ETHICS IN NURSING MANAGEMENT

Identifying Ethical Problems and Methods Used by Nurse Managers to Solve These

Elina Aitamaa

TURUN YLIOPISTON JULKAISUJA – ANNALES UNIVERSITATIS TURKUENSIS
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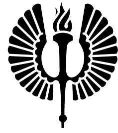

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“The time is always right to do what is right.”
Martin Luther King

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ABSTRACT

Nurse managers (NMs) have a significant role clarifying the vision, mission and values of their organization to nursing staff. They influence nursing practice so that high ethical standards are maintained and the dignity of patients is respected. In this study, NMs' work was studied from the viewpoint of ethical problems. The first aim of this study was to investigate the ethical problems in NMs' work - the nature, frequency and difficulty of the problems. The second aim was to investigate the frequency of use and usefulness of the methods used in solving ethical problems in NMs' work. Finally, the third aim was to determine the background factors associated with encountering ethical problems and their solving.

This study was carried out in three phases. In the first phase, a cross-sectional survey was conducted to investigate the frequency of ethical problems (16 items) in NMs' work and explore the role of codes of ethics in solving them, and determine the background factors associated with ethical problems and the use of codes of ethics. The sample of this phase consisted of NMs (N = 501, n= 205, response rate 41%) working in strategic, middle and ward management in 21 healthcare organizations in 2 hospital districts in Finland. The second phase, where the aim was to identify and describe ethical problems in NMs' work, was carried out using 9 semi-structured interviews with NMs in strategic, middle and ward management. The third phase consisted of a nationwide cross-sectional survey (N = 1,086, n = 214, response rate 20%) among NMs in strategic, middle and ward management in 4 out of ten largest cities and 5 hospital districts in Finland, members of a register for academic nurse managers, and participants of an education meeting targeted at NMs. The survey focused on investigating the frequency and difficulty of ethical problems (65 items) and the frequency of use and usefulness of their solving methods (40 items) in NMs' work and the associated background factors. In phases I and III, the data were analysed statistically and in phase II, with content analysis.

The results showed that NMs encounter a variety of different ethical problems in their work. Over half of the NMs encountered ethical problems at least weekly. The most often encountered and most difficult ethical problems were related to organizations. Discussion and deliberation, including discussions with different stakeholders and personal values, were the most often used methods in solving ethical problems. Most of the methods were considered useful, but most of them were rarely used by the majority of the NMs. There were work-related background factors that associated with ethical problems so that the more positively NMs perceived their work, the less frequently they encountered ethical problems and the easier they considered them.

Nurse managers need to advance discussion of ethical problems in healthcare organizations and act to strengthen resources for ethics, such as ethics experts, ethics committees and instructions for repeated situations involving ethical problems. The results of this study may also be used in education for nursing management. Further studies are needed to investigate especially the most frequent and most difficult ethical problems with different methods, like observations or interventions, to find out how they may be reduced and solved effectively.

KEYWORDS: nursing management, nurse manager, ethics, ethical problems, solving methods

TURUN YLIOPISTO
Lääketieteellinen tiedekunta
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Hoitotiede
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Hoitotieteen tohtoriohjelma
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TIIVISTELMÄ

Hoitotyön johtajilla on keskeinen rooli organisaation vision, mission ja arvojen selkiyttämisessä hoitotyön tekijöille. Hoitotyön johtajat vaikuttavat hoitotyön toteuttamiseen eettisten standardien mukaisesti ja potilaiden ihmisarvoa kunnioittavasti. Tämän tutkimuksen kohteena oli hoitotyön johtajien työ eettisten ongelmien näkökulmasta. Tutkimuksen ensimmäinen tavoite oli selvittää eettisten ongelmien luonnetta, useutta ja vaikeutta hoitotyön johtajan työssä. Toisena tavoitteena oli selvittää eettisten ongelmien ratkaisemisessa käytettävien erilaisten metodien käytön useutta ja hyödyllisyyttä. Kolmantena tavoitteena oli lisäksi määritellä minkälaiset taustamuuttujat ovat yhteydessä hoitotyön johtajien eettisiin ongelmiin ja niiden ratkaisemiseen.

Tutkimus tehtiin kolmessa vaiheessa. Ensimmäinen vaihe oli kyselytutkimus, jossa 16-kohtaisen eettisten ongelmien listan avulla selvitettiin näiden ongelmien useutta ja eettisten ohjeiden käyttöä ongelmien ratkaisemisessa. Lisäksi selvitettiin taustamuuttujien yhteyttä eettisten ohjeiden käyttöön. Kohderyhmä (N = 501, n = 205, vastausprosentti 41 %) koostui kahden sairaanhoitopiirin alueella toimivien 21 julkisen terveydenhuollon organisaation lähi-, keski- ja strategisessa johdossa toimivista hoitotyön johtajista. Toisessa vaiheessa haastateltiin 9 hoitotyön johtajaa lähi-, keski- ja strategisesta johdosta tavoitteena selvittää tarkemmin hoitotyön johtajien kohtaamien eettisten ongelmien luonnetta. Kolmannessa vaiheessa tehtiin uusi maanlaajuinen kyselytutkimus hoitotyön johtajien kohtaamien eettisten ongelmien (65) useudesta ja vaikeudesta, ratkaisukeinojen (45) käytön useudesta ja keinojen hyödyllisyydestä sekä niihin yhteydessä olevista taustamuuttujista. Kohderyhmänä oli 4 perusterveydenhuollon organisaation ja 5 sairaanhoitopiirin lähi-, keski- ja strategisessa johdossa työskentelevät hoitotyön johtajat, yhden hoitotyön johtajien järjestön jäsenistö sekä yhden hoitotyön johtajille suunnatun koulutustilaisuuden osallistujat (N = 1086, n = 214, vastausprosentti 20 %). Perusterveydenhuollon organisaatiot arvottiin 10 suurimman kaupungin joukosta. Ensimmäisen ja kolmannen vaiheen tulosten analysoinnissa käytettiin tilastollisia menetelmiä, ja toisen vaiheen haastatteluaineistot analysoitiin sisällönanalyysillä.

Tulosten mukaan hoitotyön johtajat kohtaavat työssään lukuisia eettisiä ongelmia. Yli puolet hoitotyön johtajista kohtaa eettisiä ongelmia vähintään viikoittain. Organisaatioon liittyvät eettiset ongelmat olivat useimmin kohdattuja ja vaikeimpia. Ongelmien ratkaisukeinoista useimmin käytettyjä olivat keskustelut ja pohdinta, mihin sisältyy myös tukeutuminen omiin henkilökohtaisiin arvoihin. Valtaosa ratkaisukeinoista arvioitiin hyödyllisiksi, vaikka suurin osa keinoista oli harvoin käytettyjä. Tulosten mukaan työhön liittyvien taustatekijöiden ja eettisten ongelmien välillä oli yhteys niin, että mitä tyytyväisempiä hoitotyön johtajat olivat kysyttyihin, työhön liittyviin asioihin, sitä harvemmin he kohtasivat työssään eettisiä ongelmia ja sitä helpompina he ne kokivat.

Hoitotyön johtajat voivat edistää eettisien ongelmien esille tuomista terveydenhuollon organisaatioissa ja vahvistaa niiden ratkaisemiseen tarvittavia resursseja, kuten etiikan asiantuntijoita, eettisiä komiteoita ja ohjeistuksia toistuvasti esiintyviin tilanteisiin. Tämän tutkimuksen tuloksia voidaan myös käyttää hoitotyön johtajien etiikan koulutuksessa. Erityisesti useimmin esiintyviä ja vaikeimmiksi koettuja eettisiä ongelmia on syytä tutkia edelleen erilaisin menetelmin, kuten havainnointi- tai interventiotutkimuksilla, jotta löydetään keinoja niiden tehokkaaksi vähentämiseksi ja ratkaisemiseksi.

AVAINSANAT: hoitotyön johtaminen, hoitotyön johtaja, etiikka, eettinen ongelma, ratkaisukeino

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Abbreviations

ACHE	American College of Healthcare Executives
ALLEA	European Federation of Academies of Sciences and Humanities
AONE	American Organization of Nurse Executives
CINAHL	Cumulative Index to Nursing and Allied Health Literature
ENDA	European Nurse Directors Association
EProNuMa	Ethical Problems in Nursing Management
ETENE	National Advisory Board on Social Welfare and Health Care Ethics
MCD	Moral Case Deliberation
MEDLINE	Medical Literature Analysis and Retrieval System Online
NHS	The National Health Service in the United Kingdom
NM	Nurse manager
OECD	Organisation for Economic Co-operation and Development
SAS	Statistical Analysis Software
SHKS	Sairaanhoitajien koulutussäätiö (Finnish Foundation of Nursing Education)
Taja	Terveystieteiden akateemiset johtajat ja asiantuntijat ry
SPSS	Statistical Package for the Social Sciences
STM	Ministry of Social Affairs and Health (Finland)
TENK	Finnish Advisory Board on Research Integrity
THL	National Institute for Health and Welfare (Finland)
WHO	World Health Organization

List of Original Publications

This dissertation is based on the following original publications, which are referred to in the text by their Roman numerals:

I Aitamaa E, Leino-Kilpi H, Puukka P. & Suhonen R. 2010. Ethical problems in nursing management: the role of codes of ethics. Nursing Ethics 17(4), 469–482.

II Aitamaa E, Leino-Kilpi H, Iltanen S & Suhonen R. 2016. Ethical problems in nursing management: The views of nurse managers. Nursing Ethics 23(6), 646–658.

III Aitamaa E, Suhonen R, Iltanen S, Puukka P & Leino-Kilpi H. 2019. Ethical problems in nursing management: frequency and difficulty of the problems. Health Care Management Review DOI: 10.1097/HMR.0000000000000236

IV Aitamaa E, Suhonen R, Puukka P & Leino-Kilpi H. 2019. Ethical problems in nursing management – a cross-sectional survey about solving problems. BMC Health Services Research 19(1), 417.

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1 Introduction

Ethics is an essential part of health care and it is guided by many kinds of norms, such as the Act on the Status and Rights of Patients (785/1992), ethical guidelines for nursing (e.g. Finnish Nurses Association 2014), code of medical ethics (e.g. Finnish Medical Association 2016) and many other codes of ethics for different professional groups in health care (ETENE 2001, Leino-Kilpi & Välimäki 2014). Ethics in healthcare includes respect for human dignity and basic rights of patients, focusing on the best interest of patients. Professionals are responsible for the quality of their work, including ethical competence as an inseparable part of professional skills. Services and good treatment require responsible decisions and ethical consideration at all levels of decision-making. Practices and policies that are consistent with ethical principles of healthcare professionals are part of good workplace atmosphere and well-being at work, which, in turn, improve the effectiveness of the work. (ETENE 2012.)

Management of health care in Finland is regulated by the Health Care Act (1326/2010), which states that "Health care units shall be managed by multidisciplinary experts to maintain a system of safe high-quality care, cooperation between different professions, and the development of better treatment and operating practices" (§ 4). By means of management, well-being at work and restructuring the services can be supported (STM 2012). In Finland, a major health, social services and regional government reform was due to enter into force on 1 January 2021. The aim was to level out differences in health and provide services on a more equal basis than before. The aim was also to curb cost increases in health services. (Finnish Government 2018.) This reform was interrupted, but a new one is under planning. According to the government programme, "The central objectives of the health and social services reform will be to reduce inequalities in health and wellbeing, safeguard equal and quality health and social services for all, improve the availability and accessibility of services, ensure the availability of skilled labour, respond to the challenges of changes in society, and curb the growth of costs." (Finnish Government 2019.) This objective brings into consideration ethics as well as possible ethical problems.

Nurse managers (NMs) are part of healthcare administration managing nursing care (STM 2009). Health care is a personnel-oriented field when examined in terms of the number of employees or costs (Lammintakanen et al. 2016), and nurses are the biggest group of personnel in health care in Finland (THL 2018) as well as in other countries (OECD 2019). Besides nurses, NMs have other healthcare professionals as subordinates, e.g. midwifes, radiographers and practical nurses.

NMs work at ward, middle and strategic levels of management. In Finland, in 2014 there were about 5,000 NMs in ward management and about 500 NMs in middle or strategic management (THL 2018); of these, 4,660 NMs in ward management and 316 NMs in middle or strategic management were working in local government health and social services (THL 2015).

The main responsibility of nursing management is to create conditions for effective, high quality and productive nursing care. To achieve this, NMs need to participate in creating the strategy of the healthcare unit and to direct the actions of their own units to comply with that strategy. Furthermore, they have to be in charge of the actions, finances, personnel management and development of their area of responsibility. Additionally, they have to ensure sufficient material and non-material resources to implement good quality nursing care. (STM 2009.)

Ethics in healthcare management includes discussing the values with patients, healthcare professionals, organizations and society (Gallaher & Tsudin 2010). Nurse managers have responsibility to clarify the vision, mission and values of their organization to their staff (Shirey 2005). They have a significant role in influencing nursing practice so that high ethical standards are maintained and the humanity and dignity of patients is respected (Kangasniemi et al. 2013, Poikkeus et al. 2014). NMs advance the values and attitudes in their organizations by acting as role models and by communication (Kane-Urrabazo 2006). They also communicate with different stakeholders in health care (Thompson et al. 2006).

Ethical problems – ethical conflicts, moral distress and value conflicts – are a common experience in nursing management causing a great deal of stress (Shirey et al. 2008, Barkhordari-Sharifabad et al. 2017, Prestia et al. 2017). This has been found to be associated with adverse outcomes in healthcare organizations (Thorne 2010, Mitton et al. 2010). Ethical conflicts have been found to be associated with stress, decreased organizational commitment, turnover and absenteeism (Gaudine & Beaton 2002, Thorne 2010). Managers in health care and nurse managers have reported personal and organizational consequences of ethical conflict and moral distress (Gaudine & Beaton 2002, Mitton et al. 2010, Prestia et al. 2017). As personal consequences are reported negative feelings and experiences like frustration, anger, angst/fear, powerlessness, burnout and many others (Gaudine & Beaton 2002, Mitton et al. 2010). According to Nelson et al. (2008), ethical problems in the organization have negative financial consequences as well. On the

other hand, the outcomes of ethical leadership are positive: all-inclusive satisfaction and productivity (Barkhordari-Sharifabad et al. 2018a). However, there are also signs of decreasing status of ethics with the marketization of the healthcare system. Cost-effectiveness is seen to override ethics, especially on management level. (Höglund & Falkenström 2018.)

Good management includes making fair decisions, which must be based on facts and ethical considerations (ETENE 2012). One critical outcome of ethical decision-making is a sense of trust, and the success of the organization is affected by the ethical choices made by all in the organization (Wittmer 2005). When ethical problems are encountered, they should be analysed and solved in the best possible way. Ethical decision-making models are presented for systematic decision-making. Those models include quite similar phases, like defining the problem, reviewing all possible issues influencing the problem, identifying options for action, and evaluating the consequences of actions. The ethical decision-making process involves perceiving problems as ethical in nature and knowing the methods and resources that can be used for solving the problems. (Thompson et al. 2006.)

Since the 1990s, some studies of ethical problems in nursing management have been made using interviews or surveys (e.g. Borawski 1995, Gaudine & Beaton 2002, Musa et al. 2011, Laukkanen et al. 2016a), but in these studies, ethical problems have been investigated on quite a general level. The survey studies focused mostly on the frequencies of ethical problems. There are also a few studies of the solving methods of ethical problems (e.g. Borawski 1994, Redman & Fry 2003, Nasae et al. 2008, Cooper et al. 2014) focused on what kinds of methods have been used, but more specific information is needed, especially about the usefulness of the methods. The knowledge of the background factors associated with encountering ethical problems and their solving methods is quite scarce and limited.

Ethics in management and in healthcare management has also been studied in other sciences, like social sciences (e.g. Huhtala 2013) and administrative sciences (e.g. Ikola-Norrbacka 2010). However, ethical problems in nursing management have been found to be an essential issue for the quality of nursing management and thereby for the quality of nursing practice and patient care, making it a relevant research subject in nursing science.

The purpose of this study was to analyse the frequency and difficulty of ethical problems in nursing management and the methods for solving these problems – the frequency of use and usefulness of the solving methods. The ultimate goal is to improve the quality of patient care by improving ethics in nursing management and thus advancing nursing practice.

2 Review of the Literature

The theoretical background of this study was based on scientific literature and research articles. At the beginning of this chapter, the literature reviews will be explained. In the second chapter, the concept of ethical problem and other concepts used in literature as a synonym or related concepts will be explained. Then, in the third chapter, the content and levels of nursing management and ethics in nursing management will be described based on earlier literature. Finally, in the fourth and fifth chapters, previous studies of ethical problems in nursing management and their solving methods will be presented.

2.1 Literature reviews

Empirical studies on the topic of the study were searched for, both systematically from electronic databases and manually from grey literature. Searches were made at the beginning of the study and complemented in the following study phases. The first literature search (Phase I) focused on the use of codes of ethics in nursing management. The other two searches concerned nursing management and ethical problems (Phases II–IV). The final update to the literature search was made in March 2019. (Table 1.)

Research articles and theoretical and statistical literature were complemented by manual search from reference lists, websites of Finnish Universities, authorities and associations and Research Gate.

Table 1. Literature reviews in this study.

Focus	Search terms	Databases	Limiters
Use of ethical codes in nursing management (Paper I)	(ethic$.ti AND (”code$ of ethics” or ”profession$ code$” or ”ethic$ code$” or ”ethic$ quideline$”). mp) OR ((”code$ of ethics” or ”profession$ code$” or ”ethic$ code$” or ”ethic$ quideline$”). mp AND (“nursing administ$” or “nursing managem$” or “nurs$ leade$” or “nurs$ supervis$” or “nurs$ executive$” or “healthcare$ managem$” or “healthcare$ administ$”).ti,ab	Ovid MEDLINE, CINAHL, COCHRANE	Academic journals English abstracts available No time limit
Ethical problems in nursing management (Papers III–IV, Summary)	((((nurs* AND ("2008/01/01"[PDat] : "2018/12/31"[PDat]) AND English[lang])) AND ((((managemen*) OR leader*) OR administr*) OR executiv*)) AND ((ethic*) OR moral*)) AND (((((problem*) OR stress*) OR distress*) OR challenge*) OR dilemma*)	PubMed CINAHL	English First one without time limit. Last one: publication date 2008–2018

2.2 Ethical problem as a concept

The concept of ethical problem consists of two terms. Ethical has been defined in terms of “relating to moral principles or the branch of knowledge dealing with these” (MOT Oxford Dictionary of English). The term ethics comes from the Greek ethos, meaning character, and the word moral comes from the Latin moralis, meaning manners or customs (Thiroux 1990). Ethics is defined as science of moral studies, moral referring to the domain of personal values and rules of behaviour, conventional rules of conduct and culture-specific mores. Morality encompasses moral principles, virtues, rights, rules and ideals. Ethics deals with questions such as how good and bad are determined and what rules are required to prevent harm in society and what kind of education is needed for moral competence. (Thompson et al. 2006, Beauchamp & Childress 2013.) Descriptive ethics is the investigation of moral conduct and beliefs studying how people reason and act (Beauchamp & Childress 2013). The dictionary definition for ethics is: “moral principles that govern a person’s behaviour or the conducting of an activity” (usually as plural) or “the branch of knowledge that deals with moral principles” (usually as singular) (MOT Oxford Dictionary of English). Other dictionary definitions of ethics are: “the philosophical study of the moral value of human conduct and of the rules and principles that ought to govern it; moral philosophy” (functioning as singular) or ”a social, religious, or civil code of behaviour considered correct, esp. that of a particular group, profession, or individual” (functioning as plural). (Collins English

Dictionary.) Altogether, the definitions include mentions about moral principles/rules/codes and human behaviour/conduct as elements of ethics.

Moral means that which is right or good, such as right action or a good person (Thiroux 1990). The word moral is explained in the dictionary as "concerned with or relating to human behaviour, esp. the distinction between good and bad or right and wrong behaviour" (Collins English Dictionary). Ethics can be seen as a more formal and theoretical term and moral as a more informal and personal term (Jameton 1984). However, the concepts ethical and moral are often used as synonyms, as are ethical problems and moral problems (Thiroux 1990, Thompson et al. 2006, Beauchamp & Childress 2013, Kulju et al. 2016).

A problem is "a matter or situation regarded as unwelcome or harmful and needing to be dealt with and overcome" (MOT Oxford Dictionary of English). An ethical problem can be understood as a difficult matter requiring a moral solution. Fundamentally, it is a question of what is right or wrong, good or bad. (Thompson et al. 2006.) A moral problem is also defined as "a situation in which a problem or a dilemma is experienced between our own values and norms and those of other people: a situation which by your own account is not correct or 'should not occur'' (Van der Arend & Remmers-van den Hurk 1999, p. 471).

Ethical problem is understood as a broad concept which encompasses different types of ethical issues. According to Jameton (1984), moral and ethical problems can be divided into three different types: moral uncertainty, moral dilemmas, and moral distress. Quite a similar division is made by Barkhordari-Sharifabad et al. (2017). As a result of their qualitative study they present that ethical problems contain the subcategories of ethical distress, ethical conflict, and doubt in ethical act.

The concept of an ethical dilemma is used to mean a choice between two alternatives, both being incomplete or undesirable (Thompson et al. 2006, Beauchamp & Childress 2013). According to Thompson et al. (2006, p. 48), the choice is moral dilemma if it "involves conflict between competing moral principles or values, which are both applicable to the situation – what we believe we ought to do or what we believe to be fundamentally good or important". Jameton's (1984, p.6) definition of ethical dilemma states that moral dilemma means that "two (or more) clear moral principles apply, but they support mutually inconsistent courses of action". It also seems very difficult to give up either value. (Jameton 1984.) In bioethics literature, ethical dilemma is defined in terms of conflict and choice between values, beliefs and options for action. The definition is also criticized as too narrow, suggesting that there should be broader conceptions to get the whole picture of the ethical nature of the problems. (Braunack-Mayer 2001.)

Moral distress is defined by Mitton et al. (2010, p. 101) as follows: “the suffering experienced as a result of situations in which individuals feel morally responsible and have determined the ethically right action to take, yet owing to constraints (real or perceived) cannot carry this action, thus believing that they are committing a moral offence”. Moral distress arises when one knows the right thing to do, but it is nearly impossible to put into action due to institutional constraints (Jameton 1984). Moral uncertainty appears “when one is unsure what moral principles or values apply or even what the moral problem is” (Jameton 1984, p.6).

In empirical studies of nursing management, many other terms are also used to refer to issues like ethical problems and moral problems. Concepts such as ethical concerns (Harrison & Roth 1992), ethical issues (Cooper et al. 2002, Redman & Fry 2003, Musa et al. 2011) and ethical conflicts (Gaudine & Beaton 2002) are used. The concepts ethical challenge and ethical difficulties seem also to have been used with nearly the same meaning in studies conducted among nurses and physicians (Sorlie et al. 2005, Torjuul & Sorlie 2006).

In this study, ethical and moral are understood as synonyms, as was also found to be the case in earlier literature (Thiroux 1990, Thompson et al. 2006, Beauchamp & Childress 2013, Kulju et al. 2016). Although moral refers to behavioural standards while ethical has a more formal and theoretical meaning (Thompson et al. 2006), both are important aspects of NMs’ work and thus need to be included. Ethical problem in this study is understood in the same way as Jameton’s moral problem, so that it includes ethical/moral dilemmas, ethical/moral distress and ethical/moral uncertainty, because all these parts are relevant here.

Table 2. Definitions or descriptions of ethical problem and related concepts.

Concept	Definition or description
Ethical/moral problem	A difficult matter requiring a moral solution. Fundamentally it is a question of what is right or wrong, good or bad. (Thompson et al. 2006) Can be divided to three types: moral uncertainty, moral dilemmas and moral distress. (Jameton 1984) "... consists of three subcategories of doubt in ethical act, ethical conflict, and ethical distress." (Barkhordari-Sharifabad et. al 2017, p.5) "A situation in which a problem or a dilemma is experienced between our own values and norms and those of other people: a situation which by your own account is not correct or 'should not occur'" Van der Arend and Remmers-van den Hurk (1999, p. 471)
Ethical/moral dilemma	"Moral dilemmas are circumstances in which moral obligations demand or appear to demand that a person adopt each of two (or more) alternative but incompatible actions, such that the person cannot perform all the required actions" (Beauchamp & Childress 2013, p.11) "Moral dilemma ... involves conflict between competing moral principles or values, which are both applicable to the situation" (Thompson et al. 2006, p.48) Moral dilemma means that "two (or more) clear moral principles apply, but they support mutually inconsistent courses of action. It also seems very difficult to give up either value". (Jameton 1984, p.6)
Ethical/moral distress	Moral distress arises when "one knows the right thing to do, but institutional constraints make it nearly impossible to pursue the right course of action" (Jameton 1984, p.6). "The suffering experienced as a result of situations in which individuals feel morally responsible and have determined the ethically right action to take, yet owing to constraints (real or perceived) cannot carry out this action, thus believing that they are committing a moral offence." (Mitton et al. 2010, p.101)
Ethical/moral uncertainty	Appears when "one is unsure what moral principles or values apply, or even what the moral problem is" (Jameton 1984, p. 6).
Ethical/moral conflict	"When an individual's personal values clash with those of the employing organization, the result is ethical conflict." (Gaudine & Beaton 2002, p.18)

2.3 Ethics in nursing management

Management as a concept often means managing tasks by planning, budgeting, organizing, staffing, controlling and problem-solving. Personnel are seen as one of the resources. By contrast, the concept of leadership is seen as leading people by establishing direction, aligning people, and motivating and inspiring personnel. Management emphasizes stability whereas leadership is connected with change. (Daft 2008, Northouse 2016.) Although there are differences between management and leadership, the constructs overlap in practical situations, and both processes involve influencing people toward goal attainment (Northouse 2016). According to the dictionary, management is "the process of dealing with or controlling things or people" (MOT Oxford Dictionary of English).

Nurse managers' work contains assignments from both management and leadership processes. According to the Hoidokki thesaurus published by the Finnish Foundation of Nursing Education (SHKS 2005), nursing management is one of the main concepts, including the subordinate concept of personnel management, and furthermore, leadership as a subordinate concept of personnel management. In this study, the purpose is to study ethical problems in NMs' work in its entirety and therefore the concept of management is used here.

Nurse managers (NMs) are part of healthcare administration, working in ward, middle and strategic management. The definition of nurse manager is complex because of differences between health care systems and cultures. Different titles are found in international literature, such as ward manager, ward sister, charge nurse, head nurse, nurse manager, nurse director, chief nurse executive and others. (STM 2009, Bjerregård-Madsen et al. 2016.) Ward manager, ward sister and charge nurse are typically used for managers at ward level. Ward sister is defined as "a senior nurse in charge of a ward" and charge nurse as "a nurse in charge of a ward in hospital". First-line nurse manager is the term also used for managers at ward level (Skytt et al. 2008). The term nurse manager has been used as a common title, including all levels of management (McCarthy & Fitzpatrick 2009, Laukkanen et al. 2016a), but it has also been used at ward management level (Surakka 2008). Nurse managers in middle management are often called "middle managers" (Currie 2006) or "middle level nurse managers" (Patrick & Laschinger 2006) or "nurse middle managers" (Ganz et al. 2015). Head nurse is "the chief nurse in a hospital; matron" (Collins English Dictionary). The term head nurse is parallel to nurse middle managers (Ganz et al. 2015). The term director of nursing is used when talking of nurse managers in middle or strategic management (Laukkanen et al. 2016a). The term chief nursing executive (CNE) is used in positions of the highest level of management, strategic management (Arnold et al. 2006). The titles found in literature are presented in Table 3. The list is not exhaustive, but it gives an idea of the variety of the titles. It is also remarkable that in studies concerning nurse managers with different titles, the level of management is not always mentioned.

Table 3. Titles used for nurse managers at different management levels in literature.

Management level	Title of nurse manager	
All levels or no mention of the level	Nurse manager	McGarthy & Fitzpatrick 2009, Lindy & Shaefer 2010, Musa et al. 2011, Žydžiūnaitė & Suominen 2014, Laukkanen et al. 2016a
	Nurse leader	Cooper et al. 2014, Pavlish et al. 2016, Barkhordari-Sharifabad et al. 2018, Poikkeus 2019
	Nurse in leadership role	Redman & Fry 2003
	Nurse director	ENDA 2011
	Nurse administrator	Borawski 1995, Bjerregård et al. 2016
Ward management	Ward manager	Pegram et al. 2014, Townsend et al. 2015
	Ward sister	Doherty et al. 2010, Bradshaw 2010
	Charge nurse	Doherty et al. 2010
	Charge nurse manager	McCallin & Frankson 2010
	Front line manager	McCallin & Frankson 2010
	First-line nurse manager	Viitanen et al. 2007, Skytt et al. 2008, Gunawan & Aungsuroch 2017
	Chief nurse	Ito & Natsume 2016
Ward management or middle management	Head Nurse	Nasae et al. 2008, Ganz et al. 2015, Žydžiūnaitė et al. 2015
Middle management	Middle manager	Currie 2006
	Middle level nurse manager	Patrick & Laschinger 2006
	Nurse middle manager	Ganz et al. 2015
Middle and strategic management	Director of nursing	Harrison & Roth 1992, Laukkanen et al. 2016a
	Nurse executive	Camunas 1994a, Cooper et al. 2002, Katsuhara 2005
Strategic management	Chief nursing executive (CNE)	Arnold et al. 2006

At the ward management level, both managerial and clinical responsibilities are included in the position (Doherty et al. 2010). Ward management level can be understood as managers who have a supervision task. Ward managers give orders

and instructions directly to nursing staff. (Virtanen 2010.) NMs in ward management are responsible for the smooth running of daily work at the ward. They are responsible for personnel management, financial duties, nursing practice and development of services. (Skytt et al. 2008, Townsend et al. 2015.) Planning, organizing, leading, budgeting, delivering health care, self-development and managing ethical and legal issues are listed as attributes of their work (Gunawan & Aungsuroch 2017). The role is twofold: first, there is a manager role, taking care that the daily routines are running, and second, a professional role, participating actively in patient care (Viitanen et al. 2007). In ward management NMs may have direct relationships with patients unlike most NMs in middle management and strategic management (Doherty et al. 2010). The emphasis seems to have been moving towards the administrative role, the goal being to ensure resources and that nursing staff may concentrate on quality nursing (Viitanen et al. 2007). The role change may mean that managers at ward level are appointed to the role with clinical expertise but without management competence (McCallin & Frankson 2010). When ward managers are experienced nurse practitioners given a new role as managers, two key obstacles constraining ward managers' managerial capacity have been found: increased budgetary pressures and inadequate development of their management skills (Townsend et al. 2015). In Finland, according to Surakka (2008), direct and indirect nursing care is almost completely excluded from the NMs' role since more than 10 years ago. The following are mentioned as NMs' specific competencies at this level: building and leading a team, planning and organization, and clinical practice and service quality orientation (McGarthy & Fitzpatrick 2009).

Hierarchically, middle management is located between ward management and strategic management (Hewison 2006). The work of NMs in the middle level of health care organizations involves, for example, managing several wards in a hospital or a local multidisciplinary team in primary care (Currie 2006). They have a wider area of responsibility than NMs in ward management and they usually have ward managers as subordinates (Virtanen 2010). NMs in middle management are seen to be directly involved in coordinating and planning the production of services (Currie 2006). Although there are different types of management and varying types of middle management, it seems evident that middle managers are essential to health care organizations. They have a key role in implementing organizational initiatives like evidence-based practice and healthy workplaces. (Hewison 2006.) Competencies in middle management level are mostly related to service development and integration, such as proactive approach to planning, effective coordination of resources, and setting and monitoring performance standards (McGarthy & Fitzpatrick 2009).

Strategic management represents the highest level of management in health care organizations (Jasper & Crossan 2012). NMs in strategic management may

have middle managers as subordinates. They may be part of the organization's management group without subordinates of their own. (Virtanen 2010.) Strategic management has been defined by the following features: organizational leadership containing the whole workforce, organization's relationships with its external environment, envisioning and responding to the future, providing processes for coping with organizational development and change, and facilitating consistent decision-making (Jasper & Crossan 2012).

Generic competencies are identified at all levels of nursing management, such as integrity and ethical stance, resilience and composure, sustained personal commitment, communication and influencing, relationship building, initiation and innovation, and evidence-based decision-making. At strategic level, competencies are related to strategic and system thinking, leading on values and visions and policies at the highest level of organization. (McGarthy & Fitzpatrick 2009.) Nurse managers' competencies according to the American Organization of Nurse Executives (AONE) are grouped into five main categories: 1) Communication and relationship management, 2) Professionalism, 3) Leadership, 4) Knowledge of heath care environment, and 5) Business skills and principles. Ethics is mentioned as a subgroup of Professionalism and comprises upholding ethical principles, holding themselves and the staff accountable for complying with ethical standards of practice and discussing, resolving and learning from ethical dilemmas. (AONE 2015.) These competencies are also classified into three categories 1) Science: Managing the Business, 2) Art: Leading the People, and 3) Leader Within: Creating the Leader in Yourself. A study based on these categories pointed out that NMs reported higher competency in the Art domain than in the Science domain. Experience had the strongest association with NMs' competence. The conclusion was that there was a lack of education and competency development programmes and NMs are learning solely by experience. (Warshawsky & Cramer 2019.)

There seem to be no comprehensive statistics about NMs' educational status in different countries, but based on socio-demographic background information of participants in studies among NMs, in many countries, at least in middle and strategic management, most NMs seem to have academic education (Patrick & Laschinger 2006, Fennimore & Wolf 2011, Ganz et al. 2015, Warshawsky & Cramer 2019). In a Canadian study among NMs in middle management, 43% of the participants were masters and 41% held a bachelor's degree. Their average age was 49 years. (Patrick & Laschinger 2006.) In the study of Fennimore & Wolf (2011) 60% had a bachelor's degree and 36% master's degree. An Israeli study reported that 97% of middle nurse managers had an academic education – master or bachelor – and were on average 47 years old (Ganz et al. 2015). A recent study from the USA had a national sample of 647 NMs with an average age of 45 and 62% with a bachelor degree or higher (Warshawsky & Cramer 2019). In Finland, the participants

of a nationwide study (Kantanen 2017) were NMs at all management levels. In the most extensive phase of the study (n = 1,028) 25% of NMs at ward management level had bachelor degree or higher, as did 86% of NMs at middle and strategic level. (Kantanen 2017.) In the USA, the American Organization of Nurse Executives (AONE) has made a position statement where it declares that nurses in leadership roles should have at least a baccalaureate or master-level degree and nurse leaders at the highest levels should be encouraged to obtain a doctoral degree (AONE 2019). In Finland, the requirements for NMs' education depend on the employer, but according to the trade organization of nurses, NMs at middle or strategic level of management should have at least master's degree (Tehy 2019).

There are neither comparative nor comprehensive statistics about the number of NMs in different countries. In Finland, nurse managers are mentioned in statistics at two levels – ward management and other, higher levels of management. In Finland, about 94% of NMs are women and their average age is slightly over 50 years (ward management: 51.1, middle or strategic management: 52.5) (THL 2015) (Table 4).

Table 4. Nurse managers in local government health and social services in Finland in 2014.

NMs	Count	Age Mean	Female %
Strategic or middle management	316	52.5	94.6
Ward management	4,934	51.1	94.2

In this study, the term nurse managers refers to all managers at ward, middle and strategic level who have nursing staff as subordinates or who are responsible for nursing care in a health care organization.

Ethics in healthcare management is crucial to ensure that different values between patients, healthcare professionals, organizations and society are understood and discussed (Gallaher & Tsudin 2010). It focuses on the mission of the healthcare organization and the people affected by its activities (Hall 2000). Ethics in healthcare organizations can be divided into the perspectives of clinical ethics, professional ethics, and business ethics. Clinical ethics is related to patient care and patient's rights are an essential part of it. Professional ethics (nursing and medicine) is based on the professional ideal that a healthcare professional always acts in the interest of each particular patient. Business ethics involves economic decisions concerning healthcare interventions. All these perspectives need to be considered when advancing ethics in the healthcare organization. (Spencer et al. 2000.) Accordingly, there are different levels of ethical responsibility in management, namely micro, macho, meso and macro levels. The first has to do

with direct care of patients. The second has to do with the leadership of staff while the third, meso level, concerns the ethics of management of the ward, clinic or institution. The macro level is related to political ethics dealing with internal and external policy with stakeholders. All these levels are relevant in nurse managers' work, but the priorities of different ethical principles vary at different levels. (Thompson et al. 2006.)

Ethics in nursing management affect the organization in many ways. Supportive and fair leadership is found to be one of the main factors enhancing nurses' wellbeing at work (Utriainen et al. 2015). Ethical leadership has also been found to have positive outcomes for NMs, nurses and patients. NMs' ethical behaviour not only creates inner satisfaction for the NMs themselves, but also improves employees' job satisfaction and patients' satisfaction. Another outcome of ethical leadership is improved productivity, resulting in providing better services and inspiring ethical behaviour in employees. (Barkhordari-Sharifabad et al. 2018a.) Ethical conflicts experienced by employees have negative consequences, such as stress, lack of organizational commitment, days absent and turnover intention. Therefore, it is important to address ethical conflicts in organizations and mitigate them to minimize the adverse outcomes. (Thorne 2010.)

There are also obstacles which complicate ethical management. Organizational policies and rules, lack of support from superiors and lack of qualified and sufficient workforce may weaken managers' possibilities to do ethical acts (Barkhordari-Sharifabad et al. 2017). Organizational conditions furthering moral distress are resource-constrained environments, inequities in budgets and misalignment of values (Mitton et al. 2010). Ethics has been found to have low status and it is separated from daily work among healthcare managers in Sweden. Managers have experienced that economy and cost-effectiveness have displaced ethics in management work. (Höglund & Falkenström 2018.)

The core value of managers in health care is found to be patient's best, and their other central values are fairness, impartiality, loyalty, confidentiality, and openness (Virtanen 2010). Values can be divided into personal, professional and organizational values. Nurse managers have been found to consider professional values and personal values to be significantly more important than organizational values. (Hendel & Steinman 2002.) It has also been found that there is a positive correlation between professional values and job satisfaction among NMs (Kantek & Kaya 2017).

To advance ethics in nursing management, ethical competence is a central issue in preventing or reducing moral distress arising from ethical problems (Kälvemark Sporrong et al. 2007). Ethical competence has been defined in different ways. According to Kulju et al. (2016), using concept analysis, ethical competence can be defined in terms of ethical awareness, moral judgement skills, willingness to do good, and character strength. Nurse managers' ethical competence has been

described by Poikkeus et al. (2018) as consisting of five areas: 1) knowledge of values and principles, 2) knowledge of laws and regulations, 3) ethical reflection, 4) ethical decision-making, and 5) ethical behaviour and action. NMs have estimated their own ethical competence as being on high level. (Poikkeus et al. 2018.) NMs' ethical competence is also described with three dimensions: empathetic interactions, ethical behaviour, and exalted manners (Barkhordari-Sharifabad et al. 2018b). NMs' ethical activities and/or responsibilities are compiled in an ethical activity profile with five dimensions: 1) developing their own ethics knowledge, 2) influencing ethical issues, 3) conducting or implementing ethics research, 4) identifying ethical problems, and 5) solving ethical problems. The ethical profile of NMs seems to be quite high, reflecting the identification of ethical problems in their work. (Laukkanen et al. 2016a.)

Ethical behaviour, actions and manners are mentioned as dimensions of ethical competence (Poikkeus et al. 2018, Barkhordari-Sharifabad et al. 2018b). Ethical behaviour is learned behaviour, and managers can create strategies and processes to promote ethics learning in the organization (Menzel 2007). As the largest group of managers in healthcare organizations, NMs are in a powerful position to ensure that organizational values and strategies are coherent both in the context of nursing and quality of care (Jasper & Crossan 2012). Nurse managers are responsible for influencing their subordinates and acting as mediators when professional and organizational values conflict (Gallagher & Tsudin 2010). NMs are also responsible for creating an ethical climate in nursing practice which boosts employee morale and enhances commitment and retaining in organization (Shirey 2005). In their actions and decisions, NMs should exercise caution because their actions are carefully observed by their staff. NMs must ensure trust and trustworthiness, empowerment and delegation, consistency and mentorship to promote good organizational culture. (Kane-Urrabazo 2006.) Altogether, ethics and ethic-related choices are an essential element of management work (Salminen 2010).

Identifying and solving ethical problems is part of NMs' responsibilities (Laukkanen et al. 2016a). Nurse managers are expected to understand the ethical problems of their subordinates as well as their own. They are expected to know how to support their subordinates with ethical issues. (Makaroff et al. 2014.) Nursing staff mainly have positive perceptions of NMs' ethics in their work. Nurse managers are considered to be reliable in their work and to respect the rights of the staff. (Eneh et al. 2012.) However, support for nurses' ethical competence has been found to be insufficient (Poikkeus et al. 2018). Nurses have lacked the necessary support to provide competent and ethical care and as a consequence, have experienced moral distress (Storch et al. 2013). To be able to enact their ethical responsibilities, also NMs require support, guidance and resources. However, when the importance of

financial resources and business is emphasized, the ethical aspects in nursing management may be dismissed or devalued. (Makaroff et al. 2014.)

Ethical decision-making is needed when trying to solve ethical problems. It means finding the best possible way of action. When making ethical decisions there are many issues to take into consideration, such as what are the relevant values and ethical principles in the situation, who are the stakeholders, and what are their responsibilities, competences, roles and authorities. (Thompson et al. 2006, Leino-Kilpi & Välimäki 2014). Ethical decision-making models have been drawn up to help analyse and solve ethical problems. Identifying the ethical problem is included in the first step of these models (Cooper 2006, Thompson et al. 2006, Toren & Wagner 2010, Park 2012). When seeking resolution there are several issues to work out, such as ethical/moral guidelines, possible actions, the consequences of the actions etc. The models do not mention what methods should be used when doing that. The use of ethical decision-making models is recommended (Cooper 2006, Thompson et al. 2006, Toren & Wagner 2010, Laukkanen et al. 2016b), at least in the case of significant problems (Cooper 2006). However, there do not seem to be any studies of using ethical decision-making models in nursing management. Instead, Laukkanen et al. (2016b) concluded that there seem to exist no common or systematic model for ethical decision-making among nurse managers.

Codes of ethics have been developed to guide NMs in their work to achieve high ethical level in nursing management. The European Nurse Directors' Proto-Code of Ethics and Conduct (ENDA 2011) states that NMs are accountable to the staff and public for their actions. They have to carry out their work with competence and support their staff, help them in conflict situations, and build conditions where caregivers are able to work optimally and in accordance with best practices. According to the codes, NMs are obligated to "create the organizational conditions that enable core professional values to be practised and the professional identity of nursing to be enhanced". (ENDA 2011.) The Code of Ethics of the American College of Healthcare Executives describes responsibilities towards 1) the profession of healthcare management, 2) patients or others served, 3) the organization, 4) employees and 5) community and society (ACHE 2011). Furthermore, in the UK there is the Code of Conduct for NHS Managers, serving two purposes: first, to guide NHS managers in their work, decisions and choices and secondly, to assure the public that decisions are made according to professional standards and accountability (NHS 2002). Finland has codes of ethics for nurse managers drawn up by the association of nurse leaders (Taja 2003).

To summarize, NMs have multiple responsibilities related to ethics. They affect the organizational culture and ethical climate (Shirey 2005, Cooper 2006), support staff and promote ethical behaviour and competence (Makaroff et al. 2014, Poikkeus et al.2018), and advance the quality of care and realization of patient's rights and

safety (Kangasniemi et al. 2013, Lofti et al. 2018). NMs encounter ethical problems in their work quite often (e.g. Ganz et al. 2015, Laukkanen et al. 2016a) and recognition of these problems is important for developing ethical decision-making and ethical management, the final goal being improved quality of patient care.

2.4 Encountering ethical problems in nursing management

Studies of encountering ethical problems in NMs' work have been conducted since the end of the 1980s. Still, the number of studies is quite limited. The earliest studies in the 1980s and 1990s referred to the problems on quite a general level and focused on the frequency of the problems. The most frequently encountered problems were staffing level and mix situations, developing/maintaining standards of care and allocation/ration of scarce resources. (Sietsema & Spradley 1987, Camunas 1994a, Borawski 1995.)

Ethical problems have been classified in several ways. One of the most frequently used classifications is the division into problems related to patient care, staff and organization (Esterhuizen 1996). Related to patients, there is a wide range of ethical problems. Problems concern access to care, quality of care, patient rights, autonomy, patient dignity, informant consent, use of physical restraints and issues related to patients' families (Sietsema & Spradley 1987, Harrison & Roth 1993, Camunas 1994b, Borawski 1995, Redman & Fry 2003, Katsuhara 2005, Porter 2010, Musa et al. 2011, Laukkanen et al. 2016b, Ito & Natsume 2016) (Table 5).

A remarkable number of ethical problems have been found to be related to nursing staff. In some studies they are the biggest group of ethical problems in NMs' work (Musa et al. 2011, Laukkanen 2015). Staff-related problems include issues like staff behaviour, staff relationships, substance abuse, incompetence, staff's health and well-being (Camunas 1994b, Borawski 1995, Redman & Fry 2003, Lindy & Schaefer 2010, Porter 2010, Musa et al. 2011, Ganz et al. 2015, Laukkanen et al. 2015). There are also reports of ethical problems related to other professional groups, most often physicians (Sietsema & Spradley 1987, Camunas 1994a, Borawski 1995, Cooper et al. 2002, Katsuhara 2005, Porter 2010, Ito & Natsume 2016). (Table 5.)

In relation to organization, many studies have found that managers experience ethical problems when organizational values differ their professional or personal values (Camunas1994a, Borawski 1995, Nasae et al. 2008, Porter 2010, Mitton et al. 2011, Ganz et al. 2015). For example, NMs have to communicate and implement organizational decisions although they do not agree or support those decisions (Mitton et al. 2011). Insufficient financial and personnel resources are found to be an ethical problem in many studies (Camunas 1994b, Borawski 1995,

Katsuhara 2005, Mitton et al. 2011, Ito & Natsume 2016, Laukkanen et al. 2016a). Recruiting and retaining competent staff has also been found to be an ethical problem (Harrison & Roth 1992). NMs have also experiences of voicelessness, e.g. of NMs not being heard and nursing not being valued, as well as of unjust practices of the administration and/or organization (Gaudine & Beaton 2002), and powerlessness and lack of psychological safety (Prestia et al. 2017). In the study of Cooper et al. (2002) nurse executives ranked ethical problems so that the four top-ranked problems were related to the failure of healthcare organizations to provide service of the highest quality. In the study of Ganz et al. (2015) the highest frequency score of ethical problems was for administrative dilemmas. (Table 5.)

Table 5. Ethical problems in NMs' work identified in earlier studies.

Ethical problems	References
Related to patients	
Quality of patient care	Sietsema & Spradley 1987, Camunas 1994a, Borawski 1995, Cooper et al. 2002, Nasae et al. 2008, Musa et al. 2011, Ganz et al. 2015, Laukkanen et al. 2016a
Patient's rights	Harrison & Roth 1992, Redman & Fry 2003, Musa et al. 2011, Ito & Natsume 2016, Laukkanen et al. 2016a
Relationships with patient's family	Harrison & Roth 1992, Ganz et al. 2015, Ito & Natsume 2016
Related to nursing staff	
Behaviour of nursing staff	Sietsema & Spradley 1987, Borawski 1995, Lindy & Shaeffer 2010, Ganz et al. 2015, Ito & Natsume 2016, Laukkanen et al. 2016a
Competence and malpractices of nursing staff	Sietsema & Spradley 1987, Camunas 1994b, Borawski 1995, Cooper et al. 2002, Porter 2010, Ganz et al. 2015, Laukkanen et al. 2016a.
Staff management	Sietsema & Spradley 1987, Harrison & Roth 1992, Camunas 1994a, Borawski 1995, Katsuhara 2005, Nasae et al. 2008, Laukkanen et al. 2016a
Well-being and occupational safety	Redman & Fry 2002, Ganz et al. 2015
Related to other professional groups	
Conflicts between nursing staff and other professionals	Sietsema & Spradley 1987, Borawski 1995, Cooper et al. 2002, Katsuhara 2005, Porter 2010, Ito & Natsume 2016
Related to organization	
Allocation of resources	Sietsema & Spradley 1987,Camunas 1994b, Borawski 1995, Gaudine & Beaton 2002, Cooper et al. 2002, Katsuhara 2005, Mitton et al. 2011, Ito & Natsume 2016, Laukkanen et al. 2016a
Conflict between nursing and organizational values	Camunas 1994a, Cooper et al. 2002, Mitton et al. 2011
Organization's modes of practice	Gaudine & Beaton 2002, Laukkanen et al. 2016a

Many situations or issues causing ethical problems are similar in different levels of management, but there are also found to be some differences depending on the position in hierarchy (Cooper et al. 2002, Mitton et al. 2011). In higher levels of management, NMs perceive less and different ethical problems than in lower levels. On higher level, the ethical problems are more related to the overall operation of the organization (Cooper et al. 2002).

Ethical problems in NMs' work have also been compared to those of nurses. Managers in middle level seem to experience lower levels of ethical problems than staff nurses in the clinical professional and interpersonal categories (Ganz et al. 2015). Compared to staff nurses, NMs seem to view the key ethical issues encountered in healthcare organizations in much same way (Cooper et al. 2004).

Some studies exist that explore the **difficulty** of the ethical problems NMs encounter. Issues related to personnel resource allocation problems seem to be the most difficult (Harrison & Roth 1992, Redman & Fry 2003, Ganz et al. 2015), but there are also patient-related issues among the most difficult ones. Quality of care has been ranked among the top five issues (Redman & Fry 2003, Ganz et al. 2015), but also more specific issues are mentioned. Patient/family violence against a nurse is ranked the most difficult ethical problem in the study of Ganz et al. (2015), while prolonging the dying process with inappropriate measures was found to be the second most difficult problem in the study of Redman & Fry (2003).

2.5 Solving ethical problems in nursing management

Solving ethical problems has also been studied since the end of the 1980s. The studies are mainly focused on which methods are used and how many NMs use each method. However, studies of the frequency of use and usefulness of the methods are very limited. There do not seem to be any studies combining ethical problems and methods, either.

Personal values have been found to be among the most frequently used methods when solving ethical problems (Sietsema & Spradley 1987, Borawski 1994, Camunas 1994a, Cooper et al. 2003, Cooper et al. 2014). Nursing colleagues and administrative colleagues are also often mentioned and highly ranked methods (Sietsema & Spradley 1987, Borawski 1994, Camunas 1994a, Redman & Fry 2003, Porter 2010, Musa et al. 2011). In the study of Laukkanen and colleagues (2016b) the most used method was discussions, with no mention of who they were conducted with. As well, consulting with others to find solution (Nasae et al. 2008) is mentioned as a method. (Table 6.)

Discussions with physicians (Redman & Fry 2003, Musa et al. 2011), other professionals (Redman & Fry 2003), the patient (Redman & Fry 2003), patient's

family (Redman & Fry 2003), friends and family (Sietsema & Spradley 1987, Camunas 1994a, Borawski 1994, Cooper et al. 2003, Porter 2010, Cooper et al. 2014), and hospital chaplain or religious counsellor (Sietsema & Spradley 1987, Camunas 1994a, Borawski 1994, Redman & Fry 2003) have also been mentioned as methods when solving ethical problems. Friends and family and hospital chaplain are among the least used methods (Sietsema & Spradley 1987, Camunas 1994a, Borawski 1994, Cooper et al. 2003, Cooper et al. 2014). (Table 6.)

After own personal values, factors related to organization have been found to be more helpful in ethical problems than factors related to NMs' profession. The two most helpful organizational factors were related to the absence of pressure to compromise on one's own ethical standards. The next most helpful factor was ability to get advice in ethical issues from one's own superior. The findings concerning the four most helpful factors were similar in two studies. (Cooper et al. 2003, Cooper et al. 2014.)

In earlier studies, the Patient's Bill of Rights has been listed as a method in solving ethical problems, and it has been reported as a possible method more often than ethics committee, professional codes of ethics, friends, family and hospital chaplain (Sietsema & Spradley 1987, Camunas 1994a, Borawski 1994). In later studies, it is not mentioned when listing possible methods for solving ethical problems.

Ethics committee has also been mentioned as a method to solve ethical problems (Sietsema & Spradley 1987, Camunas 1994a, Borawski 1994, Redman & Fry 2003, Musa et al. 2011, Cooper et al. 2014). It does not necessarily exist in every organization and in some studies respondents have expressed the need for an ethical committee (Borawski 1994). The percentage of NMs who mention ethics committee as a method to solve ethical problems differs between 11% and 45% (Sietsema & Spradley 1987, Borawski 1994, Camunas 1994a, Redman & Fry 2003, Musa et al. 2011). The possibility to consult a committee, team or individual on ethical issues is ranked among the top four in the study of Cooper et al. (2014). (Table 6.)

Codes of ethics are listed as a method in some studies, but they are not among the most often used methods in solving ethical problems in NMs' work (Sietsema & Spradley 1987, Camunas 1994a, Camunas 1994c, Borawski 1994, Cooper et al. 2003, Cooper et al. 2014) except in the Malaysian study of Musa et al. (2011), where about half of the managers would refer to codes of ethics or other guidelines when dealing with ethical problems. (Table 6.) Still, 89% of NMs were of the opinion that there was a need for codes of ethics in healthcare organizations (Camunas 1994c).

Other methods to solve ethical problems mentioned in studies are: intervention (Laukkanen et al. 2016b), operational models (Laukkanen et al. 2016b), statistics

and feedback (Laukkanen et al. 2016b), personal examples (Laukkanen et al. 2016b), consulting nurses' association (Redman & Fry 2003), organization's policy, rules and statements of ethics (Cooper et al. 2003, Nasae et al. 2008, Cooper et al. 2014, Laukkanen et al. 2016b) work organization (Laukkanen et al. 2016b), ethics training (Cooper et al. 2003, Cooper et al. 2014) and ethics literature (Cooper et al. 2003, Cooper et al. 2014). Trying to solve problems alone is also mentioned as a method (Redman & Fry 2003, Musa et al. 2011). (Table 6.)

There are also results describing themes and strategies related to ethical decision-making. Nasae et al. (2008) listed six themes for ethical decision-making: following higher authority, managing quality of care, maintaining good relationships and avoiding conflict among colleagues, consulting with others to find solutions, working for the benefit of nurses, and following the policy and regulations of the organization. The strategies listed in another study were: taking a positive perspective, seeking the advice of NM colleagues, reliance on a positive relationship with a supervisor, and talking it through with family members (Porter 2010). Issues related to NMs' decision-making in ethical problems have also been grouped together as the following categories: taking risks in deviating from formalities, balancing power and humaneness, maintaining professional hierarchy, managing resistance to change, managing with limited options, and experiencing the decline of nurse's professional and/or human dignity (Žydžiūnaitė et al. 2015).

Moral case deliberation (MCD) and ethics rounds have recently been studied as methods which consist of structured and guided discussions concerning moral cases, moral dilemmas and questions of good care (Janssens et al. 2015, Silén et al. 2016). MCD and ethics rounds are assessed positively, but there are only a few studies of their use (Janssens et al. 2015, Silén et al. 2016). NMs consider MCD to be a valuable but challenging method to improve nurses' critical reflection (Weidema et al. 2015). Lack of ethics resources was reported in a study by Porter (2010). Absence or ineffectiveness of ethics committees was reported by NMs. Ethics committees were mostly seen as serving physicians' needs. Resistance towards attempting to develop ethics consulting services was also reported by NMs. (Porter 2010.)

Table 6. Methods used in solving ethical problems identified in earlier studies.

METHOD	REFERENCES
Personal values	Sietsema & Spradley 1987, Borawski 1994, Camunas 1994a, Cooper et al. 2003, Cooper et al. 2014, Laukkanen et al. 2016b
Discussions	Sietsema & Spradley 1987, Borawski 1994, Camunas 1994a, Redman & Fry 2003, Nasae et al. 2008, Porter 2010, Musa et al. 2011, Laukkanen et al. 2016b
Professional codes of ethics	Sietsema & Spradley 1987, Borawski 1994, Camunas 1994a, Cooper et al. 2003, Musa et al. 2011
Ethical committees	Sietsema & Spradley 1987, Borawski 1994, Camunas 1994a, Redman & Fry 2003, Musa et al. 2011
Laws, rules, instructions	Sietsema & Spradley 1987, Borawski 1994, Camunas 1994a, Nasae et al. 2008, Laukkanen et al. 2016b
Ethics literature	Cooper et al. 2003
Moral case deliberation	Janssens et al. 2015, Weidema et al. 2015, Silén et al. 2016
Work arrangements	Laukkanen et al. 2016b
Religious counsellor	Sietsema & Spradley 1987, Borawski 1994, Camunas 1994a, Redman & Fry 2003
Family and friends	Sietsema & Spradley 1987, Borawski 1994, Camunas 1994a, Redman & Fry 2003
Personal examples	Laukkanen et al. 2016b
Statistics and feedback	Laukkanen et al. 2016b

2.6 Summary of the theoretical background

In conclusion, ethics and nursing management form the context of this study where ethical problems and their solving methods are examined (Figure 1).

Ethics concerns questions of good and bad, right or wrong in human behaviour. It is an essential part of healthcare concerning the whole functioning of the organization, including issues related to patient care, personnel and organization.

Nursing management is management and leadership of nursing personnel and nursing practices at all levels of healthcare organizations: ward management, middle management and strategic management. In this study, the participants are nurse managers.

Ethics in nursing management considers ethical aspects in nurse managers' work. This covers a wide range of responsibilities and actions, including clarifying organizational values to their staff, advancing high ethical standards in nursing practice, and respecting the human dignity of patients. Identifying and solving ethical problems are part of ethics in nursing management.

Ethical problems are difficult matters where the question is what is right or wrong, good or bad. Ethical problems contain three subcategories: ethical/moral uncertainty, ethical/moral dilemmas, and ethical/moral distress. Here, ethical and moral are understood as synonyms. Solving methods are different methods used when trying to solve ethical problems.

Ethical problems and their solving methods are the main interest in this study.

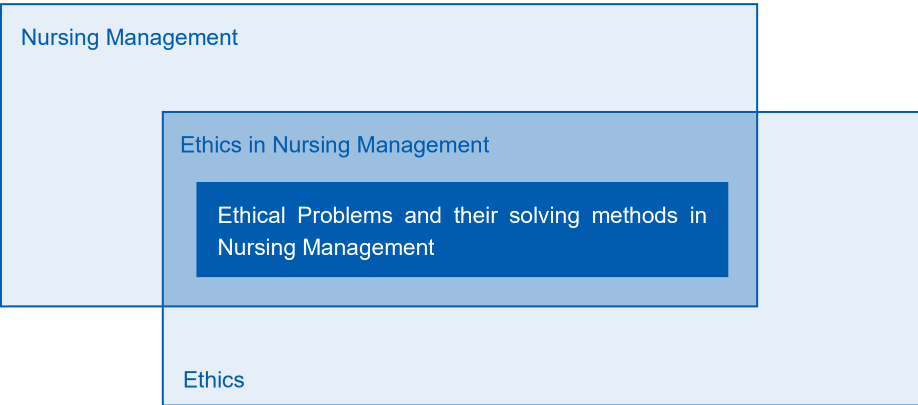

Figure 1. Study field.

3 Aims

The aim of this study was twofold. First, the aim was to identify and describe ethical problems in nursing management and to investigate the frequency and difficulty of these problems. Second, the aim was to identify the methods used when solving ethical problems in nursing management and investigate the frequency of use and usefulness of the methods. The ultimate goal was to provide new knowledge for nursing management practice and education to develop processing of ethical problems and thereby improve the quality of patient care. Both inductive and deductive approaches were combined to get a complete understanding of the ethical problems and their solving in nursing management.

The following research questions were addressed:

1. Encountering ethical problems in NMs work
   - 1.1. What kind of ethical problems do NMs encounter in their work? (Paper II)
   - 1.2. How often do NMs encounter ethical problems in their work? (Paper I, Paper III)
   - 1.3. How difficult are the ethical problems that NMs encounter in their work? (Paper III)
2. Solving ethical problems in NMs work
   - 2.1. What kind of methods do NMs use to solve ethical problems (Paper I, Paper IV)
   - 2.2. How often do NMs use different methods to solve ethical problems? (Paper IV)
   - 2.3. How useful are the solving methods? (Paper IV)
3. Background factors associated with encountering ethical problems and their solving methods
   - 3.1. What background factors are associated with encountering ethical problems in NMs' work? (Paper I, Paper III)

3.2. What background factors are associated with the solving methods used with ethical problems? (Paper I, Paper IV)

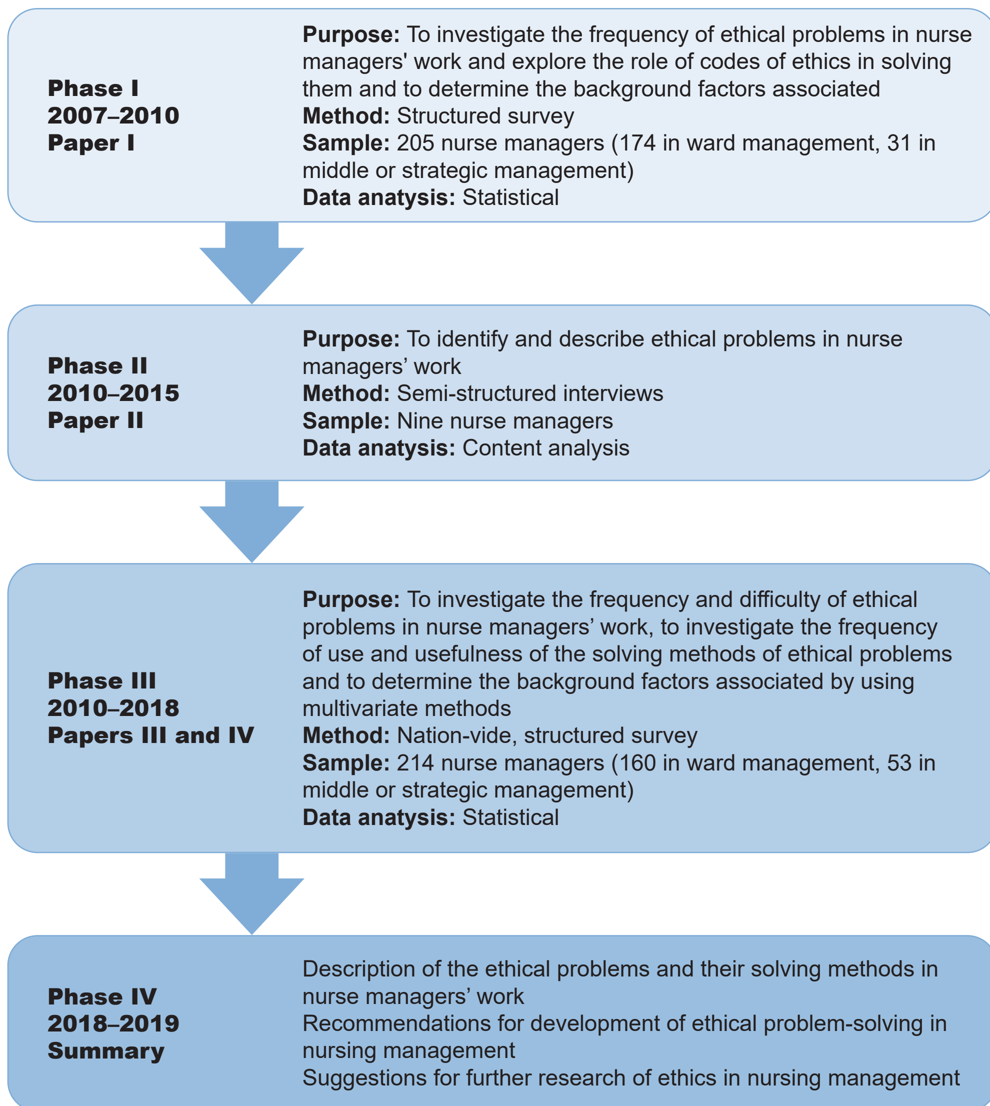

Figure 2. Study phases.

4 Materials and Methods

In this chapter, the design, setting and sample, data collection, data analysis and ethical considerations of all three phases of the study are presented (Table 7). In the first phase, there were quite few studies about ethical problems in nursing management and the problems and solving methods were described on a very general level (e.g. Sietsema & Spradley 1987, Camunas 1994a, Borawski 1995). Additionally, the usefulness of ethical codes was questioned (e.g. Edgar 2004, Meulenbergs et al. 2004). The conclusion of this phase (Paper I) was that there is a need to shape the features and nature of the ethical problems in nursing management for more detailed and accurate measurement. Phase II was therefore conducted by interviewing nurse managers in order to identify ethical problems in their work (Paper II). There was also a need to find out more about the methods NMs use for solving ethical problems. On grounds of the interviews and a new literature review it was possible to draw up a new, more focused questionnaire for phase III to give more detailed information about the frequency and difficulty of ethical problems in NMs' work and the frequency of use and usefulness of the solving methods (Papers III and IV).

4.1 Methodological approach and design

This study was carried out in three phases between 2007 and 2018 (Table 7). **In the first phase**, the frequency of ethical problems in NMs' work was studied empirically by a cross-sectional survey. For this purpose, a new questionnaire containing 16 items was developed based on earlier literature (Paper I). The aim was to find out on a general level what are the areas of ethical problems in NMs' work. Another research question concerned the use of codes of ethics when solving ethical problems. Ethical codes are meant to guide and control professionals in their actions (Thompson et al. 2006), but their usefulness has also been criticized (Pattison 2001, Tadd et al. 2006). The aim was to find out how often NMs use professional codes of ethics when solving ethical problems in their work. Cross-sectional survey design was chosen to produce generalizable information. These are reported in paper I. As a result of the first phase it was concluded that an overview of ethical problems in nursing management was achieved, but more

qualitative studies were needed for shaping the features and nature of NMs' ethical problems to get a deeper understanding of the problems.

In the second phase of the study, a qualitative approach was chosen to get a deeper and detailed understanding about the nature of ethical problems in nursing management and their solving methods. Data was collected by semi-structured interviews (Paper II). (Gray et al. 2016.) In this way it was ensured that besides information from international literature, also the ethical problems in Finnish circumstances were perceived. Generalizable information about these problems was needed and therefore, the next step was a nationwide survey.

In the third phase, a new questionnaire was developed based on the questionnaire used in phase I, the interviews in phase II and the second literature review. The aim was to get generalizable knowledge about ethical problems and their solving methods in nursing management. Based on the information obtained from the interviews in phase II, the questionnaire in phase I was found to be too restricted to explore the ethical problems NMs encounter in their work. In addition, more diverse information about problems and solving methods was desired. Problems were studied not only for their frequency but also for their difficulty, and solving methods were studied for frequency of use and usefulness. As a new element, work-related background factors (Ikola-Norrbacka 2010) were also studied in the third phase to find out if they correlate with ethical problems or solving methods. (Papers III and IV.) Also, NMs' self-expressed values were studied with the aim of describing the participants.

Table 7. Summary of the design, samples, methods of data collection and data analysis.

Phase	Paper	Design	Sample	Method of data collection	Data analysis	Literature reviews
I 2007–2010	I	Descriptive and comparative, cross-sectional study	Cluster sampling by organization, and total sampling within organizations Nurse managers in ward management, middle management and strategic management (n = 205) from all (21) healthcare organizations in 2 purposefully selected hospital districts in Finland	Purpose-designed questionnaire	Descriptive and comparative statistical methods	First literature review
II 2010–2015	II	Descriptive, qualitative inquiry	Purposeful sampling Nurse managers in ward management, middle management and strategic management (n = 9)	Semi-structured interviews	Inductive and deductive content analysis	
III 2010–2019	III, IV	Descriptive and comparative, cross-sectional study	Cluster sampling by organization, and total sampling within organizations Nurse managers in ward management, middle management and strategic management (n = 214) from 4 of ten largest cities and 5 hospital districts, randomly sampled	Purpose-designed questionnaire EProNuMa with integrated items from the questionnaire of Ikola-Norrbacka (2010)	Descriptive and comparative statistical methods	Second literature review and its updates

4.2 Setting and sample

In **the first phase**, data were collected by a structured questionnaire sent by paper mail in spring 2007. First, cluster sampling was used when selecting one university hospital district and one hospital district in Finland. Then, total sampling was used to select all specialized and primary healthcare organizations (N = 21) in both hospital districts and all NMs in those organizations. Natural clusters, healthcare organizations, were used because of a lack of national lists of MNs, so the sampling frame would have been difficult or impossible in any other way. (Gray et al. 2016.)

In **the second phase**, data were collected in 2010 through semi-structured interviews. Purposeful sampling was used to get rich data (Gray et al. 2016, Polit & Beck 2017). Informants were NMs (n = 9) representing varied and relevant experience in nursing management at different management levels in specialized health care and primary healthcare organizations in different parts of Finland. They also showed an interest in ethical questions, e.g. by belonging to ethical committees, writing about ethics or doing ethical-related research. (Paper II)

In **the third phase**, data were collected by structured questionnaires from November 2014 to May 2015 (Papers III and IV). Cluster sampling by hospitals and primary healthcare organizations and total sampling within the organizations was used (Gray et al. 2016). First, healthcare organizations were randomly selected one by one. Primary health care organizations were randomly selected from the ten largest towns (as per number of inhabitants) and specialized healthcare organizations were randomly selected from hospital districts in Finland. Secondly, convenience sampling (Gray et al. 2016) was used when selecting participants from s register of academic nurse managers and experts (Akavan sairaanhoitajat and Taja, www.taja.fi), aiming to reach a sufficient number of nurse NMs in middle and strategic management. This register is the largest one in Finland for academic nurse managers. To add diversity of data collection, the questionnaire was also distributed at an education meeting targeted at NMs (Gray et al. 2016, Polit & Beck 2017).

Random sampling of primary and specialized healthcare organizations was continuously made so that the number of 200 responses was achieved, based on power analysis (Polit & Beck 2017), which was based on expected group differences and the results of phase I (group difference of 10%, significance level of 0.05 and power 0.80). In all, the nationwide sample included one university hospital, four central hospitals and four health centres, one national association of academic nurse managers, and experts and participants of one education meeting for nurse managers. Thirdly, total sampling was used within the selected organizations, the association and education meeting, so that all NMs at every

management level were recruited, except for 4 organizations with all NMs at ward management level only.

4.3 Data collection

In the first phase, the questionnaires were sent to 76 NMs in middle or strategic level and 425 NMs in charge of a ward (N = 501). In total, 205 completed questionnaires were returned: 31 were from middle or strategic management and 174 from NMs in charge of a ward, the response rate being 41% in both groups. Participants were included if they led nursing staff conducting nursing care. NMs in units with no patients, e.g. pathology laboratories and assistant ward managers were excluded.

In the second phase, data were collected with individual interviews (Paper II). Respondents received beforehand a letter of information about the study and a broad interview framework including the research questions. They were asked to consider what kind of ethical problems they encounter in their work related to patients, staff and organization. This information gave interviewees time to think about the themes in advance to get a richer description during the interviews (Englander 2012).

In the third phase, both electronic and paper surveys were used to add diversity to data collection. An electronic Webropol survey delivered by e-mail was used in 7 organizations and the association of academic nurse managers and experts; the paper version was used in 2 organizations and the education meeting. One or two reminder messages were sent to all respondents by email via organizations' email groups. The questionnaire was sent to 1,086 nurse managers. In total, 214 usable responses were returned, giving a response rate of 20%. The inclusion and exclusion criteria were the same as in phase I.

4.4 Instruments

Two new questionnaires were developed for this study, the first in phase I and the second in phase III following a process (DeVellis 2017) and including several techniques (DeVon et al. 2007). In the first phase, a questionnaire was developed based on a literature review using deductive reasoning, expert analysis and codes of ethics (Paper I). The experts (n = 5) were nurse managers with wide experience of different levels of nursing management (Polit & Beck 2017). They reviewed the content and format of the questionnaire (Schilling et al. 2007, Almanasreh et al. 2019). Two items (ethical problems) were added and some minor modifications were made. The questionnaire was pilot tested in a sample of 8 professionals with

experience in nursing management (Polit & Beck 2017). No modifications were made after pilot testing.

The first version of the questionnaire consisted of background factors and two Likert-type scales measuring how often nurse managers encounter ethical problems (16 items) in their work (daily, weekly, monthly, less than one a month, never) and how often they use codes of ethics in dealing with those problems (never, occasionally, often, always) (Table 8, Appendix 1).

In the third phase a new, revised questionnaire – Ethical Problems of Nurse Managers (EProNuMa) – was developed for this study on the basis of the questionnaire of the first phase, interviews in phase II and a second literature review (see chapter 2). The socio-demographic background factors were mostly adopted from the questionnaire of phase I in order to achieve comparability between participants in subsequent phases. To get more information about the possible associations with working conditions (Huhtala 2013) the work-related background factors were adopted from Ikola-Norrbacka (2010). To analyse personal value orientation the respondents' values were also measured, supported by the literature (Taja 2003, Virtanen 2010, Ikola-Norrbacka 2010).

The ethical problems in the EProNuMa were more detailed, based on the information retrieved from the interviews in phase II and a literature review. Not only the frequency of ethical problems (never, less than monthly, monthly, weekly, daily, cannot say) but also their difficulty (very easy, somewhat easy, neither easy nor difficult, somewhat difficult, very difficult, cannot say) was measured. The number of solving methods was significantly increased compared to phase I. In addition to ethical codes, other solving methods were included in the EProNuMa, also based on the interviews and the second literature review. Regarding the methods, both the frequency of use (never, very rarely, occasionally, often always, cannot say) and usefulness (entirely useless, somewhat useless, somewhat useful, very useful, cannot say) were measured. (Table 8, Appendix 2.) The content of the eProNuMa was reviewed by expert analysis by 7 nurse managers, who had different types of work experience and worked at different levels of management (DeVellis 2017). The experts were asked to assess the relevance and the clarity of the items (Almanasreh et al. 2017). They found all the questions relevant and did not report any relevant issues missing. Suggestions were made to improve the clarity of some questions, which were taken account. The questionnaire was also pilot tested with 15 nurse managers. (Polit & Beck 2017.) The questionnaire was found to be functioning acceptably and no modifications were made after pilot testing.

Table 8. The content (sub-scales) and number of items of the questionnaires in phases I and III.

	Phase I	Phase III
	Number of items	**Number of items**
A. Socio-demographic background factors gender, age, position in organization, type of organization, experience in healthcare administration, number of subordinates, education, ethics training after graduation	7 (education not asked)	8
B. Frequency of encountering ethical problems	16	65
Patient-related	6	15
Nursing staff-related	6 (combined, staff-related)	25
Related to other professional groups		10
Organization-related	4	10
Related to NM her/himself	-	5
C. Difficulty of ethical problems	-	65
D. Frequency of using solving methods in ethical problems	16	40[1)]
Discussion and deliberation	Only use of ethical codes in solving ethical problems (16) in B was asked	12
Use of outside experts		7
Written instructions and ethical principles (incl. codes of ethics)		8
Acts and decrees		5
Work arrangements		8
E. Usefulness of solving methods	-	40
F. Values	-	15
G. Work-related background factors	-	11

[1)] Use of solving methods in any ethical problems was asked

4.5 Data analysis

Data were analysed statistically in phases I and III using the SPSS (Statistical Package for Social Sciences) 14.0 (phase I) and SAS 9.1 (phase I) and SAS 9.3 (phase III) software packages (SAS Institute Inc., Cary, North Carolina, USA) (Table 9).

The sample size calculations (power analysis) in phase III were based on the results in phase I. However, as the sum scores in phase III were somewhat different from the scores in phase I, the results of power analysis were only tentative (Devane et al. 2004). With group difference of 10%, significance level of 0.05 and power 0.80, the estimated sample size was 200. The sum scores (phases I and III) were formed by calculating the mean values of single items. Sum score was not calculated if more than 50% of its items had a missing answer. In the sum score of

work-related background factors, the scales of two negative statements were reversed before combining to the sum score. The normality of the distributions was checked using the Shapiro-Wilk test (phases I and III). Multivariable regression analyses (phase III) were used to find out associations between background factors, the frequency and difficulty of the ethical problems encountered, and the frequency of use of the methods in solving ethical problems. First, all background factors were included in the regression model. Then, using backward variable selection method, the non-significant variables were removed. P-values less than 0.05 were considered statistically significant.

In phase II, inductive content analysis was used to identify ethical problems in NMs' work. (Graneheim & Lundman 2004, Hsieh & Shannon 2005). Meaning units, such as words, sentences or paragraphs answering the research question, were identified and marked in the transcribed text. The manifest contents were used, meaning the visible and obvious components (see Graneheim & Lundman 2004). The expressions were then condensed and coded. The coded expressions were grouped first into subcategories and labelled, and then into larger main categories. Also deductive analysis was used to group the meaning units into patient-related, staff-related, organization-related and other problems. (Paper II)

Table 9. Statistical methods used in study phases I and III.

Purpose	Study phase	Statistical test
To describe the variables	I, III	Descriptive statistics – frequencies, percentages, means, medians and standard deviations
To compare the distributions of the categorical variables	I	The chi-square test or Wilcoxon two-sample test
To evaluate the internal consistency of the sum scores.	I,III	Cronbach's alpha
To analyse the differences between the means of the sum variables	III	Repeated measures analysis of variance
To analyse the associations between the sum scores and the background variables	I	Student's t-test
To analyse the associations between numerical work-related background factors and sum variables	III	Pearson correlations
To find out associations between background factors and the frequency or difficulty of organization-related ethical problems, and the frequency of use of the methods in solving ethical problems	III	Multivariate regression analysis

4.6 Ethical considerations

The study was conducted according to the ethical guidelines of the Finnish Advisory Board on Research Integrity (TENK 2012) confirmed in the new version (TENK 2019), Medical Research Act (488/1999, 295/2004) and ALLEA (2017). Ethics are essential in healthcare management, but research in this area seems to be quite limited and diffuse. Studying ethical problems and posing the research questions in nursing management was therefore justified.

The participants of the study, nurse managers, are working adults and the study concerns their work. Therefore, the study and the way in which it was performed cannot be considered to be ethically sensitive or questionable. The only harm of the study was loss of time when participating in the study; the benefit of the important information the study produced is clearly greater for nursing management.

In all three phases, permission for data collection was obtained from all participating organizations according to their own standards (TENK 2012). In phase III, ethical approval for the national survey was obtained from the ethics committee of the University of Turku (Statement 22/2014, 4.6.2014), which was not mandatory according to legislation, but was desired to convince all parties that ethical aspects are taken into account. The permission to use parts of a previously developed instrument was obtained by email from the original copyright holder Ikola-Norrbacka on 21 August 2012.

In every phase, respondents were given written information about the aim of the study. Voluntariness, anonymous participation and confidentiality of the data were explained to them. In survey studies (phases I and III) answering the questionnaire was seen as consent to participate. In phase II (interviews) the participants signed a written informed consent.

To protect the privacy of the respondents, their personal details (names, e-mail addresses) were not linked to the data. The results are presented so that individual respondents cannot be identified. Data is stored so that only researchers of this study may see them. The results are reported precisely, thoroughly and honestly in accordance with good scientific practices. Publication ethics (Papers I-IV) was followed (Albert & Wager 2003, ALLEA 2017, COPE 2019) regarding authorship, clear distinction between the original articles and the data they are based on, and honesty.

5 Results

In this chapter the results are presented in four parts according to the research questions. The first part reports participant characteristics: the socio-demographic background factors of the participants of all three phases and the work-related background factors and the self-expressed values of the participants of phase III. The second part describes ethical problems in NMs' work: the nature of ethical problems identified in phase II and the frequency of encountering ethical problems in phases I and III. The difficulty of solving those problems (phase III) is also reported in this part. The third part describes the solving methods NMs use when solving ethical problems: how often NMs use the methods and how useful they consider them. These results are from phase III except for the use of codes of ethics, which was measured in phase I as well. The background factors associating with encountering ethical problems and their solving are presented in the fourth part. The results are also presented in papers I-IV.

5.1 Participant characteristics

5.1.1 Socio-demographic background factors

In all phases, participants were NMs working in ward management, middle management and strategic management in public healthcare organizations in Finland. In phase I, NMs (n = 205) were from two hospital districts in western Finland (Paper I). In phase II, in the interviews, there were 9 purposefully selected NMs (Paper II) and in phase III, 214 NMs participated nationwide (Papers III and IV).

Participants in phases I and III were mainly women (I: 96%, III: 92%), their mean age was 50 years (I: 50, III: 52). In phase III there were more participants representing middle or strategic management than in phase I (I: 15%, III: 25%). Furthermore, the average number of subordinates was higher in phase three (I: 47, III: 79) and more NMs had university level education than (I: 20%, III: 40%) in phase I.

Participants in phase two (interviews) were aged 43–61 years, representing ward (n = 3), middle (n = 4) and strategic (n = 2) management. Demographics are presented in detail in Table 10.

Table 10. Characteristics of respondents in different phases of the study.

	Phase I (n=205)				Phase II (n=9)	Phase III (n=214)			
	n	**%**	**mean(SD)**	**range**		**n**	**%**	**mean(SD)**	**range**
Gender									
Female	197	96			8	197	92		
Male	8	4			1	14	7		
Age in years			50 (6.8)	29–62				52 (7,7)	29–66
< 40	14	6,5				23	11		
40–49	71	35			3	44	21		
50–59	97	47			4	116	54		
≥ 60	10	5			2	31	14		
Position in organization									
Middle or strategic management	31	15			6	53	25		
In charge of a ward	174	85			3	160	75		
Type of organization									
Specialized health care	124	60			5	130	62		
Primary health care	78	39			4				
Other than specialized health care						81	38		
Experience in health care administration in years			12 (10.2)	0.1–45				12 (8.7)	0.3–34
< 5	64	31			2	44	21		
5–14	65	32			2	97	45		
15–24	42	20			4	44	21		
≥ 25	32	16			1	29	13		
Number of subordinates			47 (81.2)	0–800				79 (139)	3–1100
< 10	29	14				13	6		
10–29	119	58				90	43		
30–59	22	11				49	23		
60–99	14	7				15	7		
≥ 100	18	9				43	20		
Education									
University	43	21				85	40		
University of applied sciences or other institute	162	79				129	60		
Participation in ethical training	**after graduation**					**in the last two years**			
Yes	90	44				59	28		
No	113	55				155	72		

5.1.2 Work-related background factors

Work-related background factors were inquired only in phase III (papers III and IV). They consisted of 9 statements about NMs' work, which can be seen to measure NMs' satisfaction with their work and some ethics-related working conditions (Table 11). Nurse managers considered their work meaningful and compatible with their values. The majority of them considered that the accelerating pace of work and insufficient financial resources made it more difficult to focus on what is essential. A sum score of these nine items (mean 3.30, SD 0.52, range 1.89–4.67) was used as a background factor measuring their association with ethical problems and solving methods.

Additionally, there were two statements of NMs' self-expressed need of additional education: one about the need to improve personnel management and one about the need to deal with ethical problems. About half of them (55%) felt they needed additional education in personnel management and about two thirds (63%) expressed a need of additional education to deal with ethical problems (Table 11).

Table 11. Work-related background factors.

	Mean	SD	completely disagree %	somewhat disagree %	neither agree nor disagree %	somewhat agree %	completely agree %	N
1. The values of those representing the professions active within my organization are compatible	3.07	0.85	2	26	36	35	2	213
2. The management system in my work unit is well-functioning	3.40	0.97	3	20	20	51	7	214
3. The accelerating pace of work makes it more difficult to focus on what is essential	3.83	1.02	2	9	19	41	28	214
4. Insufficient financial resources make it more difficult to focus on what is essential	3.53	1.03	2	17	25	38	18	214
5. My organisation has functioning instructions for dealing with unethical situations	2.99	1.05	8	24	35	25	7	214
6. My organisation addresses unethical situations in an appropriate way	3.41	0.99	5	12	31	42	10	214
7. The work I do is compatible with my values	4.17	0.74	1	2	12	52	34	214
8. I see my work as meaningful	4.24	0.83	1	4	11	41	44	213
9. I have enough decision-making power in my work	3.79	1.03	2	12	17	43	26	214
10. I feel I need additional education in order to improve myself in personnel management	3.56	0.99	2	13	30	37	18	214
11. I feel I need additional education in order to improve myself in dealing with ethical problems	3.71	0.94	1	10	25	43	20	214

1.–10. Copyright Ikola-Norrbacka 2010

5.1.3 Nurse managers' values and ethical principles

In phase III, NMs' values were also studied in order to describe the participants. They were asked to select the three most important values in their own work from a list of 14 values and ethical principles related to management role.

The most important values were patient/client-centred approach (selected by 154 NMs), fairness (n = 95) and staff well-being (n = 86). (Figure 3.) Values are not reported in papers I-IV.

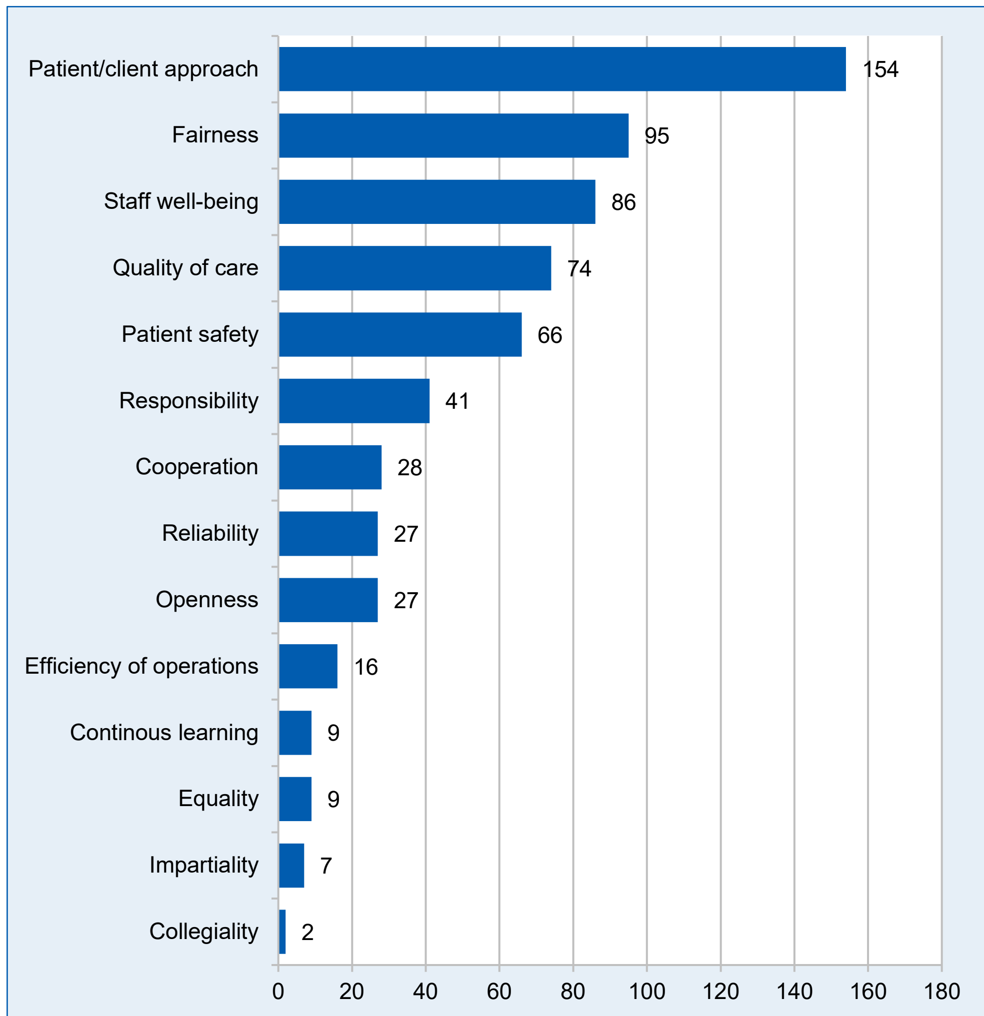

Figure 3. Nurse managers' values and ethical principles (n = 214) (Phase III).

5.2 Encountering ethical problems in nursing management

In this chapter, ethical problems are described in three sections. First, the problems identified in interviews (Phase II) are described. Then, the frequency of encountering ethical problems is reported (Phases I and III), and finally, the difficulty of ethical problems is reported (Phase III)

5.2.1 Nature of ethical problems

In phase II, NMs' ethical problems were identified by interviews in order to deepen and get more detailed information about the problems, which were studied on quite general level in phase I (Paper II). These findings were used when developing the new questionnaire (EProNuMa) for phase III.

Ethical problems in NMs' work have previously been divided into patient-, staff- and organization-related problems (Esterhuizen 1996) based on who the ethical problem concerns most. In addition to these categories, problems related to NMs themselves were also found in the qualitative phase of this study. Patient-related problems concern patient care in one way or another and they may also concern patients' relatives. Staff-related problems concern personnel management and staff relations while in organization-related problems, the main focus is on organization's actions, rules and resources. Ethical problems related to NMs themselves concern their own motivation and feelings (Table 12).

Another way to divide ethical problems in NM's work was found in this study. Problems were divided based on the nature of the problem into four categories: 'Conflicts in practical situations', 'lack of appreciation', 'disregard of the problems' and 'experienced inadequacy'. All these categories included patient-related, staff-related and organization-related ethical problems. Some ethical problems related to NMs themselves were also identified in the categories named 'disregard of the problems' and 'experienced inadequacy'. (Table 12).

Table 12. Nurse managers' ethical problems identified in interviews (Phase II), modified from Original Publication II.

	Category name	Category description and content			
1.	**Conflicts in practical situations:**	Value conflicts emerge in actions, disagreements as to what is the right way to act.			
		Patient-related: - Disagreements in patient care	Staff-related: - Conflicts between staff members - Ambivalence about justice and fairness in personnel management	Organization-related: - Conflicts with owners or persons elected to a position of trust - Conflicts between own and organizational values	
2.	**Lack of appreciation:**	Experience of a person or a group of being undervalued or not taken into account.			
		Patient-related: - Paternalistic culture - Inequality of patients - Indiscreet treatment of patients	Staff-related: - Lack of collegial behaviour - Problems with collaboration with other professionals	Organization-related: - Lack of valuing nursing profession - Negative public image	
3.	**Disregard of the problems:**	Situations or circumstances where problems exist but nothing is done to them.			
		Patient-related: - Not patient-oriented routines and habits	Staff-related: - Not listening to staff - Excessive collegiality of physicians	Organization-related: - Protection of incompetent key persons - Permitting unfair treatment - Avoiding responsibility	Other: - Lack of managers' own motivation
4.	**Experienced inadequacy:**	Experience of being not capable of doing the best possible thing			
		Patient-related: - Prioritization in patient care - Limited power - Limited circumstances	Staff-related: - Staff fatigue - Problems with evaluating and rewarding staff members	Organization-related: - Scarce resources	Other: - Limitations caused by confidentiality

5.2.2 Frequency of ethical problems

The frequency of ethical problems in nursing management was measured in both quantitative phases of the study (I and III). In phase I, the ethical problems were examined on quite a general level (total of 16 items) grouped into three categories: patient-related, staff-related and organization-related ethical problems (Paper I). Instead, in phase III there were a total of 65 items and two more groups: problems related to other professional groups and problems related to NMs themselves (Paper III). Details of the findings concerning the frequency of ethical problems are presented in Appendix 3.

In both phases, organization-related problems were among the most often encountered problems. In phase III, staff-related problems were encountered as often as organization-related problems, whereas in phase I, staff-related problems and patient-related problems were encountered significantly less frequently than organization-related problems. (Table 13.)

Of the single items of the sum variable, allocation of personnel and financial resources were the most often encountered ethical problems related to organization in both phases. In phase I, 69% of NMs encountered problems concerning personnel resources daily or weekly, whereas the corresponding number in phase III was 46%. Problems related to financial resources were encountered daily or weekly by 48% (phase I) and 37% (phase III) of NMs, respectively.

The results on staff-related ethical problems were different in phases I and III. In phase I, the most often encountered ethical problems related to staff were ‘conflicts among nursing staff’ and ‘conflicts between nursing staff and other professionals’. Instead, in phase III, the most often encountered ethical problems were ‘nurses’ experiences of being heard’ and ‘giving positive feedback’. Conflicts among nursing staff or conflicts between nursing staff and other professionals were reported essentially less frequently in phase III of the study. A separate sum variable was formed about problems related to other professional groups in phase III, whereas items relating to those problems were included in the same sum variable with staff-related problems in phase I (Table 13).

The sum variable of frequency of encountering patient-related ethical problems had significantly lower mean score values in both phases (I and III) than the frequency of encountering organization-related ethical problems. The most often encountered ethical problem related to patients in phase I was ‘providing good care to patients’. In phase III, the most often encountered problems concerning patients were ‘respecting patient’s privacy’ and ‘respecting patient’s autonomy’, which were not among the ten most often encountered problems. (Table 13.)

Ethical problems related to NMs themselves were studied only in phase III. The sum score for this sum variable was the lowest of all groups (Table 13).

Table 13. Frequency of encountering ethical problems, sum scores, phases I and III.

Sum variables	Phase I				Phase III			
Ethical problems (range 1-5)[1]	n	Mean	SD	Cronbach's α	n	Mean	SD	Cronbach's α
Related to patients	204	2.90 [2]	0.60	0.77	214	2.16	0.48	0.87
Related to staff	204	2.88 [3]	0.71	0.85	-	-	-	-
Related to nursing staff	-	-	-	-	214	2.53[4]	0.43	0.87
Related to other professional groups	-	-	-	-	214	2.14	0.46	0.78
Related to organization	204	3.18 [2,3]	0.71	0.71	214	2.52[4]	0.61	0.79
Related to NM her/himself	-	-	-	-	214	2.08	0.56	0.73

[1]range: 1 = never, 5 = daily
[2]pairwise difference between the means, $p < 0.0001$
[3]pairwise difference between the means, $p < 0.0001$
[4]Mean value higher compared to the three other sum variables, $p < .0001$

5.2.3 Difficulty of ethical problems

The difficulty of the ethical problems encountered in NMs' work was measured only in phase III. It was measured with the same 65 items of ethical problems that were used when asking about the frequency of encountering problems. (Paper III.) Details of the findings concerning the difficulty of ethical problems are presented in Appendix 3.

Organization-related ethical problems were the most difficult. The mean score of the sum variable (M = 3.92) was significantly higher compared to the four other sum variables, namely patient-related and staff-related problems and problems related to other professional groups and NMs themselves (Table 14). (Paper III.)

On item level, the most difficult single problems related to organization were 'downsizing personnel due to cost cutting', 'tacit approval of workplace bullying' and 'damage to quality of nursing due to focus on cost-effectiveness', which were also the most difficult ones of all the 65 problems listed in the questionnaire. (Paper III.)

Table 14. Difficulty of ethical problems in nursing management, sum scores.

Sum variables	Phase III			
Difficulty of ethical problems (range 1-5)[1]	No.	Mean	SD	Cronbach's α
Related to patients	213	3.26	0.63	0.89
Related to nursing staff	212	3.12	0.56	0.91
Related to other professional groups	212	3.59	0.70	0.88
Related to organization[2]	213	3.92	0.68	0.90
Related to NM her/himself	208	3.44	0.86	0.80

[1]range: 1= very easy, 5 = very difficult
[2]Mean value higher compared to the four other sum variables, $p<.0001$

5.3 Solving ethical problems in nursing management

In this chapter, methods for solving ethical problems are described in two sections. In the first section, the frequency of use of solving methods is reported, and in the second, the usefulness of methods is discussed (Phases I and III).

5.3.1 Different methods used for solving ethical problems

The role of codes of ethics was studied in phase I of this study so that participants were asked how often they used professional codes of ethics when resolving different ethical problems. Codes of ethics were most often used for patient-related problems concerning providing good care and developing quality of care. They were used less frequently for organization-related problems, although problems concerning allocation of personnel resources were the most common. (Paper I.)

Phase III asked about the frequency of use and usefulness of the professional codes of ethics and code of ethics for nurse managers as parts of a list of 40 different methods. Neither code was among the most often used. The code of ethics for nurse managers was used clearly less frequently than professional codes. However, both codes were considered somewhat or very useful by over 80% of the respondents. (Paper IV.)

The frequency of using different methods for solving ethical problems was studied only in phase III of this study, except for the use of ethical codes, which was the only method in phase I. The most often used methods were discussions and deliberation. The mean value of the sum variable (12 items) was significantly higher compared to the sum variables of other methods (Table 15). The four most often used methods belong to the group named Discussions and deliberation:

'discussion with nurses' (1.), 'relying on personal values' (2.), 'discussion with manager colleagues' (3.) and 'discussion with own manager' (4.). Details of the findings concerning the frequency of use of the solving methods are presented in paper IV.

Table 15. Frequency of using different methods when solving ethical problems in nursing management, sum scores.

Sum variables	Phase III			
Frequency of using methods (range 1-5)[1]	No.	Mean	SD	Cronbach's α
Discussion and deliberation [2]	214	3.19	0.50	0.77
Use of outside experts [3]	214	2.08	0.52	0.70
Written instructions and ethical principles	213	2.73	0.75	0.87
Acts and degrees	211	2.85	0.89	0.82
Work arrangements	214	2.83	0.57	0.73

[1]Range: 1 = never, 5 = always
[2]Mean value higher compared to all other sum variables, $p<.0001$
[3]Mean value lower compared to all other sum variables, $p<.0001$

5.3.2 Usefulness of solving methods

The usefulness of the methods for solving ethical problems was also measured. Compared to the other three categories, the sum variables of two categories of methods – 'Discussion and deliberation' and 'Acts and degrees' – were significantly higher (Table 16). Most of the single methods were considered useful so that even the least useful method was considered to be somewhat or very useful by 49% of the NMs who answered the question (n = 74). Altogether, there were 9 methods where at least one third of the responses were missing (empty or 0 = cannot say). The most useful method was 'discussion with nurses' which was also the most often used. Details of the findings concerning the usefulness of the solving methods are presented in paper IV.

Table 16. Usefulness of the solving methods, sum scores.

Sum variables	Phase III			
Usefulness of methods (range 1-4)[1]	No.	Mean	SD	Cronbach's α
Discussion and deliberation [2]	213	3.56	0.33	0.806
Use of outside experts[3]	210	3.12	0.51	0.849
Written instructions and ethical principles [4]	207	3.30	0.47	0.890
Acts and degrees	203	3.50	0.48	0.899
Work arrangements	210	3.41	0.43	0.822

[1]Range: 1 = completely useless, 4 = very useful
[2]Mean value higher compared to sum variables 'use of outside experts' and 'written instructions and ethical principles, $p < .0001$, and sum variable 'work arrangements', $p = 0.0004$
[3]Mean value lower compared to all other sum variables, $p < .0001$
[4]Mean value lower compared to sum variable 'acts and degrees', $p < .0001$, and sum variable 'work arrangements', $p = 0.0071$

5.4 Background factors associating with encountering ethical problems and their solving

Several background factors, such as age, participating in education concerning ethics, organization type, education, job position and number of subordinates, were associated with encountering ethical problems in NMs' work and with the use of different methods (Papers I, III and IV). Furthermore, the sum score of the sum variable "work-related background factors" was negatively associated with the frequency and difficulty of ethical problems (Paper III) and positively associated with the use and usefulness of the solving methods (Paper IV). (Table 17.)

A summary of the background factors is presented in Table 17. It includes all the background factors that have associations with the frequency or difficulty of the ethical problems encountered in nurse managers' work as well as with the frequency of use or usefulness of different methods used when solving ethical problems. The background factor is listed in Table 17 if there is an association with at least one category (sum score) of frequency or difficulty of ethical problems, or frequency of use or usefulness of the methods. (Table 17.)

Table 17. Background factors having significant associations with one or more types of ethical problems in nursing management.

Background factor	**Frequency of ethical problems**		**Difficulty of ethical problems**	**Frequency of using different methods**	**Frequency of using codes of ethics**	**Usefulness of the methods**
	Phase 1	**Phase 3**	**Phase 3**	**Phase 3**	**Phase 1**	**Phase 3**
Age						
younger	+					
older						+
Participating in education concerning ethics						
Yes	+			+	+	+
Organization						
Primary health care / other	+					
Specialized health care		+				
Education						
University of applied sciences or other institute		+				
University			+	+		
Job position						
Middle or strategic management				+	+	
Ward management		+				
Number of subordinates						
< 20						
21-50						
51-100		+				
> 100		+	+			
Sum score of work-related background factors	na	–	–	+	na	+

[1] +means positive association – more frequently, more difficulty, more usefulness
- means negative association – less frequently, less difficulty, less usefulness

5.5 Associations between ethical problems and solving methods

There were also several associations between the sum scores of frequency or difficulty of ethical problems and the frequency of use or usefulness of the methods. For example, the more frequently NMs encountered organization-related ethical problems in their work, the more frequently they used outside experts, written instructions and ethical principles, acts and degrees and work arrangements. As well, the more frequently NMs encountered patient-related ethical problems, the more they used discussions and deliberation as solving method. (Table 18.)

Difficulty of ethical problems had only negative associations with the frequency of use of solving methods. For example, the more difficult ethical problems NMs encountered related to nursing staff, the less frequently they used discussion and deliberation, written instructions and ethical principles and acts and degrees. (Table 18.)

The frequency of ethical problems and the usefulness of the methods also had some associations. For example, the more frequently NMs encountered ethical problems related to nursing staff, the more useful they found discussion and deliberation, acts and degrees and work arrangements. (Table 18)

Finally, there were also some associations between the difficulty of ethical problems and usefulness of the solving methods. The associations were positive so that the more the difficult ethical problems with other professional groups, the more useful NMs found discussion and deliberation. As well, the more difficult the ethical problems with the organization were found, the more useful acts and degrees and work arrangements were found. (Table 18.)

Table 18. Associations between the sum scores of frequency or difficulty of ethical problems and the frequency of use or usefulness of the solving methods[1].

	Frequency of use of methods in solving ethical problems				
	Discussion and deliberation	**Outside experts**	**Written instructions and ethical principles**	**Acts and degrees**	**Work arrangements**
Frequency of ethical problems related to					
Patients	+				
Nursing staff					+
Organization		+	+	+	+
Difficulty of ethical problems related to					
Nursing staff	-		-	-	
NM her/himself		-			-
	Usefulness of methods in solving ethical problems				
Frequency of ethical problems related to					
Patients					-
Nursing staff	+			+	+
Other professional groups					+
Organization					-
NM her/himself	-		-	-	-
Difficulty of ethical problems related to					
Other professional groups	+				
Organization				+	+

[1] + means positive association, - means negative association

5.6 Summary of results

Nurse managers encounter a wide variety of different ethical problems in their work, over half of them at least weekly. The most often encountered ethical problems were related to organization (phases I and III), but also to patients (phase I) and nursing staff (phase III). The organization-related problems were considered to be the most difficult ones.

The most often used methods for solving ethical problems were discussions and deliberation, including discussions with different stakeholders, and personal values. The next most often used were acts and degrees, followed by written instructions and work arrangements. Outside experts was the least used method. Most of the methods were considered somewhat or very useful.

Work-related background factors associated negatively with the frequency and difficulty of ethical problems and positively with the use and usefulness of the solving methods. There were also several socio-demographic background factors that associated with encountering ethical problems and with the use of their solving methods, such as age, participating in education concerning ethics, organization type, education, job position and number of subordinates. Some associations were also found between ethical problems and their solving methods.

The main results of this study are summarized in Table 19 by the phases of the study.

Table 19. Summary of the main results.

Phase	Method / Papers	Main results
Phase I	Cross-sectional survey Paper I	• the most often encountered ethical problems in NMs' work concerned resource allocation as well as providing and developing high quality patient care • codes of ethics were most often used by NMs with patient-related ethical problems • NMs in middle or strategic management used codes of ethics more often than NMs in ward management
Phase II	Interviews Paper II	• four main categories of ethical problems in NMs' work were found: conflicts in practical situations, lack of appreciation, disregard of the problems, and experienced inadequacy
Phase III	Cross-sectional survey Papers III and IV	• the most often encountered ethical problems in NMs' work were related to nursing staff and organization • the most difficult ethical problems in NMs' work were related to organization • the most often used methods in solving ethical problems were discussions with nurses, personal values and discussion with manager colleagues • almost all methods in different groups were considered very or somewhat useful • work-related background factors had several associations with the frequency and difficulty of ethical problems as well as with frequency of use and usefulness of the problems

6 Discussion

The aim of this study was to provide new knowledge of ethical problems and their solving in nurse managers' work. The study consisted of three phases. Firstly, the ethical problems NMs encounter and the use of codes of ethics were studied by cross-sectional survey. Secondly, the nature of ethical problems in MNs' work was studied by semi-structured interviews. Thirdly, a new cross-sectional survey was conducted to study ethical problems and solving methods.

In this chapter, the validity and reliability of the study will first be discussed. Then, discussion of the results will be provided in three sections – ethical problems, solving methods, and associations of background factors. Finally, conclusions and suggestions for further research and implications for practice, management and education will be provided.

6.1 Validity and reliability of the study

Validity and reliability concern the extent to which inferences can be made based on the study. Threats to validity are reasons which may cause wrong inferences. (Polit & Beck 2017.) Validity and reliability was ensured throughout the research process. However, some limitations have to be taken into account in interpreting the results.

6.1.1 Validity and reliability

Validity and reliability of the instruments

New questionnaires, both developed for the study, were used in phases I and III. The validity of a questionnaire depends on how well the instrument measures what it is supposed to measure (Gray et al. 2016, Polit & Beck 2017).

Content validity refers to the degree to which an instrument has a suitable sample of items to measure the construct and to adequately cover the construct domain (Polit & Beck 2017, Almanasreh et al. 2019). Content validity was supported in two ways: searching the literature (phases I and III) and seeking

expert opinions (phases I and III) (DeVon et al. 2007, Shilling et al. 2007); in addition, it was also supported by the results of qualitative research (phase III) (DeVon et al. 2007). The content of the instrument in phase I was based on a literature review and content and clarity was evaluated by expert analysis by 5 nurse managers with extensive experience in nursing management. Two items were added to the instrument based on expert analyses to make it more comprehensive. The items in the first instruments were quite wide in nature, containing 16 items. It was also pilot tested by 8 nurse managers (see Slattery et al. 2011).

The second instrument in phase III, the EProNuMa questionnaire, was based on a new literature review and interviews, and was also evaluated by 7 experts and pilot tested by 15 nurse managers (DeVon et al. 2007). The content of the EProNuMa was more detailed, containing 60 items. New literature in this field was published in the years between phases I and III, making the basis more diverse. Furthermore, the interviews produced exact and multiple information for the instrument. The EProNuMa can thus be seen as an advanced version of the first instrument concerning its ethical problems section. Overall, in both phases, the same categories of patient-, staff- and organization-related problems were found; these were complemented in the EProNuMa with ethical problems related to NMs themselves.

Reliability concerns the consistency and accuracy of the information obtained in a study. Internal consistency is one aspect of reliability and it is most commonly tested by Cronbach's alpha test. (Heale & Twycross 2015, Gray et al. 2016.) It is an index estimating the extent to which different subparts of the instrument are reliably measuring the critical attribute. (Gray et al. 2016, Polit & Beck 2017.) Cronbach's alpha value can range from 0.00 to 1.00, the latter meaning perfect internal consistency reliability. (Gray et al. 2016.) The alpha values of sum variables in phase I ranged from 0.71 to 0.92 (Paper I) and can be considered satisfactory (Gliem & Gliem 2003, Polit & Beck 2017). The alpha values for the sum variables in phase III were calculated and were as follows: the frequency of ethical problems (0.73–0.87), difficulty of ethical problems (0.81–0.92), frequency of use of solving methods (0.71–0.87) and usefulness of the solving methods (0.81–0.90). These alpha values can be considered satisfactory for a new instrument (Gliem & Gliem 2003, Polit & Beck 2017).

The concept of ethical problem is abstract and can be understood in different ways. The concept was briefly explained in the questionnaires to avoid misunderstanding, but the abstract nature of the concept may cause bias in the results (Phillips et al. 2016). As well, using different methods when solving ethical problems is not very concrete. However, in this study, ethical problem is understood in a wide sense, including ethical dilemmas, ethical stress and ethical uncertainty (Jameton1984). Even if there are differences between NMs in how they

understand ethical problems, the study produces a lot of information about the frequencies and difficulties of ethical problems.

The length of the questionnaire may also be a reason that weakens the reliability of the study (Gray et al. 2016). In phase III, the questionnaire was long, containing 130 items, 105 of which included two aspects (frequency and difficulty, frequency of use and usefulness). However, the questionnaires were carefully completed by the respondents, with very little missing information, for example, in phase III with frequency of ethical problems on item level (0–13%). “I don’t know” answers were used most in the section of usefulness of solving methods, which is logical when the participants have not used the methods in question. Moreover, a variety of background factors was used to identify the sample using the socio-demographic and work-related information of the respondents (Phillips et al. 2016). However, other significant background factors could have been used but were left out to keep the respondent burden acceptable (Devane et al. 2007).

Validity and reliability of the research process

The overall validity and reliability of the study may be threatened by sampling error (Polit & Beck 2017). For this study, no national registers of nurse managers existed, and use of random sampling as the only sampling method was thus not possible. The clusters of nurse managers (= healthcare organizations) were selected purposefully in phase I and randomly in phase III. Then, total sampling was used in the clusters. In phase I, the participants of the survey studies thus represented all levels of nursing management in both specialized health care and primary health care in southwest Finland. In phase III the data was national, collected all over Finland. No systematic bias can be assumed on the basis of the sampling methods (Phillips et al. 2016).

Instead, the response rates were quite low, especially in phase III. This makes representativeness of the sample doubtful, and there is a risk of bias if those who did not answer would have answered differently (Gray et al. 2016, Polit & Beck 2017). The low response rate is not exceptional among NMs. There are many national studies with quite low response rates, like Cooper et al. (2002, 16%), Redman & Fry (2003, 29%), Laukkanen et al. (2016a, 37%). Electronic survey response rates have commonly been found to be on average 20% (Hart et al. 2009). In phase I paper mail was used, and the response rate was 41%. In phase III, mainly electronic survey was used and the response rate was 20%, in spite of reminder mails sent. Still, in phase III, the real response rate may be somewhat higher. The organizations used mailing lists which might include members who were actually not available because of holidays, maternal leave or retirement. It is

also possible that the list of members in the association of academic nurse managers and experts included respondents outside the target group of the study.

However, no systematic bias (Phillips et al. 2016) is visible when examining the characteristics of the participants. Both samples correspond closely with the overall statistics of NMs in Finland as to mean age (51.2 years) and gender (female 94%) (THL 2015). The socio-demographic background factors in this study, especially in phase III, were also very similar to the study of Kantanen (2017, n = 1,028), such as gender (female over 90%), age (mean 51–52 years), experience in nursing management in years (mean 11–12 years), percentage of middle and strategic management of the sample (20%–25%) and percentage of university education (38%–40%). The sample in this study can therefore be judged as representative although the response rate was low.

There are some strengths in this study. First, different methods – qualitative and quantitative – were used in data collection, as suggested (Knafl et al. 1988). The quantitative data were collected with both electronic and paper and pencil surveys to increase the response rate and reminder letters were also sent to respondents (Phillips et al. 2016) in phase III. Secondly, the data were collected nationwide, increasing the representativeness, and the aim was to balance out the possible low response rate in surveys (Rattray & Jones 2007). However, caution needs to be placed on generalization of the results because of the low response rates.

Some limitations related to the literature review must be mentioned as well. The review consisted only of articles in English and from certain databases. However, English is the approved language of science and its use is therefore justified. CINAHL and MEDLINE have been found to be the most suitable databases covering topics in healthcare (Subirana et al. 2005). However, there may be relevant studies reported in other languages. Also, the diversity of the terms used of ethical problems in literature (Table 2) and nurse managers (Table 3) caused a risk that some terms could be missing of from the review. However, a large variety of terms were also found with an extensive manual search.

6.1.2 Trustworthiness of phase II

In phase II, semi-structured interviews were used to collect data from nurse managers. The trustworthiness of this phase was evaluated by means of credibility, dependability, confirmability and transferability (Lincoln & Cuba 1985, Polit & Beck 2017).

Credibility refers to confidence in the truthfulness of the data and its interpretations (Polit & Beck 2017). It involves two aspects. First, the study has to be carried out in a way that enhances the believability of the results. The second aspect of credibility is to take steps to demonstrate it in research reports. (Lincoln

& Cuba 1985, Polit & Beck 2017). In this study, participants were chosen so that they represented different levels of nursing management and different types of organizations and clinics; the variation in data was therefore rich, increasing the credibility (Graneheim & Lundman 2004). The necessary amount of data required to answer the research questions in a credible way differs case by case (Graneheim & Lundman 2004). In this study, the sample was nine nurse managers and the content of the interviews was rich. The main categories appeared early and were repeated in almost every interview. Quotations in the text (paper II) also increase the credibility.

Dependability is a criterion that refers to the stability of data over time and conditions (Lincoln & Cuba 1985, Polit & Beck 2017). Written information and the interview themes were given to the interviewees beforehand and they had thought about the themes, which strengthened the dependability of the study by minimizing the risk of inconsistency during data collection (Englander 2012).

Confirmability refers to objectivity, meaning that findings must reflect the participants' voice, not the researcher's perspectives (Polit & Beck 2017). In this study, confirmability is assured by providing direct quotes of the interviews and describing the stages of data analysis (Polit & Beck 2017).

Transferability refers to the extent to which findings can be transferred to other groups or settings (Polit & Beck 2017). According to Graneheim and Lundman (2004), transferability is the reader's decision although the authors can give suggestions about it. To give the reader possibility to evaluate transferability of the findings, authors should provide a clear description of the context, selection and characteristics of the participants, data collection, data analysis and findings, which are described in Paper II in this study.

6.2 Discussion of the results

This study provided new and more detailed knowledge of the frequency of encountering ethical problems in nursing management and the difficulty of the problems. In addition, new knowledge was provided about the solving methods of ethical problems and their frequency of use and usefulness. New knowledge was also provided about background factors associated with encountering ethical problems and their solving methods. Furthermore, this study strengthened earlier findings in the field concerning the areas of ethical problems encountered in NMs' work and the main methods used when solving them. The findings support NMs' decision-making in their work, and this knowledge makes it possible to improve ethics in nursing management and thereby improve the quality of patient care. In this chapter, discussion of the study findings and their connections with earlier findings is provided.

6.2.1 Encountering ethical problems in nursing management

Identifying ethical problems is a fundamental part of ethics in management. It has been seen to be a part of ethical competence (Kulju et al. 2016) and NMs' ethical activity profile (Laukkanen et al. 2016a). In ethical decision-making, identifying ethical problems is the first step (Cooper 2006, Thompson et al. 2006, Toren & Wagner 2010, Park 2012). Nurse managers are an essential part of healthcare administration and they lead the largest group of professionals – nurses. When they affect nurses' work they also affect patient care. Ethical problems in NMs' work may have a wide effect in healthcare organizations and therefore it is important to study them.

The ethical problems of nurse managers were identified by interviews in this study (Paper II). In these interviews, a wide range of ethical problems was described. Some of them were conflicts, which quite clearly had two opposing values and fulfilled the criteria of ethical dilemma. Some of them described ethical problems belonging to the categories moral distress or ethical uncertainty. Ethical problems were categorized in two different ways. First, they were grouped according to Esterhuizen (1996) to ethical problems related to patients, staff and organization. Additionally, problems related to NMs themselves were also found, a dimension which has not been reported earlier. Secondly, ethical problems were grouped in a new way based on the nature of the problems. Four categories were found: conflicts in practical situations, lack of appreciation, disregard of the problems, and experienced inadequacy (Paper II). In the next paragraphs, these categories will be discussed in more detail.

Conflicts in practical situations concerned the right way to act. Ethical problems in this category related to patients often concerned patient's rights. Patients' autonomy was also identified by Laukkanen et al. (2016a) as a source of ethical problems. Redman and Fry (2003) have discussed that being an advocate for patients' rights is very important in NM's role. The primary responsibility to patients is also mentioned in ethical codes for nurse managers (Taja 2003). The values of NMs in this study indicate that patient-centred approach is important for NMs. In conflicts in practical situations related to staff, NMs underlined justice as a weighty value in their work, and it was also the second most often mentioned value in phase III of this study. Fairness or justice was mentioned when talking about normal routines in management, such as shifts, holidays and education, which seems to indicate that NMs consider ethics as part of their daily work. Fairness was also mentioned in connection with negative behaviour of staff members, which was also found to be an ethical problem for NMs. Treating all staff members fairly was perceived as an ethical problem in the study of Lindy and Shaeffer (2010), too. Equality and fairness are mentioned as central values of NMs also in the study of Laukkanen et al. (2016a). Conflicts between NMs' own values

and organizational values are perceived in many studies (Gaudine & Beaton 2002, Laukkanen et al. 2016a, Ito & Natsume 2016), which suggests that NMs' own values are based on their nursing professional values. In this category, especially problems related to resource allocation seem to be permanent, being mentioned in many studies over several decades (Harrison & Roth 1992, Camunas 1994a, Borawski 1995, Cooper et al. 2004, Katsuhara 2005, Ito & Natsume 2016, Laukkanen et al. 2016a) and in our study as well.

Lack of appreciation was described in relation to organization's culture, staff behaviour and a sense of nursing not being valued. These issues were seen as ethical problems because they were felt to be wrong. In their study, Gaudine and Beaton (2002) named one category of ethical problems as 'voicelessness', including issues like 'nursing not valued', 'nursing not understood' and 'nurse managers not present during decision-making on issues that affect nursing'. Lack of appreciation of the nursing profession has been discussed in many other contexts. The profession has a history as an ancillary profession to medicine and physicians (Mishra 2015) and is still seen as caregiving profession for females with a limited level of autonomy (Glerean et al. 2017). Thus, the findings of this study confirm those of previous studies. Instead, lack of appreciation towards patients or some groups of patients is described in more detail than in earlier studies. Nurses maintaining a paternalistic culture in hospitals or discriminating against some groups of patients are issues that are against all ethical codes. The reasons for these problems should be found out and solved by nurse managers.

Disregard of problems was a category of ethical problems consisting of matters that are considered wrong, but there are no activities to correct them. These kinds of problems are also identified in some previous studies. Gaudine and Beaton (2002) named this problem as 'failure to act even when senior administration is aware of a problem'. This category included ethical problems related to NMs themselves. According to their descriptions, they may have problems with motivation to interfere in a situation when they are afraid of negative consequences to themselves. These kinds of ethical problems do not seem to have been previously reported. NMs may thus themselves disregard problems even if they know that the right thing to do is to act. Additionally, the same kind of ethical problem was described by nurses and physicians as 'administration turning a blind eye' (Gaudine et al. 2011). The need of support was mentioned by NMs in this study when describing problems with their motivation.

Experienced inadequacy concerned issues or situations where NMs had limited power or resources preventing them from acting in the best way. There were financial, cultural and legislative limitations. Resource allocation is mentioned above as an ethical conflict situation, but scarce resources influence patients' care and the welfare of staff as well. Related to NMs themselves, they experienced

inadequacy with limited possibilities to justify their decisions. There may be situations where confidentiality is required and not all reasons can therefore be revealed, and NMs have to tolerate it.

Altogether, NMs encounter a variety of ethical problems of different nature in their work. To get a broad picture of these problems, in this study the concept of ethical problem is understood broadly, according to Jameton's (1984) definition, including ethical uncertainty, ethical dilemmas, and ethical distress. The more narrow definition of ethical problem is criticized for limiting the picture of the ethical nature of problems (Braunack-Mayer 2001). In this study, limiting the definition would have impoverished the data, and in order to get a good overall picture of ethical problems in nursing management, all these categories of ethical problems (see Jameton 1984) were included in the study. It still is uncertain, however, how the participants understood the concept of ethical problem. To support the understanding, the concept was explained in an information letter sent to the participants in advance. Additionally, the participants of the interviews were chosen so that they were acquainted with ethical questions by writing about ethics, by belonging to ethical committees or by doing ethical-related research.

In this study, the focus has been on ethical problems in nursing management, but at least some of the problems seem to be encountered by other professionals, too. Nurses and physicians have also reported encountering ethical conflicts with organizations. The conflicts shared by both professional groups have corresponded quite closely with those reported by NMs: lack of respect and valuing, insufficient or scarce resources, organization's policies conflicting with their own values, and administration turning a blind eye in the event of a problem. (Gaudine et al. 2011.) The same ethical problems may thus be encountered by different professional groups, which is worthwhile to recognize when developing management and education.

Due to the variety of ethical problems, there is no simple solution to reduce or solve them. They seem to affect many other professional groups in healthcare, and multi-professional co-operation is therefore needed when developing ethical problem-solving in healthcare. Generalizable information is also needed to find out what kind of ethical problems are most significant. Nurse managers, as part of health care management, should have authority to take up these questions in general discussion, which would be worthwhile to the whole organization.

The frequency of encountering ethical problems was also assumed to have significance for NMs, and it was studied by surveys in the year 2007 and in 2014–1015 (Papers I and III). Differences in data collection and time between these surveys do not seem to have had any impact on the results. There were no considerable differences between the results. The most common problems were encountered at least weekly by over half of the NMs. In previous studies, the

frequency of ethical problems in nursing management has been somewhat lower. Ethical issues were encountered at least weekly by 38% of NMs according to Redman and Fry (2003) and by 47% according to Musa et al. (2011). However, all these studies show that the frequency of ethical problems in nursing management is significant, meaning that ethical problems are an essential part of NMs' work and need to be recognized and diminished in order to avoid their negative effects on the working environment (Gaudine & Beaton 2002, Thorne 2010).

In both data sets, problems related to organization were the most often encountered ethical problems. Moreover, the most often encountered organization-related problems concerned human or financial resources. This finding confirms previous survey studies. It may be significant that ethical problems related to resources have been reported for more than twenty years and are still in the current decade among the most often encountered problems (Camunas 1994a, Borawski 1995, Cooper et al. 2004, Ganz et al. 2015). It may be inevitable that there are never enough resources, especially financial ones, and prioritization must always be done. According to Höglund and Falkenström (2018), economics is prioritized over ethics, and ethics is separated from daily work. This kind of development may be harmful because ethical problems are shown to associate with adverse outcomes (Thorne 2010). It is also presented that the cost categories affected by ethical problems are not insignificant and it is therefore suggested that organizations have financial incentives to focus on ethics (Nelson et al. 2008).

The frequency of ethical problems related to staff differed most at the two time points. In the 2007 data set, they were essentially less frequently encountered than organization-related ethical problems. Instead, in the 2014–2015 data set they were encountered as often as organization-related problems. The content of ethical problems related to nursing staff was much more diverse in the later data, containing issues concerning collegiality, nurses' actions, personnel planning, rewarding and supporting nursing staff and workplace well-being – many of them concerning ordinary actions in nursing management. Most of these ethical problems were reported in interviews. The larger variety of staff-related problems may explain the difference between the results. It is also possible that some events in society between the data collection time points have had an effect on the results. For example, the sufficiency of nursing personnel in health care has been a topic of public debate. According to an analysis by the Ministry of Employment and Economy (Koponen et al. 2012), almost 40% of recruiting employers in the healthcare and social sector reported in 2011 that they had had difficulties finding appropriate employees. Accordingly, the health and social services reform was launched in 2015 (Ministry of Finance 2019), which also gave rise to public discussion.

Ethical problems related to staff do not seem to be among the most often encountered problems in earlier studies (Harrison & Roth 1992, Redman & Fry 2003, Ganz et al. 2015), but it is difficult to compare the results because of different grouping and naming of the problems. One exception can be found, i.e. the study of Musa et al. (2011), where staff management was the area, where the highest number of ethical issues was experienced. However, personnel management is one of the main areas of NMs' work and reducing and solving these problems belongs to their remit. They are responsible for creating working conditions that advance staff well-being and an ethical culture (Taja 2003). Ethical problems related to other professional groups also existed, but they were not very frequently encountered according to our results or previous studies (e.g. Borawski 1994, Redman & Fry 2003, Ganz et al. 2015).

Ethical problems related to patients were significantly more rarely encountered than those related to organization. However, in the 2007 data set there were two problems, 'Providing good care to patients' and 'Developing the quality of care', which were encountered at least weekly by more than half of the NMs. The titles of those ethical problems were at quite general level and it was therefore difficult to group some of them to patient-related, staff-related or organization-related problems. For example, the most often encountered problem in the first data set – providing good care to patients – very probably includes multiple issues, including problems related to resourcing. A more detailed way of measuring ethical problems may therefore explain that in the second data set there were no patient-related problems among the most often encountered ones. Additionally, nurse managers in middle or strategic management do not participate in clinical practice, and also ward managers' work is mostly administrative so they do not have many direct patient contacts. However, in a Malesian study by Musa et al. (2011) nurse managers were described to be involved in patient care, but also having management responsibilities. Ethical problems related to patient care were rated as most important in that study. (Musa et al. 2011.) In their study, Redman and Fry (2003) found that protecting patients' rights and human dignity was the ethical issue most frequently experienced by NMs. Nurse managers at middle or strategic level are responsible for advancing safe and high-quality patient care by developing healthcare systems (Crawford et al. 2017) and at ward level, NMs are responsible for the running of a ward (Skytt et al. 2008, Virtanen 2010), thus having more direct relationships with patients (Doherty et al. 2010, Lunden 2012). Patient care is the fundamental purpose of health care, and ethical problems at different levels of management and in different categories of problems may be connected to each other. For example, lack of financial resources may threaten the quality of patient care and the workload of nurses. Especially, resource allocation and rationing in nursing care is an ethical and economical issue that concerns not

only management, but also nurses in patient care (Scott et al. 2019). Thus, there may be some differences in how those problems are categorized.

The frequency of ethical problems related to NMs seems not to have been previously reported concerning NMs. The frequency of these problems was low. Lack of motivation and being afraid of consequences might be hard to admit, even anonymously, knowing that it is not desirable. And once again, there are differences in naming categories compared to previous studies. Laukkanen et al. (2016a) found quite a lot of ethical problems related to nurse managers themselves, but the content of that category was different from this study.

The frequency of ethical problems is worthy of serious attention and actions are needed to minimize the harmful consequences of the problems (Gaudine & Beaton 2002, Mitton et al. 2010, Prestia et al. 2017). The organization-related problems turned out to be the most frequently encountered and most difficult. Bringing the problems up for discussion is the first step. It would be worthwhile to know what kind of ethical problems are encountered, how often and by whom; the organizations can then create mechanisms to help managers with their ethical problems.

Difficulty of the ethical problems was involved in the 2014–2015 data set (Paper III). The organization-related problems were the most difficult ones, so that 7 of the 10 most difficult problems were organization-related. When taking into account that organization-related problems were measured with 10 items, the difficulty of this group is remarkable. In previous studies there are some similar findings to our results concerning the difficulty of organization-related problems. In the study of Harrison and Roth (1992) the three most problematic ethical issues belong to the category 'Resource allocation issues'. Intensity of ethical conflicts was measured in the study of Ganz et al. (2015), and the highest intensity scores were found in the administrative subscale. One possible factor influencing the difficulty of resource allocation issues may be weak competence in financial management (McCallin & Frankson 2010, Fennimore & Wolf 2011). However, strong competence in financial management does not remove ethical problems, but they may be somewhat easier to handle, which can be said about other parts of management competence, too.

Difficulty of ethical problems related to nursing staff was at the lowest level of all groups of problems, although they were very frequently encountered. One possible reason for the low difficulty may be NMs' power to act with those issues. Instead, the mean value of difficulty of ethical problems related to other professional groups was the second highest of all groups. These are problems NMs cannot solve by themselves or with nurses; other professionals are also needed, as with organization-related problems, too.

In this study, patient-related ethical problems were not among the most difficult ones. Previous findings about difficulty of these problems are very limited. Redman and Fry (2003) have reported some patient-related problems among the ten most disturbing problems. These concerned prolonging patient's dying process, not considering the quality of patient's life, and caring for patients who are uninformed (Redman & Fry 2003). Again, the wordings and meanings of the problems are very different and therefore difficult to compare. In addition, cultural, social and legislative circumstances may have some effect on experiences of difficulty of the problems. In Finland, the Act on the Status and Rights of Patients (785/1992) has been in force for more than 25 years and it may be one factor helping to deal with these problems. The Mental Health Act (1116/1990) includes guidelines concerning patients' rights as well.

Ethical problems related to NMs themselves were quite difficult. This can be easily understood if they are struggling with themselves with actions which they know to be right but have harmful consequences to themselves. When understood in our way, i.e. NMs struggling with their own conscience, it may be painful to admit that there is an attempt to ignore ethical issues. It is human, however, if there are negative consequences to the NMs themselves.

Overall, there seem to be only few studies about the difficulty of ethical problems, and different terms and different categories have been used, making comparison with earlier findings difficult. Furthermore, difficulty is quite an individual matter for which there are no exact criteria. The same problem may be experienced as difficult by one person and as easy by another.

In spite of the differences between the studies, there seem to be a lot of common features in the results of different studies about ethical problems in nursing management. The similarities concern the nature and frequency of ethical problems, difficulty having been little studied. Similar results at different times and in different cultures strengthen the idea that ethical problems are a relevant issue in NMs' work regardless of the surroundings. The differences between the studies concern the categorizing and naming of ethical problems. There are also differences between the cultures where the studies have been made and the times when they were made, and the samples and response rates differ as well. Finally, there may be differences between the numbers, educations and job descriptions of NMs between countries or even within countries. There seem to be no statistics or descriptions on NMs even in Finland, not to mention in Europe or worldwide. To advance development in healthcare systems, studying management and managers would be important, but the lack of the aforementioned information weakens the generalizability of the results.

6.2.2 Solving ethical problems in nursing management

The methods used in solving ethical problems were studied widely in 2014–2015. In the 2007 data set there were results only on the use of codes of ethics, including how often participants used them when solving each listed ethical problem (Paper I). The list of methods in the 2014–2015 survey included codes of ethics as well, but in this phase participants were asked how often each method was used, but not for which problem (Paper IV). There was a difference between the results in the frequency of use of ethical codes. In 2007, codes of ethics were used most often for problems related to providing good care to patients (always or often by 68% of respondents), but significantly less often for all organization-related ethical problems. Instead, in 2014–1015 only 25% of the respondents answered that they used professional codes of ethics for nurses always or often. Codes of ethics for nurse managers were used less often than codes for nurses; they were only used always or often by 14%. These results are not entirely comparable because of the difference in questions. Several years had passed between the two phases and the samples differed somewhat as well. It is therefore not possible to give a clear reason for the differences between the results.

Codes of ethics are criticized for being non-usable in practical situations in nursing (Esterhuizen 1996, Meulenbergs et al. 2004, Tadd et al. 2006), which may explain their low use also by NMs. According to this study, the professional codes of nurses or other professions seem to be more familiar to nurse managers than nurse managers' codes. There are no studies of the usability of the Finnish ethical codes for nurse managers, but it is probable that informing and education on them has not been sufficient. Nowhere near all NMs seem to know these codes well, because over one third of NMs in this study did not answer the question of their usability or answered 'cannot say'. Codes for nurses and other professions include norms and principles for patient care, professional relationships and professional development, but they do not contain norms for management or administrative duties. Information about ethical codes for managers should be disseminated and if necessary, the codes should be developed as well. Professional codes of ethics are part of nurse education (Numminen 2010, Dahnke 2014) and it is therefore possible that they have an influence on ethical decision-making in nursing management. Unconscious use of codes of ethics has been discovered among Finnish and international nurses (Heikkinen et al. 2006); this might be the case among NMs, too.

Discussions with nurses, relying on personal values and discussions with manager colleagues were the most frequently used methods for solving ethical problems. This finding is similar to previous studies conducted as early as in the 1990s (Camunas 1994a, Borawski 1994). Also Redman and Fry (2003) found discussion with nurses, nursing leadership or other professionals to be the most

frequently used methods. In our study, situation-specific, pre-defined instructions and organization's explicitly stated values or ethical principles were also among the ten most frequently used methods, as was the Act on the Status and Rights of Patients (785/1992). So, although codes of ethics are not much used, some written instructions and principles seem to be helpful. Still, only one third (32%) agreed somewhat or completely that their organization had well-functioning instructions for dealing with unethical situations. More instructions should be drawn up and they should be as exact and practical as possible. However, written instructions, codes of ethics or laws are not enough; internalizing the values of the organization and the profession is also needed so that they can advance them in their work.

NMs may not be able to make instructions alone when ethical problems partly concern or are caused by other professional groups; co-operation with other professions is needed. Co-operation is needed especially when ethical problems common to many professional groups are under consideration (Gaudine et al. 2011). Interprofessional collaboration and education are recommended to strengthen health systems (WHO 2010, Milton 2013). Ethics specialists having wide knowledge could give a valuable contribution to this kind of work. When developing new instructions, the findings of this study are valuable, helping to identify situations and issues where instructions are most needed.

The least frequently used methods for solving ethical problems were outside experts, especially ethics specialists and ethics committees dealing with nursing solutions. A possible reason for this may be lack (Leuter et al. 2012) of ethics specialists or committees in healthcare organizations. If so, acquiring ethics experts might ease the burden of multiple ethical problems in nursing management. In an Italian study among nurses and physicians, it was found that the use of ethics consultation increases as awareness of ethically sensitive situations increases, and decreases among those with less depth of knowledge of ethics (Leuter et al. 2018). As well, decreasing moral distress was experienced by nurses after participating in regular ethics group discussions facilitated by a nurse ethicist (Reilly & Jurcbak 2017). This may mean that a positive spiral could be achieved by increasing ethical sensitivity with education and increasing possibilities to consult ethics specialists and committees. Still, the challenge with ethics committees is how to get the ethical issues to be processed without delay. It may be problematic especially with large committees with participants from many parties with different backgrounds, as Musa et al. (2011) discussed, if the ethical problem requires a quick solution.

Ethics specialists and ethical committees could also collect data on the discussed issues. The data may be used later for solving similar cases. It could also be used when drawing up new guidelines and educating healthcare professionals. Accordingly, systematically collected data could benefit research in this area.

Besides ethics specialists and ethics committees, also ethical literature and participating in ethical training were quite rarely used, although especially ethics literature could be thought to be available to everyone. According to Laukkanen et al. (2016a), NMs recognized the ethical perspective of their own actions and identified ethical problems in their work, but the majority of NMs were not developing their own ethics knowledge. NMs' own activity is thus needed to enhance their ethical competency. If the status of ethics is low and ethics is separated from management tasks, as was discovered in the study of Höglund and Falkenström (2018), developing ethics knowledge may not be a high priority among healthcare managers. Therefore, organizations' practices and NMs' job descriptions should be developed so that ethics is part of daily duties and ethics knowledge is developed.

Connections between ethical problems and solving methods were not measured, except for the use of codes of ethics in phase I. Codes of ethics were most frequently used with patient-related problems, which is logical when talking about professional codes of ethics, because their main focus is on good care of patients. They were used least frequently with organization-related problems. In phase III it was found that discussions and deliberation were used more by NMs who encountered more patient-related problems. This result does not directly prove that discussions were used to solve ethical problems related to patients, but this would be quite logical. At least in organization-related ethical problems, discussions with nurses may not be a sufficient method, if at all useful. However, with organization-related ethical problems, which are the most frequently encountered and the most difficult, there is a need for effective methods.

NMs found almost all methods useful and no great differences were found. Over two thirds of those who answered the question found all methods except 'keeping ethics journal' very or somewhat useful. It can roughly be said that all solving methods were useful if they were known. There were methods that were never used and so the answers about usefulness were empty or 'cannot say'. Previous research about the usefulness of different methods to solve ethical problems seems to be limited. Cooper et al. (2003) and Cooper et al. (2014) reported 'own personal values and standards' to be the most helpful with ethical challenges. Useful/usefulness is also an individually experienced matter that depends on the problem, the method, and the person using the method; a person thinks that a method can be used when solving a problem. When most methods were experienced as being useful, it may mean that many kinds of methods are needed when trying to solve ethical problems. Moreover, this finding encourages the development of different methods for solving ethical problems.

6.2.3 Background factors associating with encountering ethical problems and their solving

In this study, there were two kinds of background factors – socio-demographic and work-related. Socio-demographic background factors were gathered in phases I and III, while work-related factors were only collected in phase III. Additionally, in phase III participants were asked to name the three most important values, which were not used as background factors, only to describe the participants.

In previous studies of ethical problems the background factors differ by count and content, but there are often questions about gender, age, position in management and years of practice (e.g. Redman & Fry 2003, Musa et al 2011, Ganz et al. 2015). In those studies, very few associations were identified between the above-mentioned background factors and ethical problems. Only the study among middle managers in Israel showed a difference in frequencies of ethical dilemmas and moral distress between assistant head nurses and supervisors (Ganz et al. 2015). In our study, there was probably a more diverse range of background factors than in most of the earlier studies.

In this study, many associations were found between encountering ethical problems and background factors. Some of them may appear easy to explain or interpret. For example, the fact that NMs encounter more patient-related problems in ward management than in middle or strategic management (phase III) may be explained by ward managers' work, which contains more contacts with patients. Unlike other studies (e.g. Ganz et al. 2015), in this study age was associated with the frequency of ethical problems so that younger NMs encountered more frequently ethical problems related to nursing staff (phase I). It is possible that younger NMs have problems with authority, especially with more experienced staff, but there may be other explanations, too.

Education seems to be one of the most significant background factors associating with the frequency of ethical problems and the use of solving methods. This seems to differ from most of the earlier studies among NMs, where associations were studied but were not found when encountering ethical problems (Cooper et al. 2002, Redman & Fry 2003, Ganz et al. 2015). Instead, there are some similar findings concerning solving methods in earlier studies where some methods are considered more helpful by NMs with higher education (Cooper et al. 2014). The association with higher frequency of ethical problems may mean that NMs' ethical sensibility is increased by education. A study among nurses found more perceived ethical knowledge among nurses with more education and among nurses who have participated in ethics courses (Leuter et al. 2012). Furthermore, the more frequent use of outside experts and written instructions may also be a consequence of ethics education which has increased the knowledge of different methods. In work-related background factors, respondents were also asked if they

felt they needed additional education in order to improve their ability to deal with ethical problems. This was not counted in the sum score because the question did not measure work conditions, unlike the other ones. Almost two thirds (63%) of the NMs agreed somewhat or completely that they needed additional education. Therefore, the provision of ethics education should be increased and directed to nurse managers to help them deal with ethical problems. Continuing ethics education for NMs is also recommended in other studies (Laukkanen et al. 2016a).

Work-related background factors also seem to be important, having multiple associations with encountering and solving ethical problems. The more positively NMs assessed the work-related issues, the fewer ethical problems they encountered and the easier they considered them to be. Additionally, the more positively work-related issues were assessed, the more NMs used methods for solving the ethical problems and the more useful they found them. This finding is significant and implies that the healthcare environment may be more associated with ethical problems than with personal attributes, as also discussed by Ganz et al. (2015). Poor work environment has also been found to be associated with likelihood of moral distress by Pavlish et al. (2016). It is not known which one comes first, low number of ethical problems or good atmosphere and working conditions, but there seems to be a connection between the two.

It is not obvious that low frequency of encountered ethical problems is a good thing. It may even be that the opposite is true, so that low frequency of problems means poor ability to identify problems or their ethical nature. Then again, the finding that satisfaction with work-related issues is associated with lower frequency of ethical problems may mean that the ethical competence in the organization is better and the number of ethical problems really is lower. Both explanations are probably true, more or less.

Associations between NMs' values and ethical problems and their solving methods were not measured because each NM was able to choose the three most important values from the list, so there were numerous combinations. However, patient-centred approach was the most often chosen value in this study. Acting for patients' best was also the central value in the study of Virtanen (2010) among doctor and nurse managers in middle and strategic management in specialized health care in Finland.

6.3 Suggestions for further research

In this chapter, some suggestions for further research are provided based on the findings of the study.

First, further research is still needed on ethical problems. In this study, the findings indicate that ethical problems are frequently encountered in NMs' work

and some of them are experienced to be very difficult. More research is needed to find out in what kind of situations they appear, their preconditions and their consequences. The information is needed to effectively prevent ethical problems or minimize their harmful outcomes. Especially, information is needed about the most often encountered and the most difficult ethical problems related to the organization. The difficulty of some ethical problems was perceived in this study, but further research is needed to find out the key elements of these problems and why they are perceived as difficult. It could be useful to extend these studies also to other professional groups, not only nurse managers, because the problems may be common to several professional groups and the reasons and consequences could therefore also be studied from an interprofessional perspective.

Secondly, new knowledge about the solving methods of ethical problems in nursing management was also achieved in this study. However, there is a need to study them more closely. Using observational and narrative methods, it could be studied what kind of reasoning is used by NMs and other participants in discussions and what values and ethical principles are used to justify actions. Moreover, the most often used methods – discussions – also need to be studied from the viewpoint of other parties taking part in the discussions. Additionally, more information is needed about the availability of different methods and obstacles to their use, because this study found that many solving methods were used by less than one fifth of the NMs, but were considered useful by a clearly larger proportion. NMs' own viewpoints are important, but to develop NMs' ability to be role models and support their staff it would be important to know nurses' perceptions of NMs' use of different methods in ethical problem-solving as well.

Thirdly, additional knowledge is needed about the combinations of ethical problems and solution methods, such as what kinds of methods are used with what kinds of problems. This information may help to develop and direct solving methods so that they are better available where needed.

Fourthly, associations between ethical problems and working conditions need to be studied as well to explore which comes first. In this study it was found that some work-related factors associated with the frequency and difficulty of ethical problems and with the use and usefulness of the solving methods, but causal relationships were not studied. Moreover, there was a limited number of work-related factors in this study. There may be other work-related factors associated with ethical problems and their solving as well. Further research is needed to explore more exactly what kind of factors in working conditions correlate with ethical problems and the reasons for causal relations. This will help find out whether it is possible to decrease the frequency and difficulty of ethical problems and promote their solving by developing working conditions.

Altogether, reaching more exact and wide knowledge about ethical problems and their solving methods will help develop nursing management, and thereby, high-quality patient care can be advanced.

6.4 Practical implications

The development of value-based practice and management in healthcare organizations is necessary. Recognizing ethical problems and making them visible is needed before they can be reduced or solved. According to WHO (2010), inter-professional collaboration is needed to maximize the strengths and skills of health workers. As one part of inter-professional collaboration, it is necessary to develop policies and practices to recognize and solve ethical problems. Organization-related ethical problems were found to be the most often encountered and most difficult in NMs' work and they seem to be shared by different professions (see Gaudine et al. 2011) and need to be discussed within healthcare organizations. New ways to identify and solve these problems are urgently needed. A trend where ethics is separated from management duties (see Höglund & Falkenström 2018) must be avoided by making ethical consideration a routine in administrative decision-making. Prioritization is one of the most important ethical issues in healthcare management and it should be discussed and agreed with all stakeholders, including patients and politicians, to achieve the best possible consensus on which actions can be based.

Multiple resources need to be available when trying to solve ethical problems. The possibility to consult ethical committees or experts in different problems would be helpful for problem-solving, but also for increasing NM's own ethical competence. However, outside experts seem not to be used by most NMs for some reason. Arranging possibilities for using ethical experts and informing NMs and other professionals about their existence could be helpful in developing processes for solving ethical problems. If data on ethical problems and their solving are gathered systematically, it may later benefit others in the same situation as well as researchers, and this gathering of data could be done by ethics specialists.

Organization- or unit-level ethical guidelines and situation-specific instructions were found to be quite often used methods when solving ethical problems. Therefore, developing these kinds of instructions would probably be helpful. In the event of repeated situations, instructions could ensure fairness so that patients or staff members are treated equally. The codes of ethics of nurse managers need to be developed and NMs' awareness of them to be enhanced so that NMs have ethical guidelines designated specifically to their work. Furthermore, to advance interprofessional collaboration also in ethical decision-making, ethical guidelines could also be drawn up for management including all professional groups.

Education specifically concerning ethical issues in nursing management is important in the rapidly changing healthcare environment. In nursing management it needs to be recognized that NMs are responsible not only for their own ethical problems but also for supporting nursing staff with their ethical problems. Opportunities for ethical competence building are needed. Ethics education concerning ethical problems and ethical decision-making could increase NMs' ability to recognize problems and reflect their decisions. Additionally, education concerning ethical codes, ethical principles and ethics literature usable in ethical problems could increase the diversity of the methods used in ethical decision-making. The findings of this study can be used for planning ethical education for nurse managers.

Nurse managers in strategic level could promote discussion at the highest level of management in healthcare organizations about ethical problems related to organization. Additionally, NMs in strategic and middle levels of management could act to strengthen resources for ethical problems not only for themselves, but also for NMs in ward management. NMs could also arrange continuing training on ethics in their organizations.

7 Conclusions

This study provided new and detailed knowledge about the nature, frequency and difficulty of ethical problems in nursing management. It also strengthened earlier findings of ethical problems appearing frequently in nursing management. Ethical problems related to organization were perceived to be the most frequently encountered and most difficult ethical problems in NMs' work. Ethical problems related to NMs themselves were a new dimension found in this study. Overall, the findings of this study suggest that it is important to highlight these issues in healthcare organizations, especially ethical problems related to organizations. Interprofessional discussion may be advantageous for recognizing ethical problems and finding methods to prevent or solve them. Nurse managers can encourage and promote this discussion among their own profession and inter-professionally.

This study also provided new knowledge about the frequency of use and usefulness of different methods used in solving ethical problems. The methods were grouped into five subcategories: 1) discussions and deliberation, 2) outside experts, 3) written instructions and ethical principles, 4) acts and degrees, and 5) work arrangements. The results also strengthen earlier findings about the most often used methods in solving ethical problems, which were discussions and deliberation, including personal values. The least often used method were outside experts, but almost all of the 40 methods were considered useful. Based on these findings, it can be suggested that various methods should be available when trying to solve ethical problems. Nurse managers may advance creating and using different kinds of methods in their organizations.

The findings also indicate that there is a need to pay attention to working conditions, because there seem to be associations between NMs' satisfaction with their work and lower frequency and difficulty of ethical problems. If there is dissatisfaction with working conditions, it could be useful to find out the reasons for it and possible associations with ethical problems. Furthermore, the findings of this study support the importance of continuing ethical education for nurse managers.

Investing in recognizing, reducing and solving ethical problems in nursing management may decrease the several negative consequences of ethical problems

found in earlier studies, thereby improving the functioning of the organizations and the quality of patient care. There is still need for further studies of these connections, the reasons and consequences of ethical problems, and the use of solving methods to clarify the associations between different influencing factors.

To summarize, the aim of this study was to provide new knowledge about ethical problems and their solving in nursing management, and this aim was achieved. Even if there is a need for further research, plenty of knowledge now exists about ethical problems and their solving methods, and nurse managers can act in many ways to advance the recognition and solving of ethical problems within healthcare organizations. They can develop ethics in their own work, in inter-professional collaboration, and in management education.

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References

ACHE – American College of Healthcare Executives. 2011. Code of Ethics of the American College of Healthcare Executives. Available at: https://www.ache.org/abt_ache/code.cfm Accessed October 2016.

Act on the Status and Rights on Patients (785/1992). Laki potilaan asemasta ja oikeuksista. Available at: https://www.finlex.fi/fi/laki/ajantasa/1992/19920785. Accessed November 2018.

Albert T & Wager E. 2003. How to handle authorship disputes: a guide for new researches. The COPE report 2003. Available at: https://publicationethics.org/resources/guidelines-new/how-handle-authorship-disputesa-guide-new-researchers Accessed February 2019.

ALLEA 2017. The European Code of Conduct for Research Integrity. Available at: https://ec.europa.eu/research/participants/data/ref/h2020/other/hi/h2020-ethics_code-of-conduct_en.pdf. Accessed November 2018.

Almanasreh E, Moles R & Chen T. 2019. Evaluation of methods used for estimating content validity. Research in Social and Administrative Pharmacy 15, 214–221.

AONE – American Organization of Nurse Executives. 2015. Nurse Executive Competencies. Available at: https://www.aonl.org/nurse-executive-competencies Accessed September 2019.

AONE – American Organization of Nurse Executives. 2019. AONE Position Statement on the Educational Preparation of Nurse Leaders. Available at: https://www.aonl.org/educational-preparation-nurse-leaders Accessed December 2019.

Arnold L, Drenkard K, Ela S, Goedken J, Hamilton C, Harris C, Holecek N & White M. 2006. Strategic Positioning For Nursing Excellence in Health Systems: Insights From Chief Nursing Executives. Nursing Administration Quarterly 30(1), 11–20.

Barkhordari-Sharifabad M, Ashktorab T & Atashzadeh-Shoorideh F. 2018a. Ethical leadership outcomes in nursing: A qualitative study. Nursing ethics 25(8), 1051–1063.

Barkhordari-Sharifabad M, Ashktorab T & Atashzadeh-Shoorideh F. 2018b. Ethical competency of nurse leaders: A qualitative study. Nursing Ethics 25(1), 20–36.

Barkhordari-Sharifabad M, Ashktorab T & Atashzadeh-Shoorideh F. 2017. Obstacles and problems of ethical leadership from the perspective of nursing leaders: a qualitative content analysis. Journal of Medical Ethics and History of Medicine 10(1), 1

Beauchamp TL & Childress JF. 2013. Principles of biomedical ethics, 7th edition. Oxford University Press, New York.

Bjerregård-Madsen J, Kaila A, Vehviläinen-Julkunen K & Miettinen M. 2016. Time allocation and temporal focus in nursing management: an integrative review. Journal of Nursing Management 24(8), 983–993.

Borawski DB. 1994. Resources Used by Nurse Administrators in Ethical Decision-Making. JONA 24(3), 17–22.

Borawski DB. 1995. Ethical dilemmas for nurse administrators. JONA 25 (7/8), 60–62.

Bradshaw A. 2010. Is the ward sister role still relevant to the quality of patient care? A critical examination of the ward sister role past and present. Journal of Clinical Nursing 19(23–24), 3555–3563.

Braunack-Mayer AJ. 2001. What makes a problem an ethical problem? An empirical perspective on the nature of ethical problems in general practice. Journal of Medical Ethics 27(2), 98–103.

Camunas C. 1994a. Ethical dilemmas of nurse executives. Part 1. Journal of Nursing Administration 24 (7/8), 45–51.

Camunas C. 1994b. Ethical dilemmas of nurse executives. Part 2. Journal of Nursing Administration 24 (9), 19–23.

Camunas C. 1994c. Codes of Ethics as Resources for Nurse Executives in Ethical Decision making. Journal of the New York State Nurses Association 25(4), 4–7.

Collins English Dictionary. Available at: https://www.collinsdictionary.com/dictionary/english Accessed October 2019.

Cooper R, Frank G & Shogren C. 2014. Considerations in Dealing with Ethical Conflict Encountered in Healthcare Reform: Perceptions of Nurse Leaders. Open Journal of Nursing 4, 695–704.

Cooper RW, Frank GL, Gouty CA & Hansen MC. 2002. Key Ethical Issues Encountered in Healthcare Organizations: Perceptions of Nurse Executives. Journal of Nursing Administration 32(6), 331–337.

Cooper RW, Frank GL, Gouty CA & Hansen MM. 2003. Ethical Helps and Challenges Faced by Nurse Leaders in the Healthcare Industry. Journal of Nursing Administration 33(1), 17–23.

Cooper RW, Frank GL, Hansen MM & Gouty CA. 2004. Key Ethical Issues Encountered in Healthcare Organizations: Perceptions of Staff Nurses and Nurse Leaders. Journal of Nursing Administration 34(3), 149–156.

Cooper TL. 2006. The Responsible Administrator. An Approach to Ethics for the Administrative Role. Jossey-Bass. San Francisco.

COPE. 2019. Committee of Publication Ethics. Available at: https://publicationethics.org/ Accessed November 2019.

Crawford CL, Omery A, Spicer J. 2017. An Integrative Review of 21st-Century Roles, Responsibilities, Characteristics, and Competencies of Chief Nurse Executives. A Blueprint for the Next Generation. Nursing Administration Quarterly 41(4), 297–309.

Currie G. 2006. Reluctant but resourceful middle managers: the case of nurses in the NHS. Journal of Nursing Management 14(1), 5–12.

Daft RL. 2008. New Era of Management. (International Student Edition) Mason Thomson/South Western.

Dahnke MD 2014. Utilizing codes of ethics in health professions education. Advances in Health Sciences Education 19(4), 611–623.

Devane D, Begley CM & Clarke M. 2004. How many do I need? Basic principles of sample size estimation. Journal of Advanced Nursing 47(3), 297–302.

DeVellis RF. 2017 Scale development: Theory and applications. SAGE Publications Inc. Thousand Oaks, United States.

DeVon HA, Block ME, Moyle-Wright P, Ernst DM, Hayden SJ, Lazzara DJ, Savoy SM & Kostas-Polston E. 2007. A Psychometric Toolbox for Testing Validity and Reliability. Journal of Nursing Scholarship 39(2), 155–164.

Doherty C, Gatenby M & Hales C. 2010. Role of ward sisters and charge nurses. Nursing Standard 24(51), 35–40.

Edgar A. 2004. How effective are codes of nursing ethics? In: Tadd W (ed.) Ethical and professional issues in nursing: perspectives from Europe. Basingstoke: PalgraveMacMillan, UK, 155–174.

Eneh VO, Vehviläinen-Julkunen K & Kvist T. 2012. Nursing leadership practices as perceived by Finnish nursing staff: high ethics, less feedback and rewards. Journal of Nursing Management 20(2), 159–169.

ENDA – European Nurse Directors Association. 2011. The European Nurse Directors' Proto-Code of Ethics and Conduct. Available at: http://www.enda-europe.com/files/enda-europe/docs-insite/ENDAprotocodefinal.pdf. Accessed October 2016.

Englander M. 2012. The interview: data collection in descriptive phenomenological human scientific research. Journal of Phenomenological Psychology 43(1), 13–35.

Esterhuizen P. 1996. Is the professional code still the cornerstone of clinical nursing practice? Journal of Advanced Nursing 23(1), 25–31.

ETENE – National Advisory Board on Social Welfare and Health Care Ethics. 2001. Shared values in health care, common goals and principles. ETENE publications. Available at: https://etene.fi/documents/1429646/1571616/Publication+3+Shared+values+in+Health+Care%2C+Common+Goals+and+Principles%2C+2001.pdf/10bdd2be-c322-48c2-a143-4e11ebc9235f/Publication+3+Shared+values+in+Health+Care%2C+Common+Goals+and+Principles%2C+2001.pdf.pdf Accessed August 2018.

ETENE National Advisory Board on Social Welfare and Health Care Ethics. 2012. Ethical grounds for the social and health care field. ETENE publications Available at: http://etene.fi/documents/1429646/1571616/Publication+34+Ethical+grounds+for+the+social+and+health+care+field%2C+2012.pdf/a3f0ab6b-8e42-4045-865f-466f0dae3d8e Accessed January 2018.

Fennimore L & Wolf G. 2011. Nurse Manager Leadership Development. The Journal of Nursing Administration 41(5), 204–210.

Finnish Government 2018. Regional government, health and social services reform. Available at: https://alueuudistus.fi/en/general-information-reform. Accessed August 2018.

Finnish Government 2019. Programme of Prime Minister Sanna Marin’s Government Available at: https://valtioneuvosto.fi/en/rinne/government-programme. Accessed December 2019.

Finnish Medical Association 2016. Code of Medical Ethics. Available at: https://www.laakariliitto.fi/en/ethics/ Accessed August 2018.

Finnish Nurses Association. 2014. Sairaanhoitajien eettiset ohjeet. (Ethics guidelines for nursing) Available at: https://sairaanhoitajat.fi/jasenpalvelut/ammatillinen-kehittyminen/sairaanhoitajan-eettiset-ohjeet/ Accessed August 2018. (Finnish)

Gallagher A & Tsudin V. 2010. Educating for ethical leadership. Nurse Education Today 30(3), 224–227.

Gantz NR, Sherman R, Jasper M, Choo CG, Herrin-Griffith D & Harris K. 2012. Global nurse leader perspectives on health system and workforce challenges. Journal of Nursing management 20(4), 433–443.

Ganz FD, Wagner N & Toren O. 2015. Nurse middle manager ethical dilemmas and moral distress. Nursing Ethics 22(1), 43–51.

Gaudine AP & Beaton MR. 2002. Employed to Go Against One’s Values: Nurse Managers’ Accounts of Ethical Conflict With Their Organizations. Canadian Journal of Nursing Research 34(2), 17–34.

Gaudine AP, LeFort SM, Lamb M & Thorne L. 2011. Ethical conflicts with hospitals: The perspective of nurses and physicians. Nursing Ethics 18(6), 756–766.

Glerean N, Hupli M, Talman K & Haavisto E. 2017. Young peoples’ perceptions of the nursing profession: An integrative review. Nurse Education Today 57, 95–102.

Gliem JA & Gliem RR. 2003. Calculating, Interpreting, and Reporting Cronbach’s Alpha Reliability Coefficient for Likert-Type Scales. Presented at the Midwest Research-to-Practice Conference in Adult, Continuing, and Community Education, The Ohio State University, Columbus, OH, October 8–10. Available at: https://scholarworks.iupui.edu/bitstream/handle/1805/344/Gliem%20&%20Gliem.pdf? Accessed October 2019.

Graneheim UH & Lundman B. 2004. Qualitative content analysis in nursing research: concepts, procedures and measures to achieve trustworthiness. Nurse Education Today 24(2), 105–112.

Gray JR, Grove SK & Sutherland S. 2016. Burns & Grove's The Practice of Nursing Research: Appraisal, Synthesis, and Generation of Evidence. 8th Revised edition. Elsevier, China.

Gunawan J & Aungsuroch Y. 2017. Managerial competence of first-line managers: A concept analysis. International Journal of Nursing Practice 23(1), doi: 10.1111/ijn.12502.

Hall RT 2000. An introduction to healthcare organizational ethics. Oxford University Press, UK.
Harrison JK & Roth PA. 1992. Ethical Dilemmas Faced by Directors of Nursing. The Journal of Long-Term Care Administration 20(2), 13–16.
Hart AM, Brennan CW, Sym D & Larson E 2009. The Impact of Personalized Prenotification on Response Rates to an Electronic Survey. Western Journal of Nursing Research 31(1), 17–23.
Heale R & Twycross A. 2015. Validity and reliability in quantitative studies. Evidence Based Nursing 18(3), 66–67.
Health care act 1326/2010. Available at: https://www.finlex.fi/en/laki/kaannokset/2010/en20101326.pdf. Accessed January 2018
Heikkinen A, Lemonidou C, Petsios K, Sala R, Barazzetti G, Radaelli S & Leino-Kilpi H. 2006. Ethical codes in nursing practice: the viewpoint of Finnish, Greek and Italian nurses. Journal of Advanced Nursing 55(3), 310–319.
Hendel T & Steinman M. 2002. Israeli Nurse Managers' Organizational Values in Today's Health Care Management. Nursing Ethics 9(6), 651–662.
Hewison A. 2006. Middle management and nursing. Journal of Nursing management 14(1), 1–4.
Hsieh H-F & Shannon SE. 2005. Three Approaches to Qualitative Content Analysis. Qualitative Health Research 15(9), 1277–1288.
Huhtala, M. 2013. Virtues that Work. Ethical Organisational Culture as a Context for Occupational Well-being and Personal Work Goals. Doctoral Dissertation. University of Jyväskylä. Jyväskylä studies in education, psychology and social research 479.
Höglund AT & Falkenström E. 2018. The status of ethics in Swedish health care management: a qualitative study. BMC Health Services Research 18(1), doi: 10.1186/s12913-018-3436-8.
Ikola-Norrbacka R. 2010. Johtamisen eettisyys terveydenhuollossa – esimiestyön ja hallinnon eettiset arvot julkisen terveydenhuollon kahdessa professiossa (Ethical management in healthcare organizations: Ethical values of administration and management in two professions of public health care) Akateeminen väitöskirja. Acta Wasaensia 222. Vaasan yliopisto, Vaasa. (Finnish)
Ito C & Natsume M. 2016. Ethical dilemmas facing chief nurses in Japan: A Pilot study. Nursing Ethics 23(4), 423–441.
Jameton A. 1984. Nursing practice: the ethical issues. Englewood Cliffs, NJ: Prentice-Hall, 1984.
Janssens R, Van Zadelhoff E, Van Loo G, Widdershoven G & Molewijk B. 2015. Evaluation and perceived results of moral case deliberation. A mixed methods study. Nursing Ethics 22(8), 870–880.
Jasper M & Crossan F. 2012. What is strategic management? Journal of Nursing Management 20(7), 838–846.
Kane-Urrabazo C. 2006. Management's role in shaping organizational culture. Journal of Nursing Management 14(3), 188–194.
Kangasniemi M, Vaismoradi M, Jasper M & Turunen H. 2013. Ethical issues in patient safety: Implications for nursing management. Nursing Ethics 20(8), 904–916.
Kantanen K. 2017. Kuntasektorilla toimivien hoitotyön johtajien johtamisosaaminen ja sen muutos. (Municipal sector nursing managers' management and leadership competence and the changes in it). Doctoral dissertation. Acta universitatis Tamperensis 2254. University of Tampere, Tampere. (Finnish)
Kantek F & Kaya A. 2017. Professional Values, Job Satisfaction, and Intent to Leave Among Nurse Managers. The Journal of Nursing Research 25(4), 319–325.
Katsuhara Y. 2005. What moral requirements cause ethical dilemmas among nurse executives? Japan Journal of Nursing Science 2(1), 57–65.
Knafl KA, Pettengill MM, Bevis ME & Kirchhoff KT. 1988. Blending qualitative and quantitative approaches to instrument development and data collection. Journal of Professional Nursing 4 (1), 30–37.
Koponen EL, Laiho U-M & Tuomaala M. 2012. Mistä tekijät sosiaali- ja terveysalalle – työvoimatarpeen ja -tarjonnan kehitys vuoteen 2025. Ministry of Employment and the Economy.

TEM-analyyseja 43/2012. Available at: https://tem.fi/analyysit-vuosi-2012 Accessed September 2019. (Finnish)

Kulju K, Stolt M, Suhonen R & Leino-Kilpi H. 2016. Ethical competence: A concept analysis. Nursing Ethics 23(4), 401–412.

Kälvemark Sporrong S, Arnetz B, Hansson MG, Westerholm P & Höglund AT. 2007. Developing Ethical Competence in Health Care Organizations. Nursing Ethics 14(6), 825–837.

Laki lääketieteellisestä tutkimuksesta annetun lain muuttamisesta 295/2004. Available at: https://www.finlex.fi/fi/laki/alkup/2004/20040295 Accessed November 2018. (Finnish)

Lammintakanen J, Rissanen S, Peronmaa-Hanska E, Joensuu M & Ruottu T. 2016. Johtaminen ja kehittäminen sosiaali- ja terveydenhuollossa. Monialaisen ja ammattiryhmäkohtaisen toiminnan käytännöt ja rakenteet. Sosiaali- ja terveysministerion raportteja ja muistioita 2016:68. Helsinki. (Finnish)

Laukkanen L, Leino-Kilpi H & Suhonen R. 2016a. Ethical activity profile of nurse managers. Journal of Nursing Management 24(4), 483–491.

Laukkanen L, Suhonen R. & Leino-Kilpi H. 2016b. Solving work-related ethical problems: The activities of nurse managers. Nursing Ethics 23(8), 835–850.

Leino-Kilpi H & Välimäki M. 2014. Etiikka hoitotyössä. WSOY Oppimateriaalit Oy. Helsinki.

Leuter C, La Cerra C, Calisse S, Dosa D, Petrucci C & Lancia L. 2018. Ethical difficulties in healthcare: A comparison between physicians and nurses. Nursing Ethics 25(8), 1064–1074.

Leuter C, Petruzzi C, Mattei A, Tabassi G & Lancia L. 2012. Ethical difficulties in nursing, educational needs and attitudes about using ethics resources. Nursing Ethics 20(3), 348–358.

Lincoln Y & Cuba Y. 1985. Naturalistic inquiry. Sage Publications Inc, California, USA.

Lindy C & Schaefer F. 2010. Negative workplace behaviours: an ethical dilemma for nurse managers. Journal of Nursing Management 18(3), 285–292.

Lofti Z, Atashzadeh-Shoorideh F, Mohtashami J & Nasiri M. 2018. Relationship between ethical leadership and organizational commitment of nurses with perception of patient safety culture. Journal of Nursing Management 26(6), 726–734.

Lunden A. 2012. Osastonhoitajien työtehtävien jakautuminen – Mitä osastonhoitajat tekevät? Pro gradu-tutkielma. Tampereen yliopisto, Tampere. (Finnish)

Makaroff KS, Storch J, Pauly B & Newton L. 2014. Searching for ethical leadership in nursing. Nursing Ethics 21(6), 642–658.

McCallin AM & Frankson C. 2010. The role of the charge nurse manager: a descriptive exploratory study. Journal of Nursing Management 18(3), 319–325.

McCarthy C & Fitzpatrick JJ. 2009. Development of a Competency Framework for Nurse Managers in Ireland. The Journal of Continuing Education in Nursing 40(8), 346–350.

Medical Research Act 488/1999. (Laki lääketieteellisestä tutkimuksesta) Available at: https://www.finlex.fi/fi/laki/kaannokset/1999/en19990488.pdf Accessed November 2018.

Mental Health Act 1116/1990. (Mielenterveyslaki) Available at: https://www.finlex.fi/fi/laki/kaannokset/1990/en19901116_20101338.pdf Accessed November 2018.

Menzel DC. 2007. Ethics Management for Public Administrators. Building Organizations of Integrity. M.E. Sharpe. New York.

Meulenbergs T, Verpeet E, Schotsmans P & Gastmans C. 2004. Professional codes in a chancing nursing context: literature review. Journal of Advanced Nursing 46(3), 331–336.

Milton CL. 2013. Ethical Issues Surrounding Interprofessional Collaboration. Nursing Science Quarterly 26(4), 316–318.

Ministry of Finance. 2019. Maakunta- ja sote-uudistuksen loppuraportti. Kokemuksia valmistelutyöstä, oppeja sekä johtopäätöksiä. (Final report of the regional government, health and social services reform. Experiences of the preparatory work, lessons and conclusions) Valtiovarainministeriön julkaisuja 2019:40. Available at: http://julkaisut.valtioneuvosto.fi/handle/10024/161656 Accessed September 2019. (Finnish)

Mishra S. 2015. Respect for nursing professional: Silence must be heard. Indian Heart Journal 67(5), 413–415.
Mitton C, Peacock S, Storch J, Smith N & Cornelissen E. 2010. Moral Distress among Healthcare Managers: Conditions, Consequences and Potential Responses. Health Care Policy 6(2), 99–112.
Mitton C, Peacock S, Storch J, Smith N & Cornelissen E. 2011. Moral Distress Among Health System Managers: Exploratory Research in Two British Colombia Health Authorities. Health Care Analysis 19 (2), 107–121.
MOT Oxford Dictionary of English. Available at: https://mot-kielikone-fi.ezproxy.utu.fi/ mot/turkuyo/netmot.exe Accessed January 2018..
Musa M, Harun-Or-Rashid M & Sakamoto J. 2011. Nurse managers' experience with ethical issues in six government hospitals in Malaysia: A cross-sectional study. BMC Medical Ethics 12(23), doi: 10.1186/1472-6939-12-23.
Narinen A. 2000. Terveydenhuollon osastonhoitajan työn sisältö nyt ja tulevaisuudessa. Akateeminen väitöskirja. Väitöskirjat 1:2000. Helsingin yliopisto, Helsinki. (Finnish)
Nasae T, Chaowalit A, Suttharangsee W & Ray MA. 2008. Ethical dilemmas and ethical decision making in nursing administration experienced by Head Nurses from regional hospitals in southern Thailand. Songklanagarind Medical Journal 26(5), 469–479.
Nelson WA, Weeks WB & Campfield JM. 2008. The Organizational Costs of Ethical Conflicts. Journal of Healthcare Management 53(1), 41–52.
NHS. 2002. Code of Conduct for NHS Managers. National Health Service, United Kingdom. Available at: http://www.dh.gov.uk/prod_consum_dh/groups/dh_digitalassets/@dh/@en/ documents/ digitalasset/dh_4085904.pdf Accessed December 2018.
Northouse PG. 2016. Leadership. Theory & Practice. Seventh edition. Bell & Bain Ltd, Glasgow.
Numminen O. 2010. Nursing ethics education in Finland from the perspective of codes of ethics. Doctoral Dissertation. University of Turku, Turku.
OECD 2019. OECD Stat. Health Care Resources. Available at: https://stats.oecd.org/ Index.aspx?DataSetCode=HEALTH_REAC Accessed December 2019.
Park E-J. 2012. An integrated ethical decision-making model for nurses. Nursing Ethics 19(1), 139–159.
Patrick A & Laschinger HKS. 2006. The effect of structural empowerment and perceived organizational support on middle level nurse managers' role satisfaction. Journal of Nursing Management 14(1), 13–22.
Pattison S. 2001. Are Nursing Codes of Practice Ethical? Nursing Ethics 8(1), 5–18.
Pavlish C, Brown-Saltzman K, So L & Wong J. 2016. SUPPORT: An Evidence Based Model for leaders addressing Moral Distress. Journal of Nursing Administration 46(6), 313–320.
Pegram AM, Grainger M, Sigsworth J & While AE. 2014. Strengthening the role of ward manager: a review of the literature. Journal of Nursing Management 22(6), 685–696.
Phillips AW, Reddy S & Durning SJ. 2016. Improving response rates and evaluating nonresponse bias in surveys: AMEE Guide No. 102. Medical Teacher, 38(3), 217–228.
Poikkeus T, Numminen O, Suhonen R & Leino-Kilpi H. 2014. A mixed-method systematic review: support for ethical competence of nurses. Journal of Advanced Nursing 70(2), 256–271.
Poikkeus T, Suhonen R, Katajisto J & Leino-Kilpi H. 2018. Organisational and individual support for nurses' ethical competence: A cross-sectional survey. Nursing Ethics 25(3), 376–392.
Poikkeus T. 2019. Support for nurses' ethical competence – organizational and individual support by nurse leaders. Doctoral dissertation. Annales Universitatis Turkuensis D1408. University of Turku, Turku.
Polit DF & Beck CT. 2017. Nursing Research: Generating and Assessing Evidence for Nursing Practice. 10th Edition, Wolters Kluwer Health, Philadelphia.
Porter RB. 2010. Nurse managers' moral distress in the context of the hospital ethical climate. Doctoral dissertation. University of Iowa. Available at: http://ir.uiowa.edu/etd/2758 Accessed May 2017.

Prestia AS, Sherman RO & Demezier C. 2017. Chief Nursing Officers' Experiences With Moral Distress. Journal of Nursing Administration 47(2), 101–107.
Rattray J & Jones MC. 2007. Essential elements of questionnaire design and development. Journal of Clinical Nursing 16, 234–243.
Redman BA & Fry ST. 2003. Ethics and Human Rights Issues Experienced by Nurses in Leadership Roles. Nursing Leadership Forum 7(4), 150–156.
Reilly KM & Jurcbak M. 2017. Developing Professional Practice and Ethics Engagement. A Leadership Model. Nursing Administration Quarterly 41(4), 376–383.
Salminen A. 2010. Julkisen johtamisen etiikka. (Ethics in public management) Vaasan yliopiston julkaisua. Opetusjulkaisuja 60. Julkisjohtaminen 3. Vaasan yliopisto. (Finnish)
Schilling LS, Dixon JK, Knafl KA, Grey M, Ives B & Lynn MR. 2007. Determining content validity of a self-report instrument for adolescents using a heterogeneous expert panel. Nursing Research 56(5), 361–366.
Scott AP, Harvey C, Felzman H, Suhonen R, Habermann M, Halvorsen K, Toffoli L & Papastavrou E. 2019. Resource allocation and rationing in nursing care: A discussion paper. Nursing ethics 26(5), 1528–1539.
Shirey MR. 2005. Ethical Climate in Nursing Practice, the leader's role. JONA's Healthcare Law, Ethics and Regulation 17(4), 28–32.
Shirey MR, Ebrigth PR & McDaniel AM. 2008. Sleepless in America. Nurse managers cope with stress and complexity. The Journal of Nursing Administration 38(3), 125–131.
SHKS. 2005. Hoidokki Thesaurus in Nursing. Finnish Foundation of Nursing Education. Available at: http://www.hoidokki.fi/index.php?MITform=sanat_aihe&t=5&aiheno=7 Accessed April 2019.
Sietsema MR & Spradley BW. 1987. Ethics and Administrative Decision Making. Journal of Nursing Administration 17(4), 28–32.
Silén M, Ramklint M, Hansson MG & Haglund K. 2016. Ethics rounds: An appreciated form of ethics support. Nursing Ethics 23(2), 203–213.
Skytt B, Ljunggren B, Sjödén P-O & Carlsson M. 2008. The roles of the first-line nurse manager: perceptions from four perspectives. Journal of Nursing Management 16(8), 1012–1020.
Slattery A, Voelker CCJ, Nussenbaum B, Rich JT, Paniello RC & Neely JG. 2011. Practical Guide to Surveys and Questionnaires, Otolaryngology–Head and Neck Surgery 144(6), 831–837.
Sorlie V, Kihlgren AL & Kihlgren M. 2005. Meeting ethical challenges in acute nursing care as narrated by registered nurses. Nursing Ethics 12(2), 133–142.
Spencer EM, Mills AE, Rorty MV & Werhane PH. 2000. Organization Ethics in Health Care. Oxford University Press. New York.
STM. 2009. Johtamisella vaikuttavuutta ja vetovoimaa hoitotyöhön. Toimintaohjelma 2009 – 2011 (Increasing the effectiveness and attraction of nursing care by means of management. An action plan for the years 2009–2011.) Ministry of Social Affairs and Health. Available at: https://julkaisut.valtioneuvosto.fi/bitstream/handle/10024/74335/URN:NBN:fi-fe201504226780.pdf?sequence=1 Accessed January 2018. (Finnish)
STM. 2012. Sosiaali- ja terveydenhuollon kansallinen kehittämisohjelma (Kaste) 2012–2015. (National Development Programme for Social Welfare and Health Care (Kaste programme) Ministry of Social Affairs and Health Available at: https://www.julkari.fi/bitstream/handle/10024/112147/URN%3aNBN%3afi-fe201504224670.pdf?sequence=1. Accessed January 2018. (Finnish)
Storch J, Makaroff KS, Pauly B & Newton L. 2013. Take me to my leader: The importance of ethical leadership among formal nurse leaders. Nursing Ethics 20(2), 150–157.
Subirana M, Solá I, Garcia JM, Gich I & Urrútia G. 2005. A nursing qualitative systematic review required Medline and CINAHL for study identification. Journal of Clinical Epidemiology, 58(1), 20–25.

Surakka T. 2008. The nurse manager's work in the hospital environment during the 1990s and 2000s: responsibility, accountability and expertise in nursing leadership. Journal of Nursing management 16(5), 525–534.

Tadd W, Clarke A, Lloyd L, Leino-Kilpi H, Strandell C, Lemonidou C, Petsios K, Sala R, Barazzetti G, Radaelli S, Zalewski Z, Bialecka A, van der Arend A & Heymans R. 2006. The value of Nurses' codes: European nurses views. Nursing Ethics 13(4), 376–393.

Taja – Terveystieteiden akateemiset johtajat ja asiantuntijat ry. 2003. Hoitotyön johtajan, ylihoitajan eettiset ohjeet. (Code of ethics for nurse managers.) Ylihoitajalehti 31(2), 15. (Finnish)

Tehy. 2019. Esimiehen koulutusvaatimukset. Available at: https://www.tehy.fi/fi/apua/koulutus-ja-osaaminen/esimiehen-koulutusvaatimukset Accessed October 2019. (Finnish)

TENK. 2012. Responsible conduct of research and procedures for handling allegations of misconduct in Finland – RCR guidelines. The Finnish Advisory Board on Research Integrity. Available at: http://www.tenk.fi/en/resposible-conduct-research-guidelines Accessed December 2016.

TENK. 2019. The ethical principles of research with human participants and ethical review in the human sciences in Finland. The Finnish Advisory Board on Research Integrity. Available at: https://www.tenk.fi/sites/tenk.fi/files/Ihmistieteiden_eettisen_ennakkoarvioinnin_ohje_2019.pdf Accessed November 2019.

Thiroux JP. 1990. Ethics. Theory and Practice. Fourth Edition. Macmillan Publishing Company. New York.

THL. 2018. Social welfare and health care personnel 2014. Terveyden ja hyvinvoinnin laitos, National Institute of Health and Welfare. 2018. Tilastoraportti 1/2018. Available at: http://www.julkari.fi/bitstream/handle/10024/135915/TR_01_18.pdf?sequence=1&isAllowed=y. Accessed August 2018. (Finnish)

THL. 2015. Kuntien sosiaali- ja terveyspalvelujen henkilöstö 2014. (Personnel in local government health and social services) National Institute of Health and Welfare- Available at: https://www.julkari.fi/bitstream/handle/10024/126388/Tr16_15_kokonaisraportti.pdf?sequence=4&isAllowed=y Accessed August 2018. (Finnish)

Thompson IE, Melia KM, Boyd KM & Horsburgh D. 2006. Nursing Ethics, fifth edition. Elsevier-Churchill Livingstone, Edinburgh, UK.

Thorne L. 2010. The Association Between Ethical Conflict and Adverse Outcomes. Journal of Business Ethics 92(2), 269–276.

Toren O & Wagner N. 2010. Applying an ethical decision-making tool to a nurse management dilemma. Nursing ethics 17(3), 393–402.

Torjuul K & Sorlie V. 2006. Nursing is different than medicine: ethical difficulties in the process of care in surgical units. Journal of Advanced Nursing 56(4), 404–413.

Townsend K, Wilkinson A & Kellner A. 2015. Opening the black box in nursing work and management practice: the role of ward managers. Journal of Nursing Management 23(2), 211–220.

Utriainen K, Ala-Mursula L & Kyngäs H. 2015. Hospital nurses' wellbeing at work: a theoretical model. Journal of Nursing Management 23(6), 736–743.

Van der Arend AJG & Remmers-van den Hurk CHM. 1999. Moral Problems Among Dutch Nurses: a survey. Nursing Ethics 6(6), 468–482.

Viitanen E, Wiili-Peltola E, Tampsi-Jarvala T & Lehto J. 2007. First-line nurse managers in university hospitals – captives to their own professional culture? Journal of Nursing Management 15(1), 114–122.

Virtanen JV. 2010. Johtajana sairaalassa. Johtajan toimintakenttä julkisessa erikoissairaalassa keskijohtoon ja ylimpään johtoon kuuluvien lääkäri- ja hoitajataustaisten johtajien näkökulmasta. Akateeminen väitöskirja. Turun kauppakorkeakoulu Sarja: A-2:2010. Uniprint. Turku. (Finnish)

Warshawsky N & Cramer E. 2019. Describing Nurse Manager Role Preparation and Competency: Findings From a National Study. The Journal of Nursing Administration 49(5), 249–255.

Weidema FC, Molewijk AC, Kamsteeg F & Widdershoven GA. 2015. Managers’ views on and experiences with moral case deliberation in nursing teams. Journal of Nursing Management 23(8), 1067–1075.

WHO. 2010. Framework for Action on Interprofessional Education & Collaborative Practice Available at: https://apps.who.int/iris/bitstream/handle/10665/70185/WHO_HRH_HPN_10.3_eng.pdf;jsessionid=0B804B7569F7617F8F20CCFA8EB5E2DD?sequence=1 Accessed October 2019.

Wittmer DP. 2005. Developing a Behavioral Model for Ethical Decision Making in Organizations: Conceptual and Empirical Research. In Frederickson HG & Ghere RK (eds.) Ethics in Public Management. M.E. Sharpe, Armonk, New York, pp.49–69.

Žydžiūnaitė V & Suominen T. 2014. Leadership styles of nurse managers in ethical dilemmas: Reasons and consequences. Contemporary Nurse: A Journal for the Australian Nursing Profession 48(2), 150–167.

Žydžiūnaitė V, Lepaitė D, Åstedt-Kurki P & Suominen T. 2015. Head nurses’ decision-making when managing ethical dilemmas. Baltic Journal of Management 10(2), 166–187.

Appendices

Appendix 1. Content of questionnaire used in phase I.

	Number of items	Scale
Background factors - gender, age, position in organization, type of organization, experience in health care administration, number of subordinates, ethics training after graduation	7	numeric scale or free text
Frequency of encountering ethical problems Patient related (6 items) - Providing good care to patients - Developing the quality of care - Conflict between the demand of patients' care and the staff's exhaustion - Conflicts between nursing staff and patients - Conflicts between nursing staff and patients' relatives - Conflicts caused by patient's different culture Staff related (6 items) - Conflicts among nursing staff - Conflicts between nursing staff and other professionals - Nursing staff's behaviour or attitudes - Career and assignment of nursing staff - Selecting staff members - Incompetent nurses Organization related (4 items) - Allocation of scarce human resources - Allocation of financial resources - Conflict between nursing and organizational values - Public image of organization	16	1. daily 2. weekly 3. monthly 4. less than once a month 5. never
Use of ethical codes in ethical problems - same ethical problems as before	16	1. never 2. occasionally 3. often 4. always or almost always

Appendix 2. Content of EProNuMa–questionnaire

	Number of items	Scale
Socio-demographic background factors - gender, age, position in organization, type of organization, experience in health care administration, number of subordinates, education, ethics training after graduation	8	Numeric scale or free text
Frequency of encountering ethical problems Patient related (15 items) - Issues raised by the patient concerning shortcomings in the quality of his/her care - Issues raised by the patient concerning shortcomings in the way he/she is treated - The use of coercive measures in the patient's care - Shortcomings in the conditions under which the patient is treated - Leaking confidential patient information - Respecting the patient's privacy - Respecting the patient's autonomy - Inequality between patients / groups of patients - Conflicts arising from the patient's cultural background - Respecting the patient's opinions - Differences of opinion concerning care between the patient and his/her family members - Issues raised by family members concerning shortcomings in the quality of the patient's care - Issues raised by family members concerning shortcomings in the way the patient is treated - Issues raised by family members concerning shortcomings in the way they are treated - Conflicts among family members concerning the patient's care Nursing staff related (25 items) - Bullying among nurses - Arguments among nurses - Envy among nurses - Nurses reporting on others' actions behind their back - A nurse made into a scapegoat in the work community - Shortcomings in a nurse's professional expertise - A nurse does not follow instructions - A nurse acts against instructions - Mistake(s) made by a nurse - A nurse shirking responsibility - Choosing permanent staff and/or substitutes - Matters concerning substitutes' employment relationships - Personnel shift planning - Planning the annual leaves of personnel - Planning personnel training - Rewarding personnel	65	1. never 2. less than monthly 3. monthly 4. weekly 5. daily 0. cannot say

- Penalising personnel - Giving negative feedback - Giving positive feedback - Promoting nurses' career development - Nurses' occupational safety - Nurses' experiences of being heard - Nurses' experiences of inadequacy in patient care - Nurses' experiences of lack of appreciation in their work - Considering nurses' individual life situations Other professional groups related (10 items) - Bullying between nurses and other professional groups - Arguments between nurses and other professional groups - Shortcomings in multi-professional cooperation - Lack of appreciation toward nursing among other professional groups - Excessive collegiality among doctors - Differences of opinion between nurse and doctor concerning the patient's care - Conflicts between patient and doctor - Conflicts between patient's family members and doctor - Handling patient information in a way that compromises confidentiality - Division of labour between professions in patient care Organization related (10 items) - Availability of personnel resources - Sufficiency of financial resources - Downsizing personnel due to cost cutting - Resources for development work - Damage to quality of nursing due to focus on cost-effectiveness - Making decisions concerning nursing without nursing managers - Political trustees' interference in operative management - Planning operations on doctors' terms without regard for nursing - Tacit approval of workplace bullying - Lack of support from organisational administration NM her/himself related (5 items) - Conflict between personal and organisation's values - Making decisions without sufficient information - Basing decisions on information that cannot be shared with others - Little personal motivation for addressing problems - Fear of negative personal consequences when addressing problems		
Difficulty of ethical problems - Same ethical problems as before	65	1. very easy 2. somewhat easy 3. neither easy nor difficult 4. somewhat difficult 5. very difficult 0. cannot say

Frequency of using solving methods in ethical problems		1. never
Discussion and deliberation (12 items)	40	2. very rarely
- Discussing with nurses		3. occasionally
- Discussing with the patient		4. often
- Discussing with the patient's family members		5. always
- Negotiating with all parties involved in the problem		0. cannot say
- Discussing with the doctor treating the patient		
- Debriefing problematic situations in a working		
- Discussing with other health care professionals		
- Discussing with manager colleagues		
- Discussing with own manager		
- Relying on personal values		
- Keeping an ethics journal		
- Ethics-related introductions in meetings		
Use of outside experts (7 items)		
- Professional guidance		
- Participation in training concerning ethics		
- Occupational health care		
- Occupational health and safety organisation		
- Theologian or other specialist in spiritual matters		
- Ethics committee dealing with nursing solutions(excluding research ethics)		
- Ethics specialist		
Written instructions and ethical principles (8 items)		
- Ethics literature, articles		
- The ETENE ethical recommendations for health care		
- Codes of ethics for nurse managers		
- Professional codes of ethics		
- Ethics checklists		
- Organisation's explicitly stated values or ethical principles		
- Work unit-specific explicitly stated values or ethical principles		
- Situation-specific, pre-defined instructions		
Acts and decrees (5 items)		
- Act on the Status and Rights of Patients (785/1992)		
- Mental Health Act (1116/1990)		
- Personal Data Act (523/1999)		
- Health Care Act (1326/2010)		
- Other act, specify		
Work arrangements (8 items)		
- Rearrangement of work duties between units		
- Rearrangement of work duties within a unit		
- Changes in operational practices		
- Work rotation		
- Work shift planning		
- Regulation of patient flow		
- Use of extra personnel		
- Transferring a person to another unit		

Usefulness of solving methods - Same methods as before	40	1. entirely useless 2. somewhat useless 3. somewhat useful 4. very useful 0. cannot say
Values - Patient/client-centred approach - Patient safety - Quality of care - Efficiency of operations - Fairness - Collegiality - Equality - Staff well-being - Continuous learning - Cooperation - Openness - Impartiality - Responsibility - Reliability - Other, specify ____________________	15	Choice of three most important
Work-related background factors - The values of those representing the professions active within my organisation are compatible - The management system in my work unit is well-functioning - The accelerating pace of work makes it more difficult to focus on what is essential - Insufficient financial resources make it more difficult to focus on what is essential - My organisation has functioning instructions for dealing with unethical situations - My organisation addresses unethical situations in an appropriate way - The work I do is compatible with my values - I see my work as meaningful - I have enough decision-making power in my work - I feel I need additional education in order to improve myself in personnel management - I feel I need additional education in order to improve myself in dealing with ethical problems	11	5-point Likert-type scale “totally disagree” – “totally agree” with the neutral midpoint.

Appendix 3. Summary of frequency and difficulty of ethical problems in NMs' work

	Ethical problems		Frequency of encountering (scale 1-5)[1]						Difficulty (scale 1-5)[2]						
		categ.	Mean	Median	SD	weekly %	daily %	n	order of diffi-culty	Mean	Median	SD	somewhat difficult %	very difficult %	n
1.	Nurses' experiences of being heard	NS	3.56	4.00	1.22	23.70	30.33	211	61.	2.62	3.00	0.90	15.38	1.44	208
2.	Giving positive feedback	NS	3.47	4.00	1.00	41.43	12.86	210	65.	1.94	2.00	0.99	7.69	0.96	208
3.	Availability of personnel resources	O	3.31	3.00	1.06	32.08	13.68	212	17.	3.71	4.00	0.99	40.29	22.82	206
4.	Nurses' experiences of inadequacy in patient care	NS	3.19	3.00	1.08	27.83	12.74	212	28.	3.51	4.00	0.91	42.86	11.82	203
5.	Sufficiency of financial resources	O	3.15	3.00	1.01	26.76	9.86	213	8.	3.91	4.00	0.92	41.46	28.78	205
6.	Considering nurses' individual life situations	NS	3.13	3.00	0.97	25.35	8.92	213	55.	2.96	3.00	0.95	19.62	6.22	209
7.	Nurses' occupational safety	NS	3.07	3.00	1.03	18.40	12.26	212	53.	3.00	3.00	0.91	26.32	3.83	209
8.	Personnel shift planning	NS	2.94	3.00	1.18	22.27	10.43	211	62.	2.55	3.00	0.94	11.92	2.59	193
9.	Resources for development work	O	2.92	3.00	0.93	16.11	7.11	211	7.	3.91	4.00	0.91	45.59	26.96	204
10.	Matters concerning substitutes' employment relationships	NS	2.84	3.00	1.07	18.40	8.96	212	63.	2.53	2.00	0.88	14.15	0.49	205
11.	Planning personnel training	NS	2.67	3.00	0.87	14.08	1.88	213	64.	2.51	3.00	0.90	10.14	1.45	207
12.	Damage to quality of nursing due to focus on cost-effectiveness	O	2.63	2.00	1.09	11.48	8.61	209	3.	3.98	4.00	0.96	40.72	33.51	194
13.	Choosing permanent staff and/or substitutes	NS	2.56	2.00	0.92	12.92	3.83	209	60.	2.67	3.00	0.99	18.05	3.41	205
14.	Nurses' experiences of lack of appreciation in their work	NS	2.55	2.00	0.83	12.80	1.90	211	32.	3.43	4.00	0.95	40.29	11.17	206
15.	Nurses reporting on others' actions behind their back	NS	2.52	2.00	0.81	9.39	1.88	213	40.	3.33	3.00	0.99	36.41	10.19	206
16.	Respecting the patient's privacy	P	2.51	2.00	1.10	9.81	8.88	214	54.	2.97	3.00	1.05	24.26	7.43	202
17.	Respecting the patient's autonomy	P	2.50	2.00	1.05	10.28	7.01	214	44.	3.21	3.00	1.03	31.22	10.24	205
18.	Issues raised by the patient concerning shortcomings in the quality of his/her care	P	2.49	2.00	0.71	7.94	0.93	214	46.	3.16	3.00	0.87	36.27	2.94	204
19.	Lack of support from organisational administration	O	2.48	2.00	1.06	11.37	5.69	211	4.	3.95	4.00	0.99	41.58	32.63	190
20.	Basing decisions on information that cannot be shared with others	M	2.47	2.00	0.89	8.96	2.36	212	15.	3.74	4.00	1.05	38.89	25.25	198
21.	Respecting the patient's opinions	P	2.44	2.00	0.91	9.86	4.23	213	56.	2.95	3.00	1.00	24.39	5.37	205
22.	Excessive collegiality among doctors	OS	2.42	2.00	1.05	12.81	4.93	203	11.	3.81	4.00	1.06	29.55	32.39	176
23.	Making decisions concerning nursing without nursing managers	O	2.41	2.00	1.06	9.55	5.03	199	19.	3.66	4.00	1.10	28.40	27.81	169
24.	A nurse does not follow instructions	NS	2.40	2.00	0.73	8.45	0	213	43.	3.22	3.00	1.02	38.65	7.73	207

25.	Shortcomings in multi-professional cooperation	OS	2.39	2.00	0.81	7.94	1.40	214	25.	3.58	4.00	0.89	44.83	12.81	203
26.	Shortcomings in the conditions under which the patient is treated	P	2.38	2.00	1.01	12.98	3.37	208	37.	3.36	4.00	1.02	39.89	10.67	178
27.	Downsizing personnel due to cost cutting	O	2.37	2.00	1.08	11.11	5.31	207	1.	4.16	4.00	0.90	39.44	41.67	180
28.	Promoting nurses' career development	NS	2.36	2.00	0.71	7.73	0.48	207	58.	2.82	3.00	1.14	20.30	7.92	202
29.	Division of labour between professions in patient care	OS	2.36	2.00	0.86	5.77	2.88	208	33.	3.43	3.00	0.98	35.42	14.06	192
30.	Giving negative feedback	NS	2.36	2.00	0.57	2.35	0.47	213	27.	3.55	4.00	0.98	44.55	14.69	211
31.	Mistake(s) made by a nurse	NS	2.33	2.00	0.70	5.16	0.94	213	51.	3.10	3.00	0.99	24.88	8.61	209
32.	Planning operations on physicians' terms without regard for nursing input	OS	2.31	2.00	1.01	7.69	3.85	208	6.	3.94	4.00	1.00	41.62	31.79	173
33.	Shortcomings in a nurse's professional expertise	NS	2.31	2.00	0.75	6.57	0.94	213	49.	3.11	3.00	0.95	32.85	5.31	207
34.	Differences of opinion concerning care between the patient and his/her family members	P	2.29	2.00	0.79	8.17	0.48	208	20.	3.61	4.00	0.92	47.64	13.61	191
35.	Planning the annual leaves of personnel	NS	2.29	2.00	0.76	6.13	0.47	212	59.	2.71	3.00	0.99	15.35	4.46	202
36.	Rewarding personnel	NS	2.29	2.00	0.81	6.40	2.96	203	48.	3.11	3.00	1.11	28.65	10.42	192
37.	Differences of opinion between nurse and doctor concerning the patient's care	OS	2.29	2.00	0.75	5.69	0.47	211	26.	3.56	4.00	0.90	44.85	12.37	194
38.	Issues raised by the patient concerning shortcomings in the way he/she is treated	P	2.29	2.00	0.61	5.14	0	214	45.	3.18	3.00	0.93	37.25	4.41	204
39.	Making decisions without sufficient information	M	2.28	2.00	0.81	6.67	1.43	210	16.	3.73	4.00	1.00	42.71	22.40	192
40.	Envy among nurses	NS	2.27	2.00	0.75	4.83	0.48	207	18.	3.66	4.00	1.00	43.94	19.19	198
41.	Arguments among nurses	NS	2.25	2.00	0.68	5.14	0	214	30.	3.49	4.00	0.98	45.63	11.65	206
42.	Lack of appreciation toward nursing among other professional groups	OS	2.23	2.00	0.78	5.19	1.42	212	24.	3.58	4.00	0.97	34.54	18.56	194
43.	Issues raised by family members concerning shortcomings in the quality of the patient's care	P	2.21	2.00	0.67	2.83	0.47	212	34.	3.40	3.00	0.87	42.71	7.04	199
44.	Conflict between personal and organisation's values	M	2.15	2.00	0.87	7.58	1.42	211	29.	3.50	4.00	1.16	40.74	17.99	189
45.	Inequality between patients / groups of patients	P	2.13	2.00	0.83	4.72	0.94	212	41.	3.29	3.00	1.05	34.43	10.93	183
46.	Bullying among nurses	NS	2.08	2.00	0.67	4.25	0	212	12.	3.78	4.00	1.00	48.06	22.33	206
47.	A nurse acts against instructions	NS	2.08	2.00	0.75	4.33	0.48	208	38.	3.34	4.00	1.12	36.22	14.29	196
48.	Conflicts between patient and doctor	OS	2.03	2.00	0.72	2.94	0.49	204	22.	3.58	4.00	0.89	37.80	37.80	164
49.	Issues raised by family members concerning shortcomings in the way the patient is treated	P	2.03	2.00	0.60	0.47	0	211	36.	3.39	3.00	0.93	39.39	9.60	198
50.	The use of coercive measures in the patient's care	P	2.00	2.00	1.14	11.59	3.38	207	35.	3.39	4.00	1.15	33.56	17.81	146

51.	Arguments between nurses and other professional groups	OS	1.99	2.00	0.60	0.94	0	213	23.	3.58	4.00	0.99	39.18	17.53	194
52.	A nurse shirking responsibility	NS	1.98	2.00	0.74	2.84	0.47	211	31.	3.49	4.00	1.00	42.33	13.23	189
53.	A nurse made into a scapegoat in the work community	NS	1.96	2.00	0.65	2.40	0.48	208	9.	3.85	4.00	0.93	43.01	25.81	186
54.	Conflicts between patient's family members and doctor	OS	1.92	2.00	0.60	1.96	0.49	202	21.	3.60	4.00	0.93	35.90	17.95	156
55.	Conflicts among family members concerning the patient's care	P	1.89	2.00	0.68	1.94	0	206	10.	3.83	4.00	0.98	35.63	28.75	160
56.	Conflicts arising from the patient's cultural background	P	1.89	2.00	0.68	1.40	0.47	214	47.	3.16	3.00	1.02	29.35	8.70	184
57.	Bullying between nurses and other professional groups	OS	1.84	2.00	0.68	1.45	0.48	207	14.	3.74	4.00	1.10	35.43	28.00	175
58.	Handling patient information in a way that compromises confidentiality	OS	1.81	2.00	0.69	1.96	0.49	204	42.	3.25	3.00	1.16	25.14	16.57	175
59.	Issues raised by family members concerning shortcomings in the way they are treated	P	1.79	2.00	0.64	1.43	0	210	39.	3.33	3.00	0.99	38.82	8.82	170
60.	Political trustees' interference in operative management	O	1.75	2.00	0.84	1.62	1.62	185	13.	3.75	4.00	1.24	31.06	34.09	132
61.	Fear of negative personal consequences when addressing problems	M	1.75	2.00	0.71	2.40	0	208	52.	3.01	3.00	1.34	16.47	18.24	170
62.	Penalising personnel	NS	1.74	2.00	0.55	0	0	206	5.	3.95	4.00	1.07	36.47	36.47	170
63.	Tacit approval of workplace bullying	O	1.74	2.00	0.76	2.42	0.48	207	2.	4.04	4.00	1.16	32.35	44.71	170
64.	Little personal motivation for addressing problems	M	1.68	2.00	0.71	0.48	0.48	209	57.	2.90	3.00	1.27	19.35	12.26	155
65.	Leaking confidential patient information	P	1.59	2.00	0.56	0	0.49	206	50.	3.10	3.00	1.24	25.73	15.20	171

[1]Range: 1 = never, 5 = always

[2]Range: 1= very easy, 5 = very difficult

P = patient related, NS = Nursing staff related, OS = Other professional groups related, O = Organization related, M = Nurse manager her/himself related

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