the questions no matter where the nurse education took place.

Findings

Demographic characteristics

In total 178 out of 302 (almost 59%) student nurses responded to the questionnaire. Out of the 178 student nurses 158 were female (88%) and 17 were male (11%). Participants' ages ranged from 21 to 51 with a median age of 25 years. Three persons did not answer the question on gender. Seven of the respondents did not answer the question on age. Educational background prior entering the nursing educational programme is that the majority of the respondents (66.2 %) have an educational background from upper secondary school: two or three years, but no prior educational experiences from caring programmes.

The findings will be presented with focus on mainly the first area of significance for nurses: Nursing theory and praxis. Some related responses could be found regarding the third area of Leadership/ management.

Information and secrecy

The Health and Medical Services Act (SFS 1982:763) is a framework law, which embodies the importance of security, integrity, and respect for the patient. This Act gives clear directions about patients' privileges and how and to whom information should be given.

The correct answer is that a patient has the right to obtain information about their diseases and treatment, and if the patients are not capable of comprehending the information it is the nurses' obligation to inform the relatives. Table 1 shows that approximately 16% of the nurses answered this question completely correctly and a majority gave an incomplete answer and did not state that nurses had to inform relatives.

Table 1. Frequency of answers to the questions; what kinds of information are nurses allowed or obliged to give to the patients and to whom could information about a patient be shared? (n= 178)

	Completely correct n (%)	Partially correct n (%)	Incorrect n (%)	Do not know/No answer n (%)
Kinds of information	**29 (16)**	**137 (77)**	**- (-)**	**12 (7)**
Sharing information	**114 (64)**	**- (-)**	**61 (35)**	**2 (1)**

Sixty-four percent of the nurses answered correctly the question; to whom information about a patient could be shared, i.e. to all persons involved in the care of the patient.

The law of secrecy (Law 1980:100) and law about occupational activity in the health care area (Law 1998:531) gives clear directions about how to handle information and to whom information could be given during different circumstances. All health care professionals have the obligation to observe silence.

A scenario was presented: *an 18-year old woman was hospitalized at a ward and she did not want her mother to know this. The mother calls the ward and how do you as a nurse act?* Sixty nurses (34%) act correctly, i.e. they did not disclose that the woman was staying at the ward. However, the majority did act incorrectly; they did not observe silence.

Safe care and documentation

The foundation of safe and secure care/nursing is clear and complete documentation, including descriptions about the patient's needs and what caring actions should be carried out, as well as evaluation and what should be revised regarding the care. Safe care is regulated in different laws about nurses' duties, regulations about health care and medical services. The nurse is the only health care professional who is present with the patient 24 h a day and who also has an obligation to document her actions (SOSFS 1993:17).

Table 2 shows when the nurses were asked who has the obligation to keep patient records, 65 nurses (35%) responded totally correctly. However, when the nurses were given dichotomous

Table 2. Frequency of answers to the questions; who has the obligations to keep patients records, what caring activities should be documented, how should intolerance or hypersensitivity should be marked, what quality assurance means, and with whom could information about a patient be shared? (n= 178)

	Completely correct n (%)	Partially correct n (%)	Incorrect n (%)	Do not know/No answer n (%)
Obligations to keep				
Patients' records	**62 (35)**	**57 (32)**	**58 (33)**	**- (-)**
Caring activities				
documented	**2 (1)**	**150 (84)**	**22 (13)**	**4 (2)**
Intolerance				
should be marked	**37 (21)**	**95 (53)**	**43 (24)**	**3 (2)**
Quality assurance				
Means	**34 (19)**	**39 (22)**	**47 (26)**	**58 (33)**

questions about nurses' obligations to document nursing care actions, the total correct response was 154 out of 178 (86%) (data not shown).

Only 2 nurses (1%) did know what caring activities should be documented to obtain good and secure care.

Another important issue regarding safe care is to know how intolerance or hypersensitivity to drugs should be marked or noted in patient records. About a fifth of all nurses (21%) gave a totally correct answer here and 95 nurses (53%) gave a partly correct one.

The nurse's documentation must include sufficient information about the patient to be able to give good and safe care (SOSF 1993:20). When evaluating the quality of care, documentation of the nursing process: assessment, planning, implementation and evaluation, are important tools. The documentation is a guarantee that the right things are done in a proper and correct way (SWENURSE, 2007; SOSFS 2005:12). When the nurses were asked what quality assurance means according to the statute (SOSFS 2005:12), 34 nurses (19%) knew this. However, half of the nurses (52%) did know which members of staff are obliged to participate in quality assurance work (data not shown).

Patient safety is particularly focused on blood sampling for blood-group determination. An important issue is also who (different professionals) is allowed to take this certain kind of blood sample?

Table 3 shows that ten (6%) of the nurses knew who is allowed to take this specific kind of blood sample. Having knowledge about what kind of identity control is necessary when taking a blood sample for blood-group determination, 50 (28%) of the nurses knew that.

Table 3. Frequency of answers to the questions; who is allowed to take certain kinds of blood sample (i.e. blood grouping) and what kind of identity control is necessary? (n= 178)

	Completely correct	Partially correct	Incorrect	Do not know/No answer
	n (%)	n (%)	n (%)	n (%)
Allowed to take certain kinds of blood sample (i.e. blood grouping)	10 (6)	150 (84)	15 (8)	3 (2)
What kind of identity control ?	50 (28)	112 (63)	5 (3)	11 (6)

To maintain patient security/safety and to work with quality assurance in care there are several statues and laws about obligations to report (Law 1982:763; Law 1998:531; SOSFS 2005:28). There should be reports about divergences about responsibilities, about mistakes or risks etc.

When asking the nurses what Lex Maria means (SOSFS 2005:28). A quarter of the nurses (25%) did know what this meant and what obligations there were for reporting divergences, mistakes and risks all to preserve the patient safety. Partly correct answers were given by 96 nurses (54%) (data not shown).

Management and responsibilities

Delegation is something that should be performed according to specific guidelines and some differences are to be found between hospitalized care and primary care. There are also demands when delegating medical tasks, e.g. control of knowledge and skills. If the nurse for some reason does not fulfil her obligations or makes mistakes that affect patient safety she may be command disciplinary sanctions at three levels; admonition, caution, and finally the withdrawal of nursing registration.

Table 4 shows the nurses' knowledge about delegation and control functions. Thirty-two (18%) nurses did know about these differences of delegation in hospitalized care and primary care. When asking what demands there are when delegating medical tasks, e.g. the control of knowledge and skills. No nurses knew the correct answer.

When the nurses were asked about what these disciplinary sanctions were, approximately one third (29%) of the nurses knew all of them and almost half of nurses (48%) knew partly about them.

Table 4. Frequency of answers to the questions; differences of delegation in hospitalized care and primary care, demands when delegating medical tasks, and disciplinary sanctions. (n= 178)

	Completely correct	Partially correct	Incorrect	Do not know/No answer
	n (%)	n (%)	n (%)	n (%)
Differences of delegation in hospitalized care and primary care	**32 (18)**	**69 (39)**	**30 (17)**	**47 (26)**
Demands when delegating medical tasks	**- (-)**	**138 (78)**	**23 (12)**	**17 (10)**
Disciplinary sanctions	**53 (29)**	**85 (48)**	**- (-)**	**23 (13)**

In the community, it is the medically responsible nurse who has the liability to ensure that the staff has the possibility to manage their work in a safe and correct way. Around half of the respondents (52 %) gave a correct answer, even though some nurses suggested the physician as the responsible.

When a nurse is employed in the municipality, the physicians have their positions in the county council at the welfare centre; this means that nurses have to call the doctor when there is a problem and/or e.g. needs a drug prescription. It is the nurse's responsibility to document the name of the drug, correct dose, name of the doctor and time for the prescription. The physician has the responsibility to sign the prescription afterwards. Six nurses (3%) responded correctly regarding all this important information. A majority of the nurses gave different partly correct answers (data not shown). Thirty-seven nurses did not answer this question.

When there is a suspicion regarding the wrong effect of drugs or negative side effects, the nurses have to report this to the doctor who prescribed the drugs. The correct answer on this question was given by about half of the nurses (49%). Many of the nurses suggested that the drug company had to be informed (data not shown).

Looking at all questions answered and adding all correct responses and then dividing the sum with the number of questions: only 29% of the nurses had the correct knowledge about these different statues and laws that regulate their work as nurses.

Nurses' reflections about their knowledge

When the nurses had responded all the questions, they were asked to reflect upon their knowledge in this particular area under study: national statutes and laws regulating their work as nurses. They should place themselves upon a visual analogue scale 1 (very low knowledge) to 10 (very high knowledge). When calculating all the figures, a mean value was found to be about 5**.**

Discussion

The results of this survey could be seen as the quality assurance of many different variables such as: nursing education programs, nurses' competency, quality of care and legal security, as well as patient safety. The rapid knowledge development in health care and requirements on quality and efficiency also demands that nursing education programs continuously develop, and this is written in the report about nurses' competency, which includes three main areas of significance for nurses: Nursing theory and praxis, Research, development and education and Leadership/management. A holistic point of view and ethical approaches should permeate all through the competency areas (The NBHW, 2005; WHO, 2001). In our questionnaire these three competency areas were covered, although focus is mainly on nursing theory and praxis and leadership/management. As defined by Nolan (1998) and McConell (2001) competence is a capacity, knowledge; the potential to perform skills and competency as actual performance according to policies in a special situation; the working area.

Mooney (2007) described newly qualified nurses´ experiences of the transition from being a nursing student to becoming a registered nurse. The author stresses that there is a need to contextualize the transition to registration so that the expectations of newly qualified nurses are realistic. Regardless of the educational institute in which an education program for nurses takes place, their knowledge and skills ought to be both adequate and sufficient. It is important to establish a culture for patient safety throughout the nursing education e.g. to ensure that the patient receives care which is both safe and suitable to its purpose.

It could be thought of that our study has limitations since it was performed in Sweden with national statues and laws. However, as stated by Mooney (2007), an education program for nurses should provide adequate and sufficient knowledge and skills, no matter where it

takes place. Furthermore, the ethics, statues, laws and knowledge are similar for nurses worldwide.

In the present survey, 178 participants have been evaluated concerning their knowledge and skills in law and statues. In summary, the nurses had presented a very low result on the questions, only 29 % had responded correctly to all questions. It was shocking to find that a question concerning what demands exist when a nurse had to delegate medical tasks not a single nurse could present a correct answer. One hundred and thirty six nurses out of 178 had given a partly correct answer, but not completely satisfactory. Even worse figures were seen in the responses regarding the reporting of medical side-effects and negative reactions to drugs. Nurses are accountable for the drugs they administer and they need to have knowledge of the action, side-effects and correct dosage of the drug. Lack of knowledge regarding medications may contribute to administration error (Page & McKinney, 2007) and may also jeopardize patients' safety.

The above question can be related to another about what caring activities should be documented to obtain good and secure care. Only two nurses knew the correct answer. Insufficient documentation is serious since documentation is a tool to inform other staff about the patient's health status and care provided. The foundation of safe and secure care/nursing is clear and complete documentation, including descriptions about the patient's needs and what caring actions should be carried out, as well as evaluation and what should be revised regarding the care. Safe care and secure care is regulated by different laws on nurses' duties, regulations concerning health care, and medical services (SOSFS 1993:17; SOSFS 1993:20). The nurse's documentation must include sufficient information about the patient to be able to give good and safe care (SOSFS 1993:20). Furthermore, the documentation has an important role in assuring the quality of the nurses' role and actions. When evaluating the quality of care, documentation of the nursing process: assessment, planning, implementation and

evaluation, are important tools. The documentation is a guarantee that the right things are done in a proper and correct way (SOSFS 2005:12; SWENURSE, 2007). When nurses are competent to meet professional documentation standards it ensures not only being competent but also avoiding a costly and career- jeopardizing malpractice or negligence lawsuit. Nursing is not complete until the care has been properly documented; no documentation - no care was performed. Poorly kept documentation can be seen as the patient being poorly treated by the nursing staff.

Nursing is a complex combination of theory and practice (Corlett, 2000; Kohl, 2002), and there is a problem of how to assess knowledge and moreover the ability to apply that knowledge to practice (Corlett, 2000). In the report Description of Competency for Registered Nurse (The NBHW, 2005), competence is defined as the ability and will to perform a task by applying knowledge and skills. Ability includes experiences, understanding and judgment to transform knowledge and skills. All the participating nurses in this study had the will to perform, but there seems to be insufficient ability. Will means an attitude, a commitment, courage and responsibility. Knowledge means that the nurse knows: that she has facts and methods disposal. Finally, skills mean that the nurse should be able to perform the tasks in practice.

Competence/competency is difficult to assess as Bradshaw (1998) claims; how to assess knowledge and the ability to apply that knowledge to practice. In the nursing education programs we uses different “didactical designs”; learning safe patient handling skills (Kneafley & Haigh, 2007) working with case studies and incorporating problem-solving and decision making (Baumberger-Henry, 2005), Problem-based-Learning (Ehrenberg & Häggblom, 2007; Sillén, 2001; Rideout, 2001;), drug calculation (Kapborg, 1994; Wright, 2007), drug administration (Kapborg, 1994; Manias & Bullock, 2002), student self-assessment (Dearnley & Meddings, 2007; Taras, 2001) both in theory and in clinical placements etc. The

inclusion of key sources of laws and statues and how apply them to practice is an important issue to focus in the nursing education program. If the emphasis is on these issues, e.g. the facilitation of learning the application of law to practice and its implications, student nurses will be more conscious of their responsibilities and limitations and more prepared to meet the reality of patient care.

Student nurses are taught to reflect upon their strengths and weaknesses throughout their nursing education program. Reflection is a good tool for developing and transforming nursing knowledge into skills. Most of the nurses in this survey valued themselves as having a mean value of about 5: i.e. having knowledge about statues and laws as partly enough (half way)**.** There were some nurses valuing themselves as sufficient and having all the knowledge they needed, even if the results showed the opposite. However, there were also those aware of their limitations and they hoped that there will be time to read and check up on the statues and laws when required.

Conclusion and Implications for practice

The education program for nurses should be competency-based, i.e. knowledge and skills to practice. Rapid knowledge developments in health care and requirements on quality and efficiency also demand that nursing education programs continuously develop. The nurse's function, no matter the working area, and nursing care are impressed by ethical approaches, grounded in science and well-tried experiences and should be conducted according to laws, statues and instructions. Safe patient handling is a skilled activity that necessitates a good underpinning of theoretical knowledge. For example, lack of knowledge no matter the knowledge area may contribute to serious consequences for individual patients. To be successful in implementing competency in nursing education programs, emphasis on statues

and laws and the integration of theoretical and practical knowledge as well as evidence- based knowledge must be strengthened. All efforts should be made to ensure the novice nurses are more conscious of their own limitations and more prepared to meet the reality of practice. A key aspect of this awareness is developing the nurses' ability to judge objectively the quality of their own, as well others', actions.

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