TURUN
YLIOPISTO
UNIVERSITY
OF TURKU

DEFICIENT PROFESSIONAL CONDUCT BY NURSES

Supervision from administrative measures to authority's decisions

Oili Papinaho

TURUN YLIOPISTON JULKAISUJA – ANNALES UNIVERSITATIS TURKUENSIS
SARJA – SER. D OSA – TOM. 1860 | MEDICA – ODONTOLOGICA | TURKU 2025

TURUN
YLIOPISTO
UNIVERSITY
OF TURKU

DEFICIENT PROFESSIONAL CONDUCT BY NURSES

Supervision from administrative measures to authority's decisions

Oili Papinaho

TURUN YLIOPISTON JULKAISUJA – ANNALES UNIVERSITATIS TURKUENSIS
SARJA – SER. D OSA – TOM. 1860 | MEDICA – ODONTOLOGICA | TURKU 2025

University of Turku

Faculty of Medicine
Department of Nursing Science
Nursing Science
Doctoral Programme in Nursing Science

Supervised by

Professor Mari Kangasniemi
Faculty of Medicine
Department of Nursing Science
University of Turku
Turku, Finland

Professor Arja Häggman-Laitila
Faculty of Health Sciences
Department of Nursing Science
University of Eastern Finland
Kuopio, Finland

Reviewed by

Professor Outi Kanste
Faculty of Medicine
Research Unit of Health Sciences and Technology
University of Oulu
Oulu, Finland

Professor Elizabeth Peter
Lawrence S. Bloomberg Faculty of Nursing
Joint Centre for Bioethics
University of Toronto
Toronto, Canada

Opponent

Docent, PhD Heljä Lundgrén-Laine
Chief Executive Nursing Officer
Wellbeing Services County of Central Finland
Jyväskylä, Finland

The originality of this publication has been checked in accordance with the University of Turku quality assurance system using the Turnitin OriginalityCheck service.

ISBN 978-952-02-0068-8 (PRINT)
ISBN 978-952-02-0069-5 (PDF)
ISSN 0355-9483 (Print)
ISSN 2343-3213 (Online)
Painosalama, Turku, Finland 2025

Darkness cannot drive out darkness,
only light can do that.
Hate cannot drive out hate,
Only love can do that.
-Martin Luther King, Jr.

UNIVERSITY OF TURKU
Faculty of Medicine, Department of Nursing Science
Nursing Science
OILI PAPINAHO: Deficient professional conduct by nurses. Supervision from administrative measures to authority's decisions
Doctoral Dissertation, 159 pp.
Doctoral Programme in Nursing Science
March 2025

ABSTRACT

Deficient professional conduct by nurses is a marginal phenomenon but can seriously risk patient safety and affect nursing careers and public trust. Knowledge about its supervision is lacking. As a result, there is a need to advance the understanding of this issue. This study aimed to explore and synthesize the knowledge of deficient professional conduct by nurses and related supervision at the nursing administration and supervisory authority levels.

The study was conducted with a multi-method design which included two phases. A synthetical phase was an integrative review of previous studies (n = 24) about nurses who were disciplined by their supervisory authorities, analyzed with inductive content analysis. An empirical research phase included two data sets of a retrospective document analysis. The first was conducted to the national supervisory authority's disciplinary decisions for registered nurses (N = 324) with descriptive statistics, and the second, to early intervention procedures to registered nurses (N = 43) based on one Finnish university hospital's documents with inductive content analysis.

Deficient professional conduct by nurses was described as a nurse-based issue concerned with their well-being at work and how they implemented patient care, complied with the work framework and behaved ethically and possible endangered patient safety (Papers I, II and IV). Administrative supervision of nurses' professional conduct included early intervention and sanctioned actions (Papers III and IV). The nurses were described according to their key background factors and influenced by personal, professional and work-related factors (Papers I and II). They were subjected to different forms of disciplinary decisions by their supervisory authorities (Papers I and III).

The supervision of professional conduct of nurses is a chain but contains certain gaps and the complexity of deficient professional conduct involves some challenges to related supervision. The development of professional supervision of nurses' deficient professional conduct at different levels requires a more precise definition of the phenomenon and supervision process in the future.

KEYWORDS: deficient professional conduct, disciplinary decision, document analysis, integrative review, nurse(s), professional conduct, professional regulation, supervision

TURUN YLIOPISTO
Lääketieteellinen tiedekunta, Hoitotieteen laitos
Hoitotiede
OILI PAPINAHO: Hoitotyöntekijöiden puutteellisen ammatillisen toiminnan valvonta hoitotyön hallinnon toimenpiteistä viranomaispäätöksiin
Väitöskirja, 159 s.
Hoitotieteen tohtoriohjelma
Maaliskuu 2025

TIIVISTELMÄ

Hoitotyöntekijöiden puutteellinen ammatillinen toiminta on marginaalinen ilmiö, joka voi vaikuttaa vakavasti potilasturvallisuuteen ja työntekijän uraan sekä yleiseen luottamukseen. Aikaisempi tieto sen valvonnasta on kuitenkin niukkaa. Tämän tutkimuksen tavoitteena oli selvittää ja syntetisoida tietoa hoitotyöntekijöiden puutteellisesta ammatillisesta toiminnasta ja sen valvonnasta terveydenhuollon hallinnon ja valvontaviranomaisen tasolla.

Tämä monimenetelmätutkimus sisälsi kaksi vaihetta. Ensimmäinen, synteettinen vaihe, oli integroitu kirjallisuuskatsaus aiempaan tutkimukseen (n = 24), joka käsitteli hoitotyöntekijöihin kohdistuneita kurinpidollisia viranomaistoimia. Toinen vaihe oli empiirinen tutkimus sisältäen kaksi retrospektiivistä dokumenttianalyysia. Tutkimus sairaanhoitajiin kohdistuvista viranomaispäätöksistä (N = 324) toteutettiin kuvaavilla tilastollisilla menetelmillä ja sairaanhoitajiin kohdistuvista varhaisen puuttumisen toimista (N = 43) yhden yliopistollisen sairaalan asiakirjojen pohjalta induktiivisella sisällönanalyysillä.

Hoitotyöntekijöiden puutteellinen ammatillinen toiminta liittyi heidän työhyvinvointiinsa, osaamiseen ja työkykyyn sekä ammattieettiseen käyttäytymiseen. Se kohdistui potilaisiin ja saattoi olla riski potilasturvallisuudelle (osajulkaisut I, II ja IV). Hoitotyöntekijöiden ammatillisen toiminnan organisaatiotason valvonta toteutui esihenkilöiden toimesta varhaisen puuttumisen keinoilla ja kurinpidollisilla toimilla (osajulkaisut III ja IV). Hoitotyöntekijät, joihin kohdistui viranomaisen valvontapäätöksiä, kuvattiin heidän keskeisten taustatekijöidensä mukaan (osajulkaisut I ja II) ja valvontaviranomainen kohdisti heihin eri tasoisia puuttumis- ja kurinpitotoimia (osajulkaisut I ja III).

Hoitotyön ammatillisen toiminnan valvonta ei ole aukotonta. Puutteellisen ammatillisen toiminnan moninaisuus asettaa sen valvonnalle haasteensa. Puutteellisen ammatillisen toiminnan valvontaa eri tasoilla tulee yhdenmukaistaa ja kehittää, mikä edellyttää jatkossa ilmiön ja valvontaprosessin tarkempaa määrittelyä.

AVAINSANAT: ammatillinen toiminta, ammatillinen sääntely, dokumenttianalyysi, integroitu katsaus, hoitotyöntekijä (hoitaja). kurinpidolliset toimet, puutteellinen ammatillinen toiminta, valvonta

Table of Contents

Abbreviations

AVI	Regional State Administrative Agency (Finland)
CINAHL	Cumulative Index of Nursing and Allied Health Literature
EU	European Union
ICMJE	International Committee of Medical Journal Editors
ICN	International Council of Nurses
MMAT	Mixed Methods Appraisal Tool
NCSBN	National Council of State Boards of Nursing
NMC	Nursing and Midwifery Council
PRISMA	Preferred Reporting Items for Systematic Reviews and Meta-analysis
RN	Registered Nurse
SPSS	The Statistical Package for the Social Sciences
SRQR	Standards for Reporting Qualitative Research
UK	United Kingdom
USA	United States of America
Valvira	National Supervisory Authority for Welfare and Health in Finland

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 Papinaho O, Häggman-Laitila A, Liedenpohja A-M & Kangasniemi M. Integrative review of studies about nurses who have been disciplined by their professional regulatory bodies. *Journal of Nursing Management*, 2019; 27: 1588–1603.

II Papinaho O, Häggman-Laitila A & Kangasniemi M. Unprofessional conduct by nurses: A document analysis of disciplinary decisions. *Nursing Ethics*, 2022; 29(1): 131–144.

III Papinaho O, Häggman-Laitila A, Pasanen M & Kangasniemi M. Disciplinary processes for nurses, from organizational supervision to outcomes: A document analysis of a regulatory authority's decisions. *Journal of Nursing Management*, 2022; 30(7): 2957–2967.

IV Papinaho O, Häggman-Laitila A & Kangasniemi M. Nurse managers' early intervention in nurses' professional conduct: A document analysis. *Nordic Journal of Nursing Research*, 2024; 44.

1 Introduction

Nurses have a responsibility to their work. Thus, they are obliged by professional ethics and legislation. Their duty is to take care of those who need care. Nurses play a vital role in ensuring patients' well-being and recovery as they serve as patients' trustworthy caregivers, advocates, and instructors (Varaei et al., 2024). Most nursing professionals fulfil their duty well in the challenging and rapidly changing operating environment of nursing. Nurses can meet the requirements of their profession and the expectations originating from regulations, patients, clients and society. For that reason, their well-being and ability to work must be seen as a basic element for producing safe and high-quality care (Letvak, 2013; Ministry of Social Affairs and Health, 2022; Poikkeus et al., 2020; Salyers et al., 2017). There are nevertheless some real problems occurring at a marginal rate where the nurses' professional conduct does not meet the expectations or the standard set for the profession in regulations. Therefore, supervision is particularly important, requiring structured monitoring of operations and early observation of and interventions in problems. In the current situation in society, we cannot afford to treat patients poorly, nor lose any competent nursing professionals which would further increase both costs and human suffering.

In nursing, professional conduct refers to a characteristic that is achieved through professional education, training and qualification, and the adoption of knowledge, skill-based know-how and ethical guidelines (Alidina, 2012; De Braganca & Nirmala, 2017; Ghadirian et al., 2014). It involves conducting oneself in a manner that upholds the reputation and professional values of nursing and involves maintaining a high standard of competence (International Council of Nursing, 2021; Nursing & Midwifery Council, 2018). Nurses are expected to have the ability for decision-making, adhere to professional standards, engage in positive interpersonal relationships, apply their skills and knowledge based on situations and perform outcome evaluation based on standards (Azemian et al., 2021; Church, 2016; Schmidt & McArthur, 2018; Starc, 2009).

Professional conduct in nursing emphasizes care for the individual patient and that nurses do their best to create a caring and healing environment for patients (Cao et al., 2023; Riegel et al., 2021). Global human rights are respected and ensured by

national legislation and norms, and they require respect for every human being as an individual person with the right to make their own choices which is the main basis for ethical nursing. Professional codes of ethics, built on values such as autonomy, beneficence, nonmaleficence, justice, fidelity, and veracity, outline what is expected of nurses in their practice (College of Nurses of Ontario, 2023; International Council of Nursing, 2021) Ethical nursing practice also involves promoting high-quality care and patient safety (Finnish Nurses Association, 2020a; International Council of Nurses, 2012; Ministry of Justice, 1994). Professional conduct in nursing has been shown to have a positive connection to patients, organisations, and professionals themselves. Strong professional conduct increases nurses' recognition, autonomy and empowerment, promotes their job satisfaction, and improves the quality of practices. In addition, it reduces employee turnover rates and increases work motivation as well as organizational and mental commitment. (Cao et al., 2023; Çelik & Hisar, 2012; Elksas et al., 2021; Rowland, 2016.)

Professional conduct in nursing is regulated through a combination of legal frameworks, professional standards, codes of ethics and conduct, and by regulatory bodies such as supervisory authorities. The regulation of professional conduct in nursing is based on professional standards and legislation that guides the implementation of both education, professional qualifications, and the supervision of the professional conduct of nursing practice (Adams, 2020; Benton et al., 2014; Benton & Flynn, 2013; Choi & Lee, 2024; Kirwan et al., 2019; Stievano et al., 2019). Professional regulation in nursing defines the norms of professional conduct as well as the margins and limits, conditions and prerequisites for how professional conduct must be maintained. It takes into account the other implementation of patient safety, public safety and the implementation of the rights of patients and individuals as well as controls the supervision of professional conduct. (Benton & Thomas, 2021; Garrett & MacPhee, 2014).

In Finland, the legislation for the professional conduct of healthcare professionals lays down the requirements for the professional competence of nurses and general nursing education (Ministry of Justice, 1994). Nurses obtain a license or certification to practice based on the national regulated education and training, based on the European Union Directive 2005/36/EC, amended by Directive 2013/55/EU. In Finland, nurse education is provided and produced by the universities of applied sciences. In this study, the term "nurse" refers to registered nurses (RN) with a bachelor's degree (EQF level 6), who have valid education, licensing, and registration by Valvira, the National Supervisory Authority for Welfare and Health (Ministry of Justice, 1994; National Supervisory Authority for Welfare and Health, 2021) that is shown in an open register (National Supervisory Authority for Welfare and Health, 2016).

Based on the self-supervision, nurses are required to assume a general duty take care of and find out possible hazard and evaluate the adequacy of their competence and education in relation to the task. They are demanded to equally take into account the benefits brought to patients by professional conduct and its possible disadvantages (Affara & Al-Jabri, 2016; Choe et al., 2022; Kiljunen et al., 2019; Poikkeus et al., 2014). In this context, activities in nursing that violate professional legislation must be detected and dealt with through professional supervision (College of Nurses of Ontario, 2023; International Council of Nurses, 2014; Ministry of Justice, 1994). The level of supervision depends on the seriousness of the risk for professional practice and safety, patients, organisation and working community, or society. The task of monitoring cases is mainly handled at the organizational level (Cronquist, 2013; Eisenmann, 2020).

In Finland, all nursing care service providers are required to have a self-monitoring plan to ensure client and patient safety and quality, and compliance with the plan is monitored and reported regularly (Ministry of Social Affairs and Health, 2022). The supervisory authority deals with the most serious, high-risk cases if the intervention requires measures imposed by the supervisory authority related to or directed at professional rights to practice (Brous, 2012; Cronquist, 2013; Gallagher & Saleem, 2022; Russell & Radtke, 2014; Worsley et al., 2020). For example, nurses' substance abuse cases are considered to pose such a high risk that they require rapid intervention and are referred to the authorities (Foli et al., 2019; Trinkoff et al., 2021).

Although professional standards and national legislation direct the supervision and monitoring of the implementation of professional nursing at different levels (Affara & Al-Jabri, 2016; Benton et al., 2014; Benton & Thomas, 2021; Garrett & MacPhee, 2014), there is still little knowledge on the supervision of and intervention in nurses' deficient professional conduct. Previous studies on the disciplinary measures imposed by supervisory authorities for nurses have been mainly conducted in the USA and Australia (Foong-Reichert et al., 2021) and several studies have focused on physicians and other social and healthcare professionals (Eisenmann, 2020; Härkänen et al., 2023; Mattar E Silva et al., 2022; Millbank, 2020). Lack of standardization in disciplinary processes and definitions used to classify the reasons for disciplinary action prevents comparison across jurisdictions, professions and internationally (Currie et al., 2019; Foong-Reichert et al., 2021). The procedures for notifications of inconvenience, danger or complaints need to be reformed at the nursing administrative level (Gil, 2019). In addition, previous research has uncovered signs of risk that indicate deficient professional conduct by nurses related to the employees themselves as well as their work and the living environment (AbuDagga et al., 2019; Ghobadi et al., 2023).

Thus, more research is needed on the guidance of nursing professionals and their professional domains. Still, deficient professional conduct by nurses has not been systematically defined previously and it needs to be considered as a serious problem even though its incidence is marginal. This study has set out to respond to the knowledge gap with research setting that is unique not just at the national level but also more broadly. In this study, nurses' deficient professional conduct and related supervision at the levels of administrative and supervisory authorities are described based on the previous literature and documents from different levels of nursing supervision.

2 Review of the Literature

This chapter is based on the previous literature about professional conduct, deficient professional conduct and supervision of professional conduct (Appendix 1) and the relevant national and international professional standards, legislation and guidelines in nursing (Appendix 2). Systematic literature searches on the research topic were conducted in four scientific electronic databases, CINAHL, PubMed, Scopus and Web of Science, with a combination of MeSH terms and free key terms. The search was limited to peer-reviewed publications published between 2006 and 2024 and resulted in 31 papers.

2.1 Professional conduct in nursing

Professionalism is a multifaceted, abstract target of successful professional action relating to a strong aspirational level that professional conduct should be and include (Eid et al., 2018; Žiaková et al., 2023). It refers to meeting professional requirements (Žiaková et al., 2023) such as adhering to professional standards and professional conduct expected from a specific profession or workplace setting (Miller, 1988; Miller et al., 1993; Sullivan & Benner, 2005). It demands a particular level of knowledge based on the qualified profession (Azemian et al., 2021; Schmidt & McArthur, 2018; Starc, 2009) that is achieved through formal education, producing the specifics of the profession such as a job title (Eid et al., 2018; Ghadirian et al., 2014). Professionalism encompasses qualities such as professional expertise and interactions (Azemian et al., 2021; Cao et al., 2023; Cusack et al., 2019), skills, competence, excellence and experience (Eid et al., 2018; Ghadirian et al., 2014).

Professionalism demands improving one's skills and knowledge (Miller, 1988; Miller et al., 1993; Sullivan & Benner, 2005) based on continuous professional self-regulation and professional development (Azemian et al., 2021; Cao et al., 2023; Cusack et al., 2019). Nursing professionalism demands an ability to analyse and utilize knowledge, and judge and reason the best options in practice in clinical situations based on up-to-date knowledge (Azemian et al., 2021; De Braganca & Nirmala, 2017). In addition, professionalism refers to social, professional and situation-related factors, and the appropriation of organizational structures (Azemian et al., 2021; Ghadirian et al., 2014; Miller, 1988; Miller et al., 1993; Sullivan &

Benner, 2005). Professionalism requires high-quality teamwork (Žiaková et al., 2023) that involves maintaining an appropriate work level, communicating effectively and collaborating with other professionals (Miller, 1988; Miller et al., 1993; Sullivan & Benner, 2005).

From the perspective of professional ethics, professionalism demonstrates professional values such as social, professional and legal responsibility, a sense of calling (Azemian et al., 2021; Cao et al., 2023; Cusack et al., 2019; Eid et al., 2018; Ghadirian et al., 2014), commitment, (Eid et al., 2018) and adherence to ethical standards such as integrity, reliability, respectfulness and accountability (Miller, 1988; Miller et al., 1993; Sullivan & Benner, 2005). Thus, it is a central aspect of nursing (Tomagová et al., 2023) that gives nurses an advantage in their professional status (Azemian et al., 2021; Çelik & Hisar, 2012; De Braganca & Nirmala, 2017). Personal characteristics such as self-confidence, innovation, acuity, self-image, emotional intelligence, self-control, lifelong learning, reflection, up-to-date technical knowledge, conflict management, and work-life balance were found essential to professionalism (Azemian et al., 2021; Cao et al., 2023; Cusack et al., 2019). In addition, professionalism comprises demographic background (Ghadirian et al., 2014; Žiaková et al., 2023), attitudes and professional behaviour and values that are expected in interactions with clients and patients (Cusack et al., 2019; Eid et al., 2018; Ghadirian et al., 2014; Miller, 1988; Miller et al., 1993; Sullivan & Benner, 2005).

Professionalism is understood as an ideological prerequisite for professional conduct. In this study, professional conduct has been considered as an observable and measurable form of professionalism that can be directed, monitored and developed, and needs an implementer or a creator. It is a concrete realization of professionalism that is performed by professionals. In the context of nursing, nursing professionals serve in this role as a group of implementers who operate according to the same standards and in pursuit of the same target (Kangasniemi et al., 2015). They have the knowledge base required by the profession obtained through formal education, an expanded level of skills, the type of certification that provides them entry into the profession, and attitudes that represent a high level of commitment to professional standards (Alidina, 2012; De Braganca & Nirmala, 2017; Ghadirian et al., 2014).

Professional conduct is determined by the professional role in society. It refers to nurses' adherence to professional standards and ethics established on expectations for their profession, in society and in the organizational context (Currie et al., 2019; Hulme et al., 2019; Varaei et al., 2024). The realization of professional conduct requires knowledge, mental and physical ability and skills, professional self-regulation and ethics from the nurse. Professional conduct includes not only know-how but also ethical competence and the ability to act in a professional role (Cao et

al., 2023; De Braganca & Nirmala, 2017) respect of professional obligations, such as consideration of the patient's rights, appropriate preparation of patient documents and the duty of confidentiality (Varaei et al., 2024).

Previous studies have shown that strong professional conduct in nursing has positive consequences (Eid et al., 2018). The attributes of personal factors such as appropriate individual characteristics, mental excellence, creativity, professional knowledge and technical skills impact professional practice in nursing (Ahmad et al., 2017; Burford et al., 2014). The development of nurses' professional conduct has been shown to improve the quality of care and nurses' ability to respond to the growing needs of patients and promote patient satisfaction (Dehghani et al., 2016; Ghadirian et al., 2014). In addition, professional conduct has been shown to have effects on nurses themselves. It increases positive attitudes towards work, job satisfaction and full-time job retention and decreases work burnout, which supports the retention of nurses at work and could result in a smaller number of complaints against nurses (Azemian et al., 2021).

2.2 Deficient professional conduct in nursing

Defining professional conduct and its supervision helps to outline the limits of activities that violate professional regulation, termed "deficient professional conduct" in this study. Based on the previous literature, the concepts describing deficient professional conduct are partly overlapping. They can be defined in relation to the violation of professional standards and deficient professional competence and work ability (Table 1).

Table 1. Definitions of deficient professional conduct based on the related concepts according to previous studies and dictionaries' definitions.

Deficient professional conduct referring to	Definition	References
Violation of professional standards		
Professional misconduct	**Negligence, incompetence, misconduct, unprofessional conduct or other unacceptable actions,** such as violent behaviour, bad temper, or failure to meet expected professional standards **Improper or inappropriate acts, violations of professional rules** or boundaries, and unsatisfactory professional conduct or character	Neale 1996, LaDuke 2001, Johnstone & Kanitsaki 2005, Pugh 2009, 2011, Mauritz et al. 2016, Currie et al. 2019, Hulme et al. 2019, Millbank 2020, Oxford English Dictionary 2023, Ghobadi et al. 2023, Varaei et al. 2024, Al Abrawi 2024
Poor performance	**Failure to perform the duties of the role** of a professional or **meet the standards required**	West 2007, Stone et al. 2011; Weenink et al. 2017
Practice breakdown	**The disruption or absence of any of the aspects of good nursing practice**	National Council of State Boards of Nursing 2009, Zhong & Thomas 2012, Wolf 2012, Matthews et al. 2019, Thomas et al. 2020
Unethical conduct	**Neglecting of professional ethical guidelines** **Not respecting patients' rights** and dignity and threatening patient safety	Johnstone 2012, Dixon 2013, Björklund & Hemberg 2024
Counterproductive work behaviour	**Intentional behaviour** which has likely detrimental effect on organizations, their members and other stakeholders; harm employees or organisations	Fox & Spector & 2005, Zaghini et al. 2016
Negligence	**Failing to perform professional responsibilities to the required standard or breaches** of the duty of care. **A lack of attention to what ought to be done**; **failure to take proper or necessary care** of a thing or person A lack of necessary or reasonable care in doing something; carelessness	Jacoby & Scruth 2017, Khodayarimotlagh et al. 2022, Oxford English Dictionary 2023

Deficient professional conduct referring to	Definition	References
Deficient professional competence and work ability		
Professional incompetence and malpractice	**Deficient knowledge, skills, or qualifications** to perform tasks or fulfil responsibilities **Deficiencies in communication, collaboration, physical or mental capacity, or ethical conduct,** including negligence or actions that deviate from accepted standards **Intentional misconduct**, carelessness, or ignorance in the performance of duties	Gittler & Goldstein 1996, Beckstead 2005, Weld & Garmon Bibb 2009, Fidanci et al. 2014, Weenink et al. 2015, Oxford English Dictionary 2023
Professional impairment	**Cognitive, interpersonal or psychomotor ability is seriously impaired** due to individual condition that interact with the environment e.g. substance abuse, bad behaviour, mental or physical disability	Moore & McAuliffe 2012, Mauritz et al. 2016

Violation of professional standards

Deficient professional conduct that refers to violation of professional standards comprises professional misconduct including unprofessional conduct, poor performance and practice breakdown (Table 1). It is described as negligent, incompetent, violent or unacceptable professional behaviour or act that may threaten patient safety (Dixon, 2013) and may require disciplinary or corrective actions (Currie et al., 2019; Pugh, 2009, 2011). In addition, professional misconduct refers to a failure to meet the professional standards of practice and a violation of the rules (Ghobadi et al., 2023; Hulme et al., 2019; Maurits et al., 2016; Millbank, 2020; Neale, 1996; Varaei et al., 2024) that includes unsatisfactory professional conduct or a lack of professional character (Al Abrawi, 2024; Chiarella & Adrian, 2014; Currie et al., 2019; Ghobadi et al., 2023; Maurits et al., 2016; Millbank, 2020; Varaei et al., 2024). Similarly, poor performance threatens or endangers patient safety, exposing services to substantial risk, and undermining the reputation or efficiency of services in some significant way that is outside acceptable practice guidelines and standards (Stone et al., 2011; West, 2007). This is called practice breakdown that indicates the disruption or absence of any of the aspects of good nursing practice (Matthews et al., 2019; Nursing & Midwifery Council, 2018; Thomas et al., 2020; Wolf, 2012; Zhong & Thomas, 2012). Boundary violations refer to deficient professional conduct that occurs in situations in which a professional is close to patients, the boundaries of professional interaction become blurred and thus may risk their safety (AbuDagga et al., 2019; Evans, 2010; Griffith & Tengnah, 2013; Halter et al., 2007; Jones et al., 2008).

Deficient professional conduct refers also to violation of professional ethics such as poor ethical or unethical conduct or competence, counterproductive work behaviour and negligence (Table 1). Intentional unethical conduct manifests itself in the neglect of professional ethical guidelines and patients' rights and human dignity (Björklund & Hemberg, 2024; Dixon, 2013; Johnstone, 2012). Unprofessional conduct also refers to actions that violate the ethics or norms of a specific profession or workplace. It often involves actions that are disrespectful, unethical, or contrary to the established codes of conduct, potentially harming clients or the employee's professional reputation and the reputation of the organisation or profession itself (Currie et al., 2019). In addition, moral disengagement is associated with counterproductive work behaviour that may lead to unfavourable or dangerous outcomes for patients, the organisation or the working community by cultivating a culture of deviant conduct (Fox & Spector, 2005; Zaghini et al., 2016). Altogether, negligence is used to describe carelessness that emerges as the failure to take proper or necessary care of a thing or a person or a failure to exercise necessary or reasonable care in an action (Jacoby & Scruth, 2017; Khodayarimotlagh et al., 2022; Oxford English Dictionary, 2023).

Deficient professional competence and work ability

Deficient professional conduct that refers to deficient professional competence and work ability comprises professional incompetence, impairment and malpractice (Table 1). Limited functioning in a profession as a result of a deficiency in knowledge or an unreasonable lack of professional skills, including communication and collaboration problems is also referred to as professional incompetence (Beckstead, 2005; Weenink et al., 2015) or malpractice (Gittler & Goldstein, 1996; Weld & Garmon Bibb, 2009). Malpractice is also used to describe professionals' improper or immoral conduct in the performance of duties, due to carelessness or ignorance, which includes negligence or intentional misconduct (Fidanci et al., 2014; Weld & Garmon Bibb, 2009). Impaired professional conduct refers to cognitive, interpersonal or psychomotor abilities which are seriously impaired due to individual conditions, such as substance abuse, aggressive behaviour, mental illness or physical disability (Maurits et al., 2016; Moore & McAuliffe, 2012). The term unprofessional conduct is also used when describing incompetent professional practice (Currie et al., 2019; Dixon, 2013; Pugh, 2009).

2.3 Supervision of nurses' professional conduct

The primary purpose of nursing is to treat and protect the public from harm. The fulfilment of individual rights, promotion of client and patient safety and quality of social and health services are ensured by the supervision of professional nursing (Rothwell et al., 2021; Snowdon et al., 2017). Professional standards serve as a guide on the knowledge, skills, judgment and attitudes required of nurses to practice safely (Dozier, 1998; Tønnessen et al., 2020). Based on the previous literature, professional supervision of nurses' professional conduct is described at the levels of the nurses' self-supervision, administration and authority (Benton & Thomas, 2021; Flook, 2003; Garrett & MacPhee, 2014) (Figure 1).

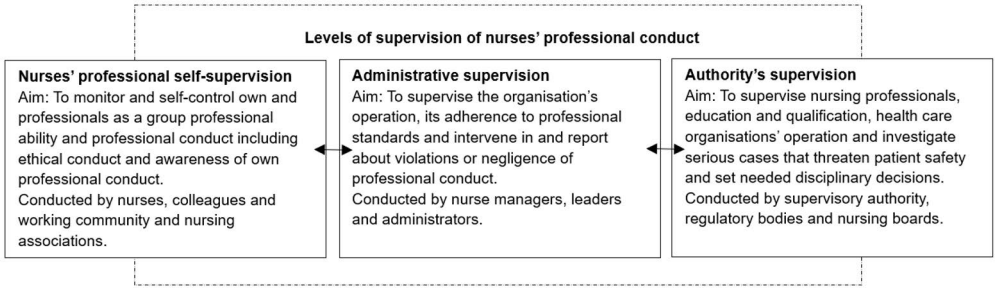

Figure 1. Professional supervision of nurses' professional conduct at different levels.

2.3.1 Nurses' self-supervision

Professional self-supervision involves nurses' monitoring and controlling their professional abilities, conduct, and ethical awareness on individual and professional group level (Figure 1). It is based on professional standards, which outline the accountability and responsibility of nurses as set by legislation (Affara & Al-Jabri, 2016; International Council of Nurses, 2014). Nurses are personally responsible for maintaining and updating their qualifications, skills, and professional conduct through self-regulation, relying on their experience, training, and education (Adams, 2020; Affara & Al-Jabri, 2016; Benton et al., 2013, 2014; Leslie et al., 2023). This requires them to be aware of their knowledge, practical skills, and ability to practice (Balestra, 2012; Cronquist, 2013; International Council of Nursing, 2021). Additionally, they must demonstrate self-management, meaning they can complete tasks independently without constant oversight (Affara & Al-Jabri, 2016; Choe et al., 2022; Kiljunen et al., 2019; Poikkeus et al., 2014; Witczak et al., 2022).

Nurses must maintain professional self-supervision throughout their careers by meeting education standards, obtaining certification, and adhering to a code of ethics that lays the foundation of their professional work (International Council of Nursing,

2021). They are demanded to practice within their individual competence and use professional judgment when delegating responsibilities, while ensuring a positive work environment that promotes well-being (Hudspeth, 2009; International Council of Nursing, 2021). Continuing education and competency requirements ensure that nurses maintain licensure and certification by staying current with the best practices, healthcare advancements, and regulatory changes (Hudspeth, 2009; Leslie et al., 2021).

Professional ethics in nursing creates a framework for professional conduct and self-supervision in nursing. Ethical principles in nursing, outlined by professional associations, demand that nurses respect patient dignity and autonomy at all stages of life (Heikkinen et al., 2006; Kangasniemi et al., 2015) and that they are accountable for their ethical practice and must continuously engage in professional development to ensure their competence (International Council of Nursing, 2021). Professional values in nursing serve as a guide in performing ethical behaviour in providing safe care (Poorchangizi et al., 2019). Ethical competence is required from nurses (Choe et al., 2022; Poikkeus et al., 2014) and it includes the characteristics of ethical awareness, moral judgement skills and willingness to do good (Kiljunen et al., 2019; Kulju et al., 2016). Thus, nurses have a responsibility to ensure that they follow the ethical codes of professional nursing in their everyday work (Kangasniemi et al., 2015; Zaghini et al., 2016).

Previous studies have described the importance of nurses' professional self-awareness of their professional ethics and emphasis on human values which are the basic elements of professional nursing (Brecher, 2014; Dehghani et al., 2016). Nurses are required to devote considerable efforts to providing high-quality care to earn and foster society's trust (Dehghani et al., 2016; Poorchangizi et al., 2019) as it determines patient satisfaction, and promotes positive health outcomes and nurses' personal and professional development (Çelik & Hisar, 2012; Ruotsalainen et al., 2020; Tabari et al., 2006). In addition, previous studies have highlighted that nurses need moral courage to notice and report actions that do not follow the required guidelines (Beckstead, 2005; Evans et al., 2006; Konings et al., 2021; Mansbach et al., 2014; Numminen et al., 2017; Sadooghiasl et al., 2018). Having weakened moral reasoning (Zaghini et al., 2016) or lower moral courage has been shown as a risk factor for negligence in professional conduct (Numminen et al., 2017; Sadooghiasl et al., 2018). In practice, improving the quality of care and preventing errors depends on nurses' adherence to the principles of patient safety (Vaismoradi et al., 2020). An effective way to prevent violations of nursing standards is to understand and avoid the factors of unsafe practice (Benton & Flynn, 2013).

2.3.2 Administrative supervision in organisations of nurses' professional conduct

Administrative supervision is concerned with the organisations' operation, its adherence to professional standards and intervening in violations or negligence of professional conduct (Figure 1). In nursing, it is conducted at the healthcare organisation level by leaders, nurse managers or administrators by monitoring and assessing professional conduct (Rothwell et al., 2021). It addresses issues that may cause ethical problems and dilemmas, based on laws, guidelines, and organizational structures, and is regulated at the national level (Koesnell et al., 2019). Nurse managers protect patient safety by supervising nurses' professional conduct according to models that are based on professional standards (Cronquist, 2013; Eisenmann, 2020; Garrett & MacPhee, 2014; Hudspeth, 2009). In addition, they maintain suitable and appropriate work, working environments and resources for the purpose of nursing practice. They are responsible for ensuring a safe, ethical work environment by overseeing quality patient care, staff welfare, and organizational operations (Aitamaa et al., 2016; Toren & Wagner, 2010). In addition, healthcare organisations ensure that the work and working do not cause excessive (unsustainable) risk of stress or harm to the employees. Nurse managers are expected to continuously ensure that ethical standards are met and to support employees' professional competence (Aitamaa et al., 2021; Devik et al., 2020).

Most violations of professional standards are handled at the organizational level, especially when they do not pose serious life-threatening risks. Organisations monitor and intervene when nurses fail to meet expected professional competencies, potentially risking patient or public safety (Brous, 2012; Kunyk et al., 2016). If such violations are identified, it is the responsibility of nurse managers and administrators to follow regulatory protocols, issue warnings, or apply sanctions (Brous, 2012; Cronquist, 2013; Currie et al., 2019; Varaei et al., 2024). More severe cases, beyond the organization's jurisdiction, are reported to regulatory bodies for further action, as managers must notify these authorities of any threats to patient safety (Cronquist, 2013; Hudspeth, 2009; Russell & Radtke, 2014).

Based on previous studies, nurse managers use certain checklists as a tool for supervising and intervening in unsafe practices in nursing (Cadiz et al., 2012, 2015; Moll, 2014). They use work-directed interventions whose aim is to reduce employees' sickness absences (Karlsson et al., 2023). These models help to address risk signs that threaten employees' ability to work and practice safety and to find solutions that promote the continuation of work as early as possible (Ministry of Social Affairs and Health, 2002). Previous studies have also addressed organizational and work environment factors that can increase the risk of negligence 2of professional conduct. These situations have been shown to involve nursing management and include employers' incapability to control ambiguous or hidden

substance abuse, lack of managerial abilities, high workloads, lack of resources and working in a hurry or while distracted when performing nursing tasks (Cleary & Duke, 2019; Tønnessen et al., 2020; Zaghini et al., 2016).

2.3.3 Authority's supervision of professional nursing

The authority's supervision targets to nursing professionals, education and qualifications, monitors healthcare organisations, and investigates serious threats to patient safety, making necessary disciplinary decisions (Figure 1). In nursing, professional supervision at the authority level is implemented by supervisory authorities such as national nursing boards or regulatory bodies (Cooke, 2006; Leslie et al., 2021; Raper & Hudspeth, 2008). Regulatory bodies have mechanisms in place to address complaints or allegations of deficient professional conduct (Gallagher & Saleem, 2022; Russell & Radtke, 2014; Worsley et al., 2020). At the national level, supervision of professional conduct in nursing is based on the statutory responsibility to protect the public, maintain public trust in the nursing profession and prevent and avoid harm, which is guided by national legislation and professional standards and ethics (Benton et al., 2014; Brecher, 2014; Garrett & MacPhee, 2014). The aim is to uphold professional standards by ensuring patient safety and high-quality care and that nurses practice ethically, competently and responsibly (Benton et al., 2014; Brous, 2012; Kunyk & Deschenes, 2019; Ritter et al., 2018).

In general, nursing regulatory bodies in different countries adopt common supervision approaches based on professional standards and legislation (Foong-Reichert et al., 2021; Garrett & MacPhee, 2014; Ritter et al., 2018). In Finland, the National Supervisory Authority for Welfare and Health (Valvira) is a part of the Ministry of Health and Social Affairs, which guides and supervises the activities of both public and private social and healthcare professionals and operational units nationwide. In addition, six regional administrative agencies (AVI) manage permit local administration and supervision (Ministry of Social Affairs and Health, 2023; National Supervisory Authority for Welfare and Health, 2023).

The professional title of a nurse is subject to licensing and regulation and is monitored by the nursing board. Nursing professionals such as registered nurses (RNs) are regulated by nursing boards, which use the disciplinary process to address violations and for to ensure patient safety (Benton & Thomas, 2021; Martin & Kaminski-Ozturk, 2022). They have the responsibility as an authority to investigate complaints against nurses, enforce disciplinary actions, and set standards for education, practice, and continuing competency (Hudspeth, 2009; Leslie et al., 2021). Notifications typically arise when employers cannot ensure patient safety due to insufficient organizational supervision or serious breaches of professional conduct threaten patient safety, in which the national supervisory authority takes the case to

investigate (Brous, 2012; Cronquist, 2013; International Council of Nurses, 2014). Thus, disciplinary processes are triggered by complaints or announcements regarding significant patient safety risks in professional practice (Brous, 2008, 2012; Cronquist, 2013; Foong-Reichert et al., 2021; Hudspeth, 2009). The majority of the formal complaints are handled by the professional nursing boards, where matters are related to the nurse's health or performance and professional conduct. The most serious matters are referred to formal disciplinary tribunals that are the only bodies with the authority to revoke licences and remove professionals' right to practice (Benton et al., 2014; Brous, 2012; Millbank, 2020; Ritter et al., 2018).

Complaints against RNs can originate from various sources such as nurse managers, organisations' administrators or other stakeholders, or other official sources such as a policy or a pharmacy, and any violation of professional legislation (Benton & Thomas, 2021; Martin & Kaminski-Ozturk, 2022). The supervisory authority considers each complaint carefully and investigates complaints that allege a violation of professional legislation (Beardwood & Kainer, 2015; Cronquist, 2013; Raper & Hudspeth, 2008). In Finland, Valvira considers serious complaints about adverse events in cases that involve severe and permanent injury to a patient or the death of a patient after a suspected medical error or due to the malpractice of a healthcare professional. Other complaints involving a lower level of risk are handled by regional administrative agencies (Ministry of Justice, 2008; Ministry of Social Affairs and Health, 2023.)

Case investigation officials employed by the supervisory authority have extensive access to information and the right and duty to gather information about the suspected nurses so that nursing boards can review and make appropriate decisions (Brous, 2012; Ministry of Justice, 2008). In addition, the authorities evaluate in detail the nurses' ability to work or continue working in their profession as well as the possible legal consequences with regard to the nurses' professional rights (Kunyk & Deschenes, 2019). The supervisory authority investigates whether nurses have violated patient safety and thus, professional legislation. They decide whether a nurse is professionally competent and ethical, and provides safe care (Cooke, 2006; Gallagher & Saleem, 2022; Leslie et al., 2021; Raper & Hudspeth, 2008; Russell & Radtke, 2014). In cases where neglect or violation of professional standards is found, a disciplinary decision may be imposed on a nurse (Brous, 2012; Foong-Reichert et al., 2021; Kunyk & Deschenes, 2019).

In Finland, the Board for the Supervision of Health Care Professionals can sanction nursing professionals if they violate professional legislation with temporary, permanent, or indefinite decisions that restrict, suspend or remove their professional rights to practice, or issue a written warning (Ministry of Justice, 1994, 2008). In addition, the supervisory authority can limit a nurse's professional right to practice or prohibit a nurse from using the professional title also when the nurse is assessed to be

unable to practice in the profession without endangering patient safety due to a health condition or a lack of professional skills. Also, in this context, the nurse's health may be examined. (Ministry of Justice, 1994; Ministry of Social Affairs and Health, 2023.)

Previous studies have demonstrated disciplinary actions for nurses such as reprimands, suspensions, revocation of licence or a combination of these sanctions (Balestra, 2012; Brous, 2012; Cronquist, 2013; Flook, 2003; Garrett & MacPhee, 2014; Raper & Hudspeth, 2008). The vast majority of nurses are highly skilled and conscientious professionals and the number of those who represent a cause for concern appears to be extremely small (Stone et al., 2011). Based on the previous studies, the share of nurses who have been subject to disciplinary action compared to the total national nursing population is quite similar in different countries. For example, from 2008 to 2009 in Australia, the complaints against nurses concerned 0.25 % of the nurse population according to the Nurses and Midwives Board of Western Australia (Pugh, 2011). Meanwhile, nurses who were subject to investigations by the Nursing and Midwifery Council (NMC) amounted to 0.2 % of nurses in the United Kingdom (UK) between 2008 and 2009 (Nursing and Midwifery Council, 2009). In one Canadian province, less than 0.5 % of nurses were disciplined between 2007 and 2017 (Kunyk & Deschenes, 2019). During the year 2019, in the US the rate of disciplined nurses was about 0.23–0.24 % of the whole nursing population (Zhong et al., 2022) which is also in line with the statistics of the US National Council of State Boards of Nursing (National Council of State Boards of Nursing [NCSBN], 2022).

The number of disciplined registered nurses in Finland complies with the numbers found in other countries. According to the supervisory authorities' reports, the Finnish board annually issued just under 40 disciplinary decisions such as licence revocations or restrictions for registered nurses between 2011 and 2023. This concerned approximately 0.3 % of the Finnish registered nurses' population as, in 2023, there were in total 155,245 registered nurses in Finland (Finnish Nurses Association, 2020b; National Supervisory Authority for Welfare and Health, 2024) (Figure 2).

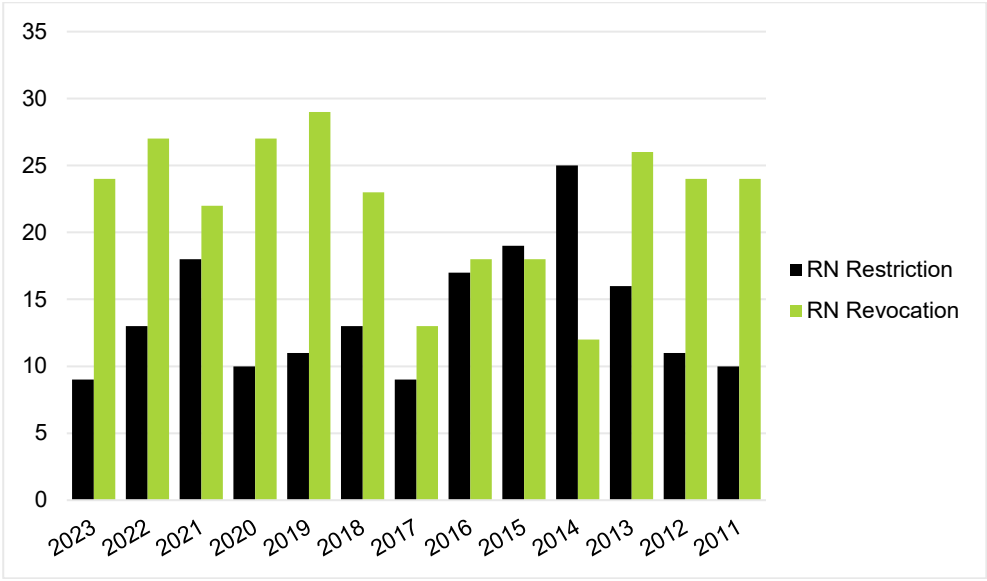

Figure 2. Restrictions and revocations of registered nurses' professional rights to practice between 2011 and 2023 in Finland according to Valvira statistics (National Supervisory Authority for Welfare and Health, 2024).

2.4 Summary of the literature

Professionalism is an idea or goal that defines how people in a profession should act. Professional conduct is an observable and measurable form of a concrete realization of this idea. In nursing, professionalism involves critical thinking and decision-making in clinical situations, requiring the application of up-to-date knowledge and ethical judgment. Professional conduct is established through education and certification, which equip nurses with the necessary knowledge, skills, and commitment to maintain high professional standards. Professional conduct in nursing is shaped by the nurse's role in society, requiring a combination of professional competence, work ability, self-supervision, and adherence to ethical standards. Nursing professionals embody and implement professional conduct, ensuring consistency in standards and objectives within the profession, and contributing to the overall workplace environment and well-being. Since professional conduct can be observed, measured, and improved, it is the focus of this study.

Deficient professional conduct in nursing undermines patient safety and quality of care, yet its nature and contributing factors remain poorly understood. Defined as the failure to meet professional and ethical nursing standards, deficient professional conduct includes violations or neglect of regulations and guidelines due to professional incompetence or diminished capacity. Factors such as physical or

mental health issues, unprofessional behaviour, insufficient clinical knowledge, or workarounds contribute to this deviation from accepted practices. This sub-standard performance poses risks not only to patient care but also to the nurses' careers, the organisation, and the nursing profession as a whole. Deficient professional conduct erodes public trust and respect for nursing, and it can have severe consequences for healthcare teams and institutions. Reducing its occurrence requires identifying the influential factors and addressing the root causes. Research into this issue is critical to ensuring safer, higher-quality care.

Supervision of professional nursing is essential to protect the public, ensuring patient safety and quality of care through professional standards and regulation. Nurses are primarily responsible for maintaining their professional conduct via self-supervision. At the administrative level, nurse managers and leaders oversee professional conduct and intervene in cases of violations. Serious cases are addressed by supervisory authorities, who may impose sanctions or disciplinary actions. However, there is limited understanding of deficient professional conduct in nursing and related supervision at different levels. Previous research in this area is scarce and definitions of deficient conduct and comprehensive data on complaints or factors influencing allegations in nursing are lacking. More research is needed to clarify these gaps.

3 Aims

This study aimed to explore and synthesize the knowledge of nurses' deficient professional conduct and its supervision at the nursing administration and supervisory authority levels. The ultimate aim is to produce new knowledge that allows detecting nurses' deficient professional conduct as early as possible and intervening in it time before patient safety is compromised.

To achieve the aim of this study, the following research questions were addressed:

I) What is the deficient professional conduct of nurses like? (Papers I, II and IV)

II) What kind of supervision do nurse managers apply to nurses' professional conduct? (Papers III and IV)

III) Who are the nurses who encountered disciplinary decisions by the supervisory authorities? (Papers I and II)

IV) What kinds of disciplinary decisions does the supervisory authority make on nurses' deficient professional conduct? (Papers I and III)

4 Materials and Methods

This multi-method study (Tashakkori & Teddlie, 2010; Vivek & Nanthagopan, 2021) consisted of two phases. The first, a synthetical phase, was an integrative review of previous studies (Paper I) and the second, an empirical research phase, included two document analysis (Bowen, 2009; Moilanen et al., 2022) using quantitative (Papers II and III) and qualitative methods (Paper IV) (Figure 3).

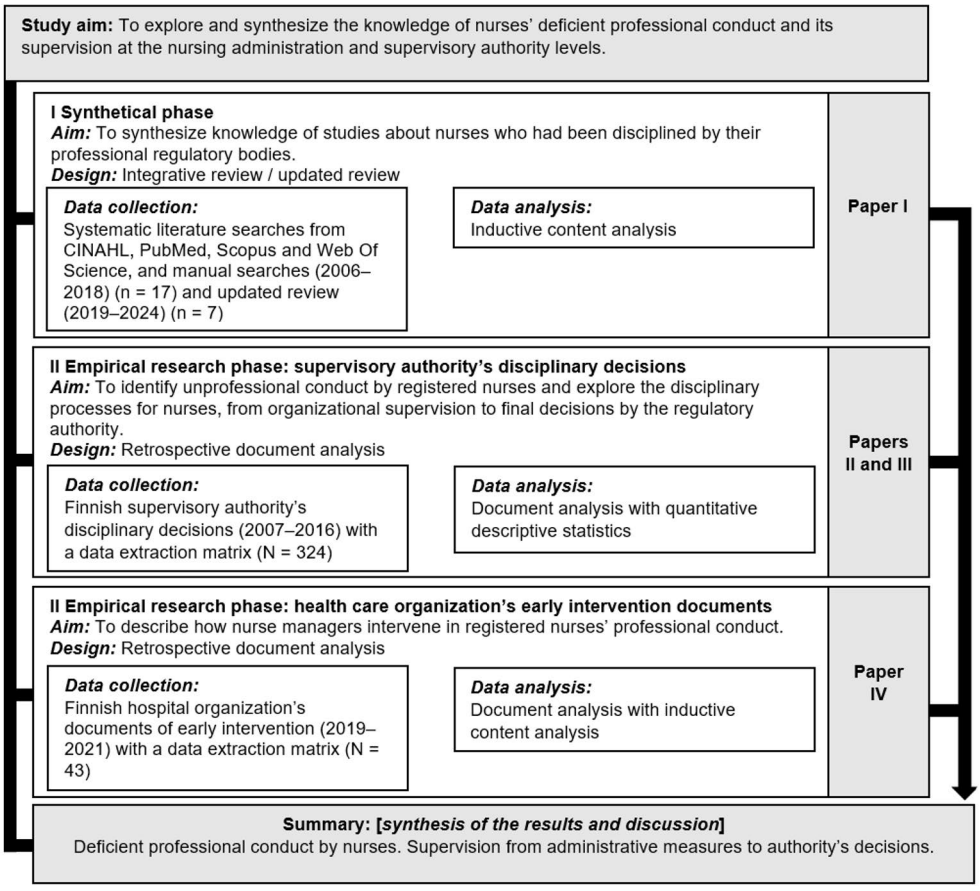

Figure 3. Study phases and papers.

An integrative review synthesized previous research on nurses who were disciplined by their regulatory bodies. It was needed due to the fragmented nature of previous knowledge available on the topic (Paper I). Deficient professional conduct by nurses was described empirically with a document analysis due to a lack of definition of the concept based on previous literature (Papers II and IV). In addition, the disciplinary decisions for nurses were described based on the previous studies (Paper I) and the description was further advanced based on the national supervisory authority's disciplinary decisions as the previous knowledge was scarce (Paper III). As knowledge about nurse managers' supervision measures triggered by nurses' deficient professional conduct was narrow based on the supervisory authority's documents and previous literature, the knowledge base was supplemented with the description of nurse managers' early interventions for nurses' professional conduct (Paper IV).

4.1 Integrative review (Paper I)

An integrative review (Whittemore & Knafl, 2005) with inductive content analysis (Graneheim & Lundman, 2004) synthesized previous knowledge about nurses' who have been disciplined by their professional regulatory bodies (Paper I). The integrative review followed the five-stage protocol according to which the problem was identified, systematic literature searches were conducted, data was selected, evaluated and analysed and results and conclusion were presented (Whittemore & Knafl, 2005).

4.1.1 Data search, selection and appraisal

At first, the topic of the literature review was identified, and research questions were created based on preliminary literature searches (Whittemore & Knafl, 2005). The review was structured according to the preferred reporting items for systematic reviews and meta-analysis (PRISMA) instructions (Moher et al., 2009). The literature searches were conducted in two phases; the integrative review was conducted in 2018 and an updated review in 2024. Systematic electronic searches were conducted in the scientific CINAHL, PubMed, Scopus and Web of Science databases in both phases based on the predefined inclusion and exclusion criteria (Table 2).

Table 2. Inclusion and exclusion criteria for data selection in integrative review.

Inclusion criteria	Exclusion criteria
Focused on nurses (nursing professionals).	Focused on nursing students or other health care professionals.
Focused on professional regulation related to professional discipline or licensure revocation.	Focused on nursing education, certification, registration or licensure.
Focused on authority level of disciplinary actions against nurses.	Focused on issues other than the health care context or patient safety.
	Not concerning nursing practice.

Search terms were formulated based on the preliminary searches and a consultation with an information specialist. The search phrases consisted of MeSH terms, free words, and their combinations. To ensure the coverage of relevant studies, in the integrative review, manual searches were also conducted by screening the reference lists of the selected studies and three scientific journals (*Nursing Ethics*, *Journal of Nursing Law* and *Journal of Nursing Regulation*). The limitations set for the data included that the study was published in English, an integrative review published between 2006 and 2018 and, in the updated search, between 2019 and 2024, published in a peer-reviewed scientific journal and had an abstract available. A total of 2,047 studies were reviewed and based on the 70 abstracts, 39 studies were selected and reviewed by their full texts. Altogether, 18 studies were included. In total, these included 11 studies from the integrative review, six studies from the manual searches in the integrative review and seven studies from the updated review, resulting in 24 included studies (Table 3).

Table 3. The literature searches for the integrative review and updated searches concerning the professional regulation of nurses, disciplinary actions or licensure revocation (2006-2024).

	Search terms	(nurse OR nurses) AND (“professional regulation” OR “employee discipline” OR “professional discipline” OR “license revocation”)				
	Integrative review (2006-2018) / updated review (2019-2024)					
	Database	**Items found**	**Papers included based on:**			**Selected**
Electronic search			Title	Abstract	Full-text	
	CINAHL	646 / 349	59 / 24	17 / 24	17 / 12	7 / 7
	PubMed	530 / 101	52 / 4	14 / 1	6 / 1	3 / -
	Scopus	203 /82	40 / 11	12 / -	3 / -	1 / -
	Web of Science	59 / 77	17 / 3	2 / -	- / -	- / -
	Total	**1,438 / 609**	**168 / 42**	**45 / 25**	**26 / 13**	**11 / 7**
Manual search	Reference lists of the selected studies					1 / -
	Selected journals	1,986				5 / -
	Total	**4,033**	**210**	**70**	**39**	**24**

The included studies were structured according to the PRISMA guidelines by their aim, design, methods, settings, data and key findings (Paper I, Table 1, and Appendix 3). The quality of the selected full texts was evaluated by two independent researchers during the integrative review (Paper I, Table 1) and by one during the updated literature searches (Appendix 3) with the Mixed Methods Appraisal Tool (MMAT) (Pluye et al., 2011). The tool includes two screening questions for all types of studies, four for different types of studies and three for the mixed method parts. Every 'yes' answer was given one point. The total score of the methodological quality of the included papers ranged from one to six points. All the included studies met at least two criteria, and none was excluded based on the quality score.

4.1.2 Data analysis and description of the data

Data from the integrative review were analyzed following the inductive content analysis method (Graneheim & Lundman, 2004). At first, to get a preliminary understanding of the phenomenon, all included studies were read through several times. The content of the studies was tabulated. Data were extracted based on the research questions that focused on the characteristics of disciplined nurses, reasons for disciplinary actions and the disciplinary actions imposed on nurses. Subsequently, meaning units, such as a word or groups of words were combined. The groups were created by comparing the meaning units with each other and grouping them based on similarities. The produced groups were combined into descriptive subcategories and after that, into the main categories which were named after the descriptive content and research questions.

The 24 included studies were published in English between 2007 and 2024. The studies were conducted in the USA (n=18), two in the UK and one each in Australia, Brazil, Canada and Israel. There were 16 quantitative studies that were cross-sectional, retrospective, or longitudinal retrospective cohort studies with statistical analysis, post hoc analysis, or used a comparative descriptive study design. Three qualitative studies were conducted with the content analysis, discourse analysis and document analysis methods. Two were mixed-method studies conducted with descriptive statistics and content analysis. In addition, three included studies were case-based reviews concerning disciplinary procedures against nurses in the USA (Paper I, Table 1, and Appendix 3). The included studies covered complaints or allegations against nurses, professional misconduct, disciplinary actions for nurses, boundary violations, practice breakdown, documentation-related infractions, nurses' prior criminal convictions, and closed claims with insured nurses. The results of both the integrative review and the updated review are presented as a synthesis.

4.2 Document analysis of supervisory authority's decisions (Papers II and III)

A retrospective document analysis with a quantitative descriptive design was conducted on the national supervisory authority's disciplinary decisions that were set for registered nurses. The findings of this study phase have been reported in two publications (Papers II and III). The first document analysis (Paper II) identified unprofessional conduct among registered nurses that had led to the supervisory authority's disciplinary decisions. The second document analysis (Paper III) explored the disciplinary process for nurses from supervision at the organization level to the supervisory authority's disciplinary decisions.

4.2.1 Research environment

Empirical research was carried out at the premises of the Finnish National Supervisory Authority for Welfare and Health. Data were collected from closed disciplinary cases from the most recent 10 years of which the final disciplinary decisions were available at the time of data collection, and as a result, the study comprised data from 1 January 2007 to 31 December 2016. Each year, the board of the Finnish supervisory authority issues approximately 200 decisions relating to healthcare professionals on serious threats to patient safety. Of the decisions, around 20 % relate to registered nurses which equates approximately to 0.3 % of the total registered nurses' population in Finland. 325 disciplinary decisions that were set for registered nurses between 2007 and 2016 were submitted by the officials at the Finnish National Supervisory Authority for Welfare and Health to the study.

4.2.2 Selection of documents and data description

The data were collected using a pre-developed electronic data extraction matrix, whose variables were based on previous research and literature on the topic (Paper I) (Bowen, 2009; Moilanen et al., 2022). The data extraction matrix was developed during the pilot phase of the data collection after 68 documents had been reviewed. The structure and the content of the applicable fields for data collection of the extraction matrix were evaluated by ten percent of the reviewed original documents (n = 23). Based on this, the variables in the original matrix were condensed from 64 to 34. The content and correctness of each extraction matrix collected were double-checked by two researchers. The final data extraction matrix included 34 fields that covered information about the demographics of registered nurses, complaints concerning their professional conduct, and authority's decisions for them. Data collection was carried out with the inclusion and exclusion criteria (Figure 4).

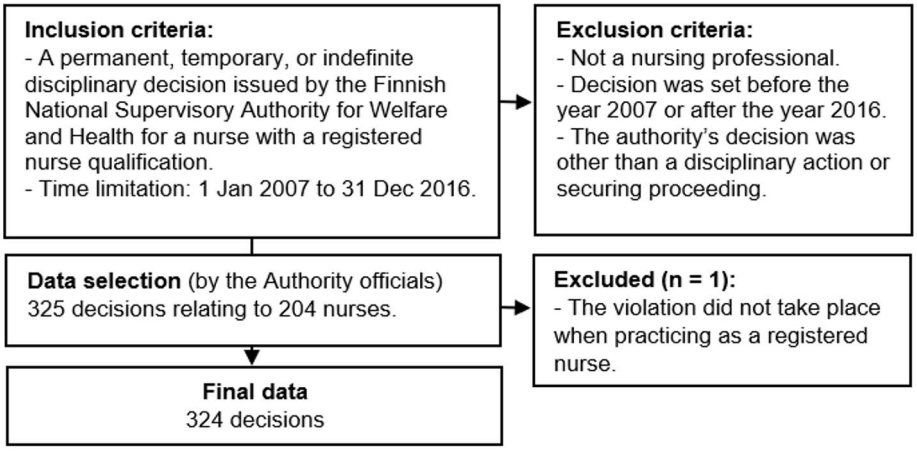

Figure 4. Flow chart of data collection of supervisory authority's documents (Modified from Paper II).

The final data consisted of 324 disciplinary decision documents relating to registered nurses between 2007 and 2016. The disciplinary decision documents included a typed main decision document by the supervisory authority and typed or handwritten attachment appendices such as an investigation or reports by managers or nurses themselves. The data were collected mainly from the supervisory authority's decision documents and were additionally supplemented with information from the attachment appendixes. The information was transferred from the original documents manually to the electronic extraction matrixes. Several decisions relating to the same complaint could concern one nurse, in which case these were combined into one disciplinary process.

4.2.3 Quantitative data analysis

The quantitative data analysis was conducted with descriptive statistics (Bowen, 2009; Moilanen et al., 2022). The reporting of the results was guided by the phases of document analysis according to Moilanen et al., 2022 and followed by the systematic reporting guidelines (International Committee of Medical Journal Editors [ICMJE], 2024). The disciplinary decisions for 204 registered nurses were reviewed to describe unprofessional conduct by nurses (Paper II). To explore the disciplinary processes for registered nurses (Paper III), 296 disciplinary decisions were reviewed, as 28 disciplinary decisions with the same outcome were combined into one. In this study, 31 out of the 34 fields in the extraction matrix were analyzed.

The contents of the extraction matrixes were given numeric variables. The SPSS Statistics® 25.0 software (IBM Corp, New York, USA) was used to produce

descriptive quantification of the data. The results were reported according to the rate of registered nurses and the rate of disciplinary decisions. Categorical variables were examined as frequencies and percentages in the explored variables and continuous variables and as means and ranges for the time- and year-based variables. Statistically significant associations were addressed between the registered nurses' demographics and primary reasons for the complaints with Pearson's chi-squared test correlation coefficient. In addition, associations of statistical significance were addressed between the primary reasons for the complaints and the coexisting reasons that were reported in the documents (Paper II). Statistical significance associations with Fischer's exact test were addressed between the reasons for the complaints, nurses' demographics, and disciplinary decisions (Paper III). Statistical significance was indicated as a *p*-value of 0.05.

4.3 Document analysis of early interventions by nurse managers (Paper IV)

A retrospective document analysis with qualitative design (Bowen, 2009; Doyle et al., 2020; Moilanen et al., 2022) described nurse managers' supervision of nurses' professional conduct based on early intervention documents (Paper IV). The data enabled the description of early concerns about nurses' professional conduct and early intervention methods employed by nurse managers whose descriptions were limited in the previous study phase. The study follows the seven steps of document analysis (Moilanen et al., 2022).

4.3.1 Research environment

Empirical research was carried out in one Finnish university hospital based on the purposeful sampling (Moilanen et al., 2022). The participating organisation was selected as they used a model of early intervention discussion that helped staff and supervisors to identify possible early risks in an employee's ability to work, support their coping with and continuation of work and reduce their sickness absences. To get as fresh a sample of the documents as possible, data were collected from documents on the early intervention and support programme based on discussions held from the 1st of January 2019 to the 31st of December 2021 between registered nurses and their managers. The administrators provided this study with 45 documents concerning early intervention and support between 2019 and 2021.

4.3.2 Selection of documents and data description

Data collection was conducted using a pre-formed data extraction matrix (Bowen, 2009; Kaae & Traulsen, 2015; Moilanen et al., 2022) that was based on earlier literature (Cadiz et al., 2015; Cleary & Duke, 2019; Kangasniemi et al., 2022; Maurits et al., 2016; Moilanen et al., 2021; Tønnessen et al., 2020) and the form of the early intervention and support programme. The data extraction matrix included three fields that aimed to collect information about issues that influence nurses' professional conduct, issues that are related to nurses' ability and competence to practice their profession and managerial procedures that were used to supervise and support nurses' coping and staying at work.

The structure of the data extraction matrix was evaluated with pilot testing after five documents were reviewed (Moilanen et al., 2022). The information was transferred manually from the original documents to the electronic data collection frame. The early intervention documents were structured, typed or handwritten paper forms. The documents were filled out by both the affected nurses and nurse managers and, in some cases, only by the managers. Pre-defined inclusion and exclusion criteria directed the data collection. Two documents were excluded based on the inclusion and exclusion criteria. The final data consisted of 43 early intervention and support documents and each document included between one and 12 pages of text, and thus, the final data consisted of 167 pages (Figure 5).

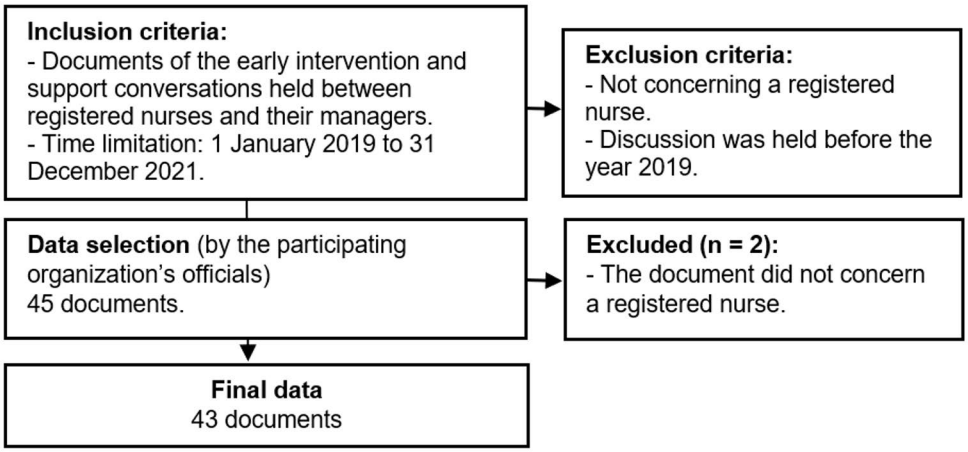

Figure 5. Flow chart of data collection of health care organization's documents.

4.3.3 Qualitative data analysis

The data contained by the early intervention documents were analyzed using inductive content analysis (Graneheim & Lundman, 2004). At first, the data extraction was read through to achieve a preliminary understanding of the topic. The analysis was conducted using the NVivo12 data analysis program (Version 12.6.1.970 Plus, Co. QSR International). The data consisted of the analysis units that were original expressions (n = 1,261) including words, groups of words, parts of a sentence or whole sentences. With the program, the analysis units were organized and quantified for frequencies. The analysis units with similar content were grouped together. The groups with similarities were clustered together into sub-categories (n = 23), which were subsequently abstracted into seven categories and further into two main categories (Bowen, 2009; Graneheim & Lundman, 2004). The main categories were concerns about nurses' professional conduct and nurse managers' early intervention methods. The reporting of the results was guided by the Standards for Reporting Qualitative Research (SRQR) checklist (O'Brien et al., 2014).

4.4 Synthetisation of the results

To find an answer to the ultimate aim of the study, the findings of the four sub-studies were synthesised. The findings were combined deductively based on similar descriptions from each paper according to the research questions (Kyngäs et al., 2020; Kyngäs & Kaakinen, 2019), which resulted in a comprehensive description of the nurses' deficient professional conduct and its supervision at different levels. The synthetisation produced descriptions of the deficient professional conduct by nurses (Papers I, II and IV), nurse managers' supervision of nurses' professional conduct (Papers III and IV), nurses who encountered disciplinary decisions (Papers I and II) and the supervisory authority's disciplinary decisions on nurses' deficient professional conduct (Papers I and III). The findings are presented in accordance with the supervision process, starting with a description of the types of nurses' deficient professional conduct, nurse managers' early intervention and supervision and ending with the supervisory authority's disciplinary decisions.

4.5 Ethical considerations

Good scientific practice and responsibility were followed throughout this study. This meant that the study was based on the relevant scientific literature and that it was systematically and carefully designed, data were collected and analyzed, and the findings were reported with respect while ensuring the protection of the anonymity and privacy of the target group based on relevant guidelines (ALLEA - All European Academies, 2023; Finnish National & Board on Research Integrity, 2023).

The ethical considerations of this study concerned research permission, the sensitivity of the research topic and the relevance of the used methods. The research topic is justified based on previous literature and the knowledge gap it shows, as well as the importance of the topic to patient safety, nursing practice and nursing science. The sensitivity of the topic is related to the fact that the topic deals with very personal and unfavorable situations for nursing professionals. Overall, based on national legislation, this type of document analysis study does not require an ethical review statement from an ethical committee or the consent of the target groups (ALLEA - All European Academies, 2023; Finnish National Board on Research Integrity, 2019).

In the integrative review (synthetical phase), the research process was diligently planned and described. The used search strategy and data analysis fulfilled the criteria for a reliable method (Graneheim & Lundman, 2004). The literature searches were structured according to the preferred reporting items for systematic reviews and meta-analysis (PRISMA) instructions (Moher et al., 2009) (Paper I, Table 1 and Appendix 3). The findings of the included studies were reported based on honesty and originality. References of the selected studies were cited faithfully to the original data and the authors.

For the empirical research phases II, the research permits were obtained from the Finnish Supervisory Authority for Welfare and Health (V/73495/2017) (Papers II and III) and from one Finnish public university hospital (the participating organization's research diary number is 207/2021) (Paper IV). The scientific use of protected documents requires a structured study design with systematic and transparent research methods (Rasmussen et al., 2012). The explanation for the use of atypical documents for research purposes was that those documents can produce a new, better or unique description of the phenomenon of interest (Gibson & Brown, 2009; Moilanen et al., 2022). The ethical justification of the chosen research topic was based on an understanding that such sensitive topics may be approached and comprehensive descriptions may be produced on them for research purposes (Rasmussen et al., 2012).

In accordance with the research permits for the supervisory authority's documents, the researcher was bound by non-disclosure agreements when using protected documents. This enabled considering the sensitivity of the research topic, and taking this into account, the protection of confidentiality, anonymity and privacy of the target groups (Papers II and III.) Respect for these ethical issues was ensured within the research process (Finnish National Board on Research Integrity, 2019). This was important to consider when reporting findings about harmful and atypical descriptions related to nurses' professional conduct in a manner free from blaming or criticizing. According to the research permits the data collection takes place at the premises of the supervisory authority and the participating organisation. The original

documents included identifying information on the target group, which was pseudonymized during data collection by the researchers, which means that the identification was re-coded and anonymized (European Union, 2016).

The research permits for the healthcare organization's documents included limitations for collecting certain demographic information of the target group. In addition, an internal announcement about the research was given to the organisation to allow stakeholders to withdraw documents concerning them from the research (Finnish National Board on Research Integrity, 2019). Data were provided for research as anonymized (European Union, 2016) without any identifying data on the target group with the exception of the nurses' professional qualifications. Regarding both data collection rounds in both research phases, photographing, copying or scanning the original documents was not allowed. The research data were protected with a password in electronic storage. The data from the supervisory authority were stored at the university and the data from the health care organisation were only used in this study.

5 Results

This result section answers the research questions according to the synthesis of the findings performed based on the sub-studies. These are described according to the disciplinary process from nurse managers' early intervention to the supervisory authority's disciplinary decisions. At first, deficient professional conduct by nurses is described based on the findings of papers I, II and IV. The supervision by the nursing management of nurses' professional conduct is presented according to nurse managers' early intervention methods (Paper IV) and the organization's supervision procedures (Paper III). The nurses who encountered disciplinary actions are described by their demographics based on the knowledge obtained in previous studies (Paper I) and the national supervisory authority's disciplinary decisions on nurses (Paper II). The description of the authority's supervision for nurses' deficient professional conduct is based on the knowledge obtained in previous studies (Paper I and updated literature searches) and in national documents (Paper III).

5.1 Deficient professional conduct by nurses (Papers I, II, IV)

Deficient professional conduct by nurses is defined based on concerns about nurses' professional conduct in early intervention documents (N = 43) (Paper IV), the reasons for the complaints against nurses in Finnish supervisory decisions (N = 324) (Paper II) and the reasons for disciplinary actions imposed on nurses described in previous studies (N = 24) (Paper I and updated review). Deficient professional conduct included nurse-based, patient-directed and organisation-directed, working-community-directed and supervisory-authority-directed deficient professional conduct (Table 4).

Table 4. Deficient professional conduct by nurses (based on the results of Papers I, II and IV).

Deficient professional conduct	Sub-categories	Sub-studies
Nurse-based deficient professional conduct	- Reduced ability to work - Unprofessional working behaviour - Nursing incompetence - Substance abuse	Papers I, II, IV
Patient-directed deficient professional conduct	- Abuse toward patients - Mistakes in nursing practice - Risk to patient safety	Papers I, II, IV
Organisation- and working-unit-directed deficient professional conduct	- Violence toward staff - Unprofessional behaviour - Violence toward organisation - Negligence of employer's rules	Papers I, II, IV
Supervisory-authority-directed deficient professional conduct	- Neglect of professional standards and guidelines - Unlicenced or falsified licenced practice - Neglect of previous authority's agreement	Papers I, II

Nurse-based deficient professional conduct (Papers I, II and IV)

Based on the findings, nurse-based deficient professional conduct included reduced ability to work, unprofessional working behaviour and nursing incompetence. Based on the early intervention documents, early concerns about nurses' professional conduct were linked to their work-related well-being and ability to work. The nurses had personally raised a concern about whether their **reduced ability to work** would influence their ability to work and cope with certain nursing practices. In addition, nurses' reduced work motivation or commitment to work had also raised early concerns in their managers. Some nurses had challenges in managing work-life balance (Paper IV) (Figure 6).

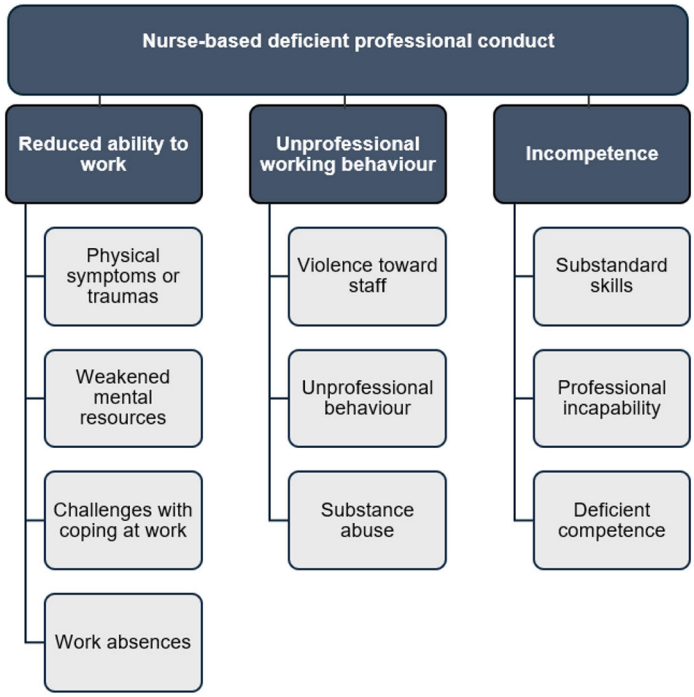

Figure 6. Nurse-based deficient professional conduct (Papers I, II and IV).

Nurses' ability to work was weakened by physical factors, such as long-term physical symptoms, traumas, or symptoms caused by the work environment which affected their work. In addition, the nurses' deficient mental health resources affected their work through work burnout, sleeping problems, depression and anxiety. Some nurses had challenges in coping at work due to fatigue, stress, burden and overloading or memory problems. This could be reflected in increased sickness absences that were recognized by their nurse managers as early signs relating to the nurses' poor well-being. (Paper IV). Similarly, one fifth of Finnish nurses (21 %) subject to disciplinary measures were mentioned to have reduced ability to work during their disciplinary process. For a smaller share of nurses (14 %), the main reasons for the complaint included a decline in mental health condition or a memory problem. Most of the nurses (82 %) were reported to have a care relationship with some social and healthcare services such as substance abuse, occupational healthcare, psychiatric or social services (Paper II).

Both previous studies (Paper I and updated review) and disciplinary decisions (Paper II) contained reports of nurses' **unprofessional working behaviour**. Nurses had committed acts of violence towards other staff and behaved inappropriately towards customers and other staff at the workplace. Nurses' substance abuse was the most reported type of unprofessional behaviour (Paper I and II) as it was the main

reason for almost half of the disciplinary cases in Finland (43 %) (Paper II). Almost one fifth of the disciplined nurses were reported to have a substance abuse disorder or dependence (19 %). Based on previous studies, nurses misused or worked under the influence of alcohol, drugs or chemicals such as medicines. Substance abuse was reported in previous studies to be associated with inaccurate medication amounts and waste errors. In addition, nurses' substance abuse could lead to criminal behaviour such as writing or presenting illegal prescriptions and procuring medication for themselves or a third party, using stolen drugs for personal use, selling drugs, and committing acts of violence while working under the influence of substances. (Paper I and updated review). However, based on the Finnish data, almost every disciplinary case was somehow related to nurses' substance abuse (96 %) even though it was not the main reason for the complaints filed against them. Substance abuse influenced issues such as the nurses' working, coming to work, or spending time at the workplace under the influence of substances (Paper II).

Some of the disciplined nurses in Finland were reported to have demonstrated **nursing incompetence** (Paper II), which was also reported in previous studies (Paper I and updated review). This included descriptions of nurses' substandard nursing skills or incapability to carry out nursing tasks. In addition, based on the early intervention documents (Paper IV), serious problems with the nurses' professional conduct, such as the implementation of patient care by the nurses' raised concerns among their colleagues and managers. This incompetence emerged as nurses' incorrect working, deficiency in medication administration or the use of health technology or equipment, or a lack of basic skills in nursing practice.

Deficient professional conduct directed to patients and patient care (Papers I, II and IV)

Based on the findings, patient-directed deficient professional conduct included the abuse of patients, mistakes in nursing practice and risk to patient safety. The **abuse toward patients** referred to patient integrity violations by nurses such as the neglect of patients' confidentiality and privacy. Nurses also abused patients mentally or physically or violated professional boundaries in patient relationships. They stole patients' belongings, such as money or medications (Paper I and updated review). The same was mentioned in a few Finnish disciplinary decisions (1 %) (Paper II) (Figure 7).

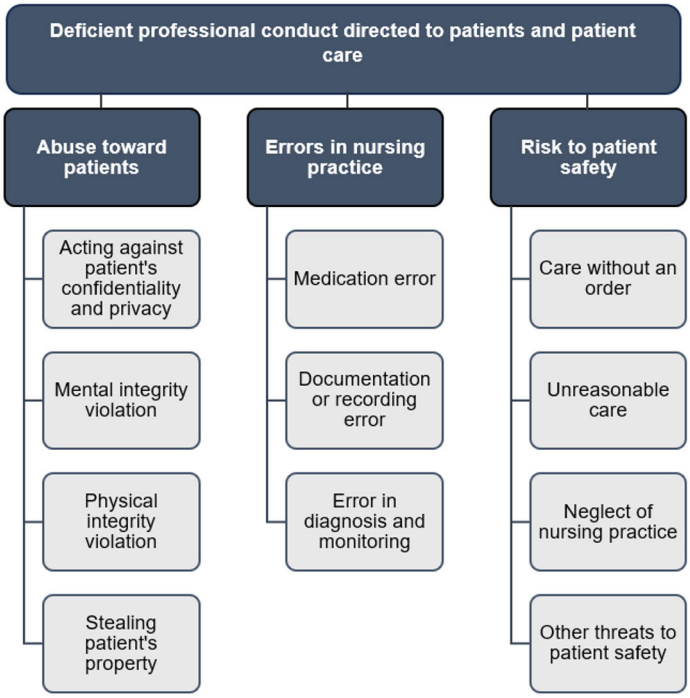

Figure 7. Deficient professional conduct directed to patients (Papers I, II and IV).

Errors in nursing practice were reported in the previous studies (Paper I and updated review), complaints against the nurses (Paper II) and early intervention documents (Paper IV) (Figure 9). The errors in nursing practice refer to neglecting nursing tasks, making deficient patient records or documentation or falsifying documents. In addition, medication administration errors and a negligence of patient monitoring (Papers I, II and IV), or diagnosis and treatment without reason or against a given order were reported (Paper I and updated review). Nurses were reported to demonstrate deficient professional conduct in nursing practice that posed a **risk to patient safety**. These included the provision of care without a physician's order, unreasonable care, and the neglect of nursing practice. In addition, some nurses committed other acts threatening patient safety (2 %) (Papers I, II and IV).

Deficient professional conduct directed organisation and working unit (Papers I, II and IV)

Nurses' deficient professional conduct directed to the organisation, working community or unit was also addressed. Previous studies addressed **violence toward colleagues and the organisation,** which included aggressive behaviour of nurses

against their colleagues (Paper I). In addition, the primary reasons for complaints against Finnish nurses included descriptions of the violence against the organisation and working community. Violence toward the organisation was also addressed in the Finnish authority's documents; one third of the nurses had been stealing their employer's property such as medications (32 %) (Paper II) (Figure 8).

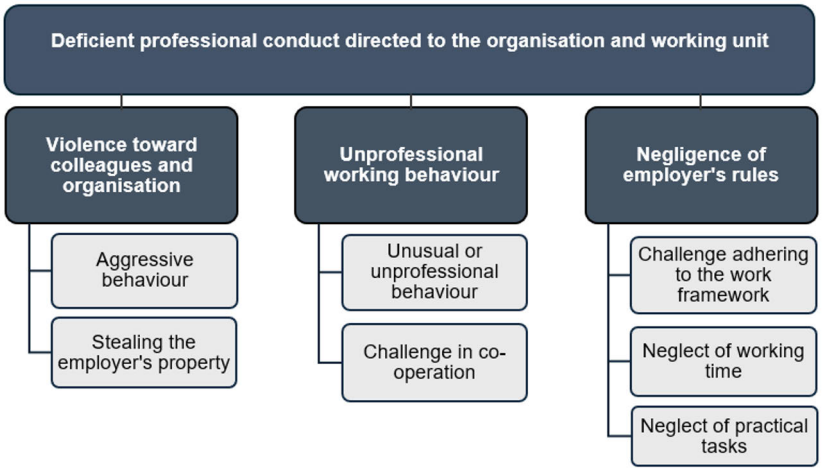

Figure 8. Deficient professional conduct directed to the organisation and working unit (Papers I, II and IV).

Based on the previous studies, nurses were committed to risky behaviour such as **unprofessional working behaviour** in the working community (Paper I). In addition, according to early intervention documents, nurses' unusual or unprofessional working behaviour in working communities raised concerns with their colleagues. Several nurses had difficulties with the atmosphere at work or had found it challenging to work with other staff (Paper IV).

Deficient professional conduct directed to the organisation also included **negligence of the employer's rules.** Concerns about nurses' professional conduct included challenges adhering to the work framework (Paper IV). This was related to the ability to manage shift work or challenges to meet the conditions required by the work unit and the nature of the work. Working environment issues were related to the physical working environment with difficulties caused by large facilities, with a high number of equipment and long distances, indoor air problems or working in isolation chambers. In addition, the neglect of the organization's practical rules was described in Paper I and in the national authority's decision documents as the neglect of practical guidelines, such as the neglect of nursing practice, structures or working time (Paper II).

Deficient professional conduct directed to the supervisory authority (Papers II and II)

Nurses' deficient professional conduct was also directed to the supervisory authority. In previous studies, this was reported to refer to the **neglect of professional standards and guidelines** which emerged as nurses working without a professional license or working **unlicensed under a revoked or falsified** license (Paper I and updated review). In addition, disregard of the professional rules was also reported among Finnish nurses, referring to the **neglect of previous authority's agreement**, for example, the obligation to declare the current working position for the authority every time when changing a working place (Paper II).

5.2 Administrative supervision of nurses' professional conduct by nurse managers (Papers III and IV)

The administrative supervision of nurses' professional conduct is described according to nurse managers' early interventions (Paper IV) and nurses' actions sanctioned by organizations (Paper III).

Nurse managers' early interventions for nurses

The early intervention was applied as the supervision method by nurse managers in situations where concerns had been raised about the nurses' professional conduct (Paper IV). The nurses' current situation was investigated by defining their current working arrangements and recognizing their strengths, and the factors enabling and preventing their work (Figure 9.)

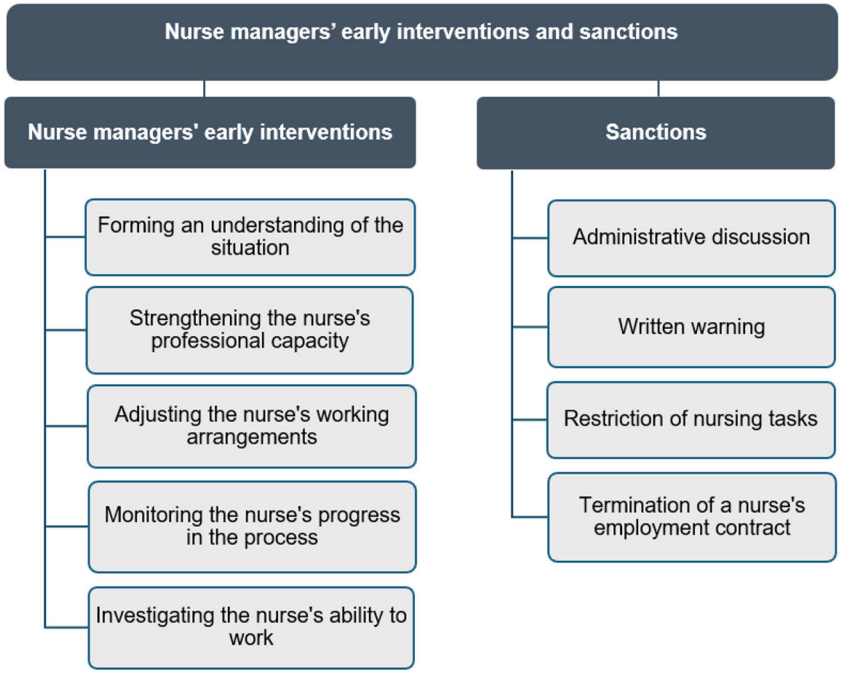

Figure 9. Nurse managers' early intervention and sanctioned actions (Papers III and IV).

The early intervention discussions were based on respect, understanding and skilful communication, openness and trust. The nurses reported supportive factors in their lives, including hobbies, rest, social contacts and a supportive working community. Nurse managers often recognized the nurses' good professional competence. In some cases, they had not noticed the early signs of the nurses' reduced ability to work (Paper IV).

Based on the early intervention documents, the nurses and their managers set a goal and draw up a shared plan for the early intervention process to find appropriate solutions. The plans were primarily based on the nurses' individual needs and wishes about changes to their working unit, practices, or working hours. The nurses' working arrangements were altered to support their work. The nurses' professional capacities were strengthened by providing them with supportive training and re-education, and by referring them to the necessary supportive services. Nursing tasks were also restricted, or re-training was organized if needed. The nurses' progress in this process and performance at work were monitored by their managers with follow-up meetings and close collaboration with occupational health care services. The nurses were also controlled by requiring them to obtain sickness absence certificates only through the occupational health care provider (Paper IV.) In addition, the

disciplinary decisions reported that nurses' ability to work was investigated at the organizational level (3 4%) (Paper III).

Sanctions for nurses by nurse managers (Paper III)

Most of the Finnish nurses who were subject to a disciplinary decision (82 %), had supervision procedures in their working organisation by their nursing directors, head nurses, nurse managers or staff nurses. These were related to more serious cases of deficient professional conduct that demanded imposing sanctions at the organizational level. These included situations where nurses' working contracts were terminated (68 %) and discussions at the administrative level (56 %). Other procedures included issuing written warnings (18 %) and imposing restrictions on nursing tasks (12 %) (Paper III) (Figure 9).

5.3 Supervisory authority's disciplinary decisions on nurses (Papers I, II and III)

The description of the nurses who encountered disciplinary decisions by their supervisory authorities based on the previous studies (Paper I and updated review) and the national supervisory authority's disciplinary decisions fronted to 204 registered nurses (Paper II). In addition, the authority level of supervision for nurses' deficient professional conduct is described according to the national supervisory authority's 324 disciplinary decisions for 204 registered nurses (Papers II and III) and disciplinary actions for nurses based on previous studies (Paper I and updated review). Disciplinary decision is a term used for these measures.

5.3.1 Nurses who encountered disciplinary decisions

The nurses who encountered disciplinary decisions by their supervisory authorities are described by their demographics based on the previous studies (Paper I and updated review). At the time of the disciplinary decision, the nurses' age ranged from 20 to 76 years (Paper I and updated review). Based on the Finnish supervisory authority's disciplinary decisions for 204 registered nurses (Paper II), the nurses were on average 44 years old, ranging from 25 to 61 years or more. The Finnish nurses who were under 44 years old were more likely to commit to infraction of stealing drugs (43 %) (p<0.001). Substance abuse was more common among the nurse aged 45 and above (52 %) (p<0.017).

Based on previous studies that reported the gender of the nurses, these nurses were mainly female, but the share of male nurses was higher than in nursing in general (Paper I and updated review). Most of the Finnish nurses were female (81

%). Female nurses were more likely to have engaged in substance abuse, but the patterns were fairly the same between the genders in other types of deficient professional conduct (Paper II). The ethnicity of the disciplined nurses was reported in three studies, but in the Finnish documents, this data was not available. The Finnish nurses had a registered nurse qualification and over one third of them had also another nursing degree (Paper II). The previous studies concerned different types of professional licenses in nursing such as those of licenced practical nurses, practical nurses, nurse practitioners, nursing technicians, licenced vocational nurses, registered midwives, registered nurses, and advanced practice registered nurses (Paper I and updated review). On average, the Finnish nurses had been licensed as nursing professionals for more than 14 years, with the duration ranging from one to 54 years (Paper II) (Table 5.)

Table 5. Characteristics of the nurses who encounter disciplinary actions based on the national data and previous studies (Papers I and II).

Characteristic		**204 nurses (Paper II) n (%)**	**Previous studies (n = 24) (Paper I and updated review)**	**References that reported the content**
Years of the data		2006–2017	2007–2024	
Country		Finland	USA, UK, Canada, Australia, Brazil, Israel	
Age (years)		202 (99)		
	Range	25–61	21–77	(n = 8) Abudagga et al. 2022, Clevette 2007, Hester et al., 2011, Hudson & Droppers 2011, Jones et al., 2008, Kenward 2008, Zhong et al., 2009, Zhong & Thomas 2012
	Mean	43.4	42–51.5	
Gender		204		
	Female	166 (81)	76.3–86 %	(n = 11) Abudagga et al. 2022, Azuri et al. 2014, da Silva et al., 2016, Evangelista & Sims-Giddens 2008, Hester et al., 2011, Hudson & Droppers 2011, Jones et al., 2008, Kenward 2008, Worsley et al. 2020, Zhong et al., 2009, Zhong & Thomas 2012
	Male	38 (19)	14–23.7 %	
Type of nursing license		204		
		Registered nurse	Registered nurse	(n = 19) Abudagga et al. 2022, Azuri et al. 2014, Benton & Flynn 2013, Brous 2008, Cady 2009, Chiarella & Adrian 2014, Clevette 2007, Evangelista &

Characteristic		204 nurses (Paper II) n (%)	Previous studies (n = 24) (Paper I and updated review)	References that reported the content
				Sims-Giddens 2008, Fischer et al., 2008, Gallagher & Saleem 2022, Hester et al., 2011, Hudson & Droppers 2011, Jones et al., 2008, Kenward 2008, Leslie et al. 2021, Strong 2011, Worsley et al. 2020, Zhong et al. 2009, Zhong & Martin 2022
			Licensed practical nurse Practical nurse Licenced vocational nurse Nursery nurse	(n = 10) Azuri et al., 2014, Benton & Flynn 2013, Clevette 2007, da Silva et al., 2016, Evangelista & Sims-Giddens 2008, Fischer et al., 2008, Hudson & Droppers 2011, Kenward 2008, Zhong et al., 2009, Zhong & Thomas 2012
			Nursing technician	(n = 1) da Silva et al. 2016
			Registered midwife	(n = 3) Chiarella & Adrian 2014, Gallagher & Saleem 2022, Worsley et al. 2020
			Nurse practitioner	(n = 3) Azuri et al., 2014, Cady 2009, Oyeleye 2019
			Advanced practice registered nurse	(n = 5) Abudagga et al. 2022, Evangelista & Sims-Giddens 2008, Hudspeth 2007, Kenward 2008, Zhong et al., 2009
The time to be licenced (years)		202 (99)		
		<5–35 or more	1–54	(n = 3) Clevette 2007, Kenward 2008, Zhong & Thomas 2012
	Mean	15.5	14.3–31.5	
Working career (years)		190 (93)		
		1–36	< 5–21	(n = 4) Azuri et al., 2014, Benton & Flynn 2013, Kenward 2008, Zhong & Thomas 2012
	Mean	5	12	
Working in the public sector		199 (97.5)		
		76 %	33.3 %	(n = 1) da Silva et al. 2016
Working in the private sector		21 %	-	
Criminal background		37 (18)		(n = 4) Clevette et al., 2007; Kenward, 2008; Zhong et al., 2009, Zhong & Martin 2022

One study reported that one-third of the disciplined nurses were reported to work in the public sector. They worked mainly in hospital settings and long-term care facilities. On average, they had been working at the time of discipline for almost 12 years, ranging from less than five years to 21 years or more (Paper I). Three out of four (76 %) of the disciplined nurses in Finland worked in the public sector and in the professional role of a registered nurse (85 %). Half of them worked in hospital organisations (52 %), and the rest in supported and home health care, health centres and school health care, occupational health care, social welfare or rehabilitation services. The nurses worked in several different practical fields such as geriatric, medical, oncological, surgical, emergency and intensive care, community health, mental and substance care, and delivery, maternity and pediatric care. At the time of the disciplinary action, the Finnish nurses had been working for their current employer on average for five years, ranging from less than one year to 26 years or more. The duration of the career of two thirds of the nurses with the employer was five years or less and almost half of the nurses had reported having two or more previous employers (48 %). In addition, the nurses whose employment contracts had lasted less than a year were more likely to have two or more employers ($p<0.001$) (Paper II.)

Almost one fifth of the Finnish nurses were reported to have a criminal history (18 %) (Paper II). Also, three included studies reported that some disciplined nurses had a criminal background. For example, in the US, over one third of the nurses who had committed a criminal offence in their nursing work had a history of other criminal convictions (Kenward, 2008). Nurses with criminal backgrounds were reported to be more likely to re-offend and had been subject to a disciplinary action earlier in their nursing careers (Paper I). In addition, almost half of the disciplined Finnish nurses (48 %) were under criminal investigation during the disciplinary process. The nurses with a criminal history were more likely to have two or more employers ($p<0.002$) and their employment contracts were more likely to have lasted less than a year ($p<0.025$) (Paper II). A previous study addressed that nurses with a previous discipline history pose a higher risk of committing additional offences when compared to nurses in the general workforce (Zhong & Martin, 2022). It demonstrated that the vast majority of nurses who were disciplined by their authority for a criminal offence and were allowed to continue to practice as nurses did not pose an elevated risk of harm to patients during a 5-year post-disciplinary period.

5.3.2 Supervisory authority's disciplinary decisions for nurses' deficient professional conduct

The disciplinary process begins with a complaint (Paper III)

According to the Finnish supervisory authority's documents (Paper III), the supervisory authority received complaints in the form of oral or written notification concerning a registered nurse's professional conduct on issues such as the nurse's substance abuse, stealing medicine or reduced ability to work. The complaints were submitted by organizational administrators, nurse managers (17 %), police officers or the judicial system (13 %). The complainants included healthcare professionals, such as physicians, pharmacies, and the Social Insurance Institution (16 %) who were responsible for the person concerned (a nurse). In a few cases, the nurses had personally filed a report on themselves to the supervisory authority (2 %). The disciplinary process could also be initiated by the supervisory authority to investigate a certain case concerning a nurse's professional conduct. The reasons for the complaints are described in more detail in section 5.2 (Paper II).

After receiving a complaint, the supervisory authority investigated the affected nurse's professional conduct, and the potential negligence of practice and legislation, and evaluated the risk to practice and patient safety. As the authority has extensive access rights to information, it could receive wide information on the party concerned. According to disciplinary documents, on average, investigations were requested per case, ranging from one to 73 (Paper III). These documents included reports from officials, physicians or other responsible healthcare professionals, employer's representatives, the Social Insurance Institution, police, the judicial system and the nurse concerned. In addition, the supervisory authority also requested documents and reports concerning the nurse's health condition, including medical records. In nearly half of the cases, they also requested that the nurse undergo a health assessment (46 %). Some of the Finnish nurses (12 %) had been subject to previous disciplinary actions. These included requirements to inform the supervisory authority of the nurse's current working place, drawing attention or issuing reprimands, imposing restrictions or issuing written warnings (Paper III.)

Disciplinary decisions on nurses (Papers I and III)

According to previous studies, the disciplinary actions taken on nurses included reprimand, probation, suspension and revocation (Paper I and updated review). The same forms of discipline were used in Finland (Paper III). Between one and three disciplinary decisions could be made on each registered nurse subject to the disciplinary actions (n = 204) over ten years (Paper III). Previous studies reported

that some disciplined nurses had been subject to criminal charges and fines, could surrender their professional licence and their professional information was removed from the nursing register (Paper I). Such situations were not reported in the Finnish disciplinary documents (Table 6.)

Table 6. The authority's disciplinary decisions for nurses' deficient professional conduct based on national documents and previous studies (Papers I and III).

Disciplinary decision	Frequency in the 296 disciplinary decisions in Finland (Paper III) n (%)	Descriptions in previous studies (Paper I and updated review) n
Reprimand or warning	63 (30.9)	(n = 7) Abudagga et al. 2018, Benton & Flynn 2013, Chiarella & Adrian 2014, Evangelista & Sims-Giddens 2008, Fischer et al., 2008, Hudson & Droppers 2011, Kenward 2008
Restrictions to practice (including probation, limitation or remediation)	85 (41.7)	(n = 12) Abudagga et al. 2018, Benton & Flynn 2013, Brous 2008, Cady 2009, Chiarella & Adrian 2014, Evangelista & Sims-Giddens 2008, Fischer et al., 2008, Hester et al., 2011, Hudson & Droppers 2011, Kenward 2008, Oyeleye 2019, Zhong et al., 2009
Suspension of nursing license	83 (40.7)	(n = 14) Abudagga et al. 2018, Azuri et al., 2014, Benton & Flynn 2013, Brous 2008, Cady 2009, Chiarella & Adrian 2014, Evangelista & Sims-Giddens 2008, Fischer et al., 2008, Gallagher & Saleem 2022, Hudson & Droppers 2011, Kenward 2008, Oyeleye 2019, Worsley et al. 2020, Zhong & Martin 2022
Revocation of nursing license	65 (31.9)	(n = 11) Abudagga et al. 2018, Azuri et al., 2014, Benton & Flynn 2013, Cady 2009, Evangelista & Sims-Giddens 2008, Fischer et al., 2008, Gallagher & Saleem 2022, Kenward 2008, Oyeleye 2019, Worsley et al. 2020, Zhong & Martin 2022
Criminal charges, penalties or fines	-	(n = 7) Abudagga et al. 2018, Benton & Flynn 2013, Brous 2008, Cady 2009, Evangelista & Sims-Giddens 2008, Fischer et al., 2008, Kenward 2008
Self-revocation of a nurse license	-	(n = 5) Benton & Flynn 2013, Chiarella & Adrian 2014, Evangelista & Sims-Giddens 2008, Hudson & Droppers 2011, Zhong et al., 2009

In the Finnish data, three out of four of the 257 decisions were permanent (76 %), half were temporary (50 %) and one was indefinite (1 %) which was a final decision that the employee could not appeal. One third of the nurses (35%) had been subject to both a temporary and a permanent decision. The nurses with just temporary decisions were younger (average age 39 years) than the nurses with a permanent decision alone (average 45.3 years) (Paper III.)

The reprimands included verbal or written formal notices or warnings set for nurses (Paper I and updated review). One third of the Finnish registered nurses (31 %) had received written warnings, some of which were set as the only decision and some alongside another decision (Paper III). Previous studies reported about probation that included restrictions on professional nursing licences or limitations on professional conditions on how, where or with whom the nurse must practice, and they were subject to monitoring or re-education. Probation was reported to last from one to seven years (Paper I.) In Finland, the nurses received specific restrictions to practice (42 %) related to medical treatment or working under the supervision of another nursing professional. In addition, they were suspended from work (41 %), which meant that they could not practice in any nursing role during the set time (Paper III.) The same was described in previous studies (Paper I) which reported suspensions to last one to three years and that they were imposed for serious infractions of behaviour.

The aim of the revocation of a nursing license was to prevent the nurse from practising in the nursing profession in the future. It was set temporarily or permanently with immediate effect. The revocation was reported as the most severe disciplinary action and was imposed for very serious infractions such as the falsification of documents or posing a serious risk to patient safety (Paper I.) One third of the Finnish nurses subject to disciplinary action received a decision on the revocation of their professional nursing licences (32 %). Most of the licence revocations (32 %) were permanent ($p<0.001$), and suspensions (34 %) were more likely temporary decisions ($p<0.001$). In addition, the supervisory authority required 33 nurses to report their current workplace to the supervisory authority (Paper III.)

When comparing the disciplinary actions to the reasons for complaints and criminal investigations, statistical significance was shown as follows. Almost half of the disciplined nurses had been subject to a criminal investigation during their disciplinary case (48 %). Over half of them (57 %) had stolen medicines. One fifth (21 %) of the nurses subject to criminal investigation were disciplined due to substance abuse ($p<0.001$). In addition, most of the written warnings (79 %) had been issued to nurses who had abused substances ($p<0.001$). The nurses who were issued a decision of suspension were more likely to be facing a criminal investigation ($p<0.002$), had been working less than a year ($p<0.002$) and two or more employers ($p<0.014$). (Paper III.)

Based on the Finnish disciplinary decisions, the duration of the disciplinary process ranged from less than one month to 64 months between the time when the supervisory authority received the complaint and the final decision. The process could last from three months to 21 months, depending on the type of decision. The suspension of the professional right to practice took the longest time to process. One third of the initial decisions took less than a month from the complaint (33 %) and just over half took less than six months (54 %). In addition, a quarter of the final decisions (25 %) were delivered in less than half a year. (Paper III, Figure 2.)

5.4 Summary of the main results

This section presents a description of deficient professional conduct by nurses, administrative supervision of nurses' professional conduct by nurse managers and the supervisory authority's disciplinary decisions based on the synthetization of the findings of the sub-studies (Table 7).

Table 7. Synthetisation of the findings of sub-studies.

Research questions	Main findings	Papers
I) **Deficient professional conduct by nurses**	Deficient professional conduct by nurses includes - Nurse based deficient professional conduct - patients and patient care directed deficient professional conduct, - organisation and working community directed deficient professional conduct and - supervisory authority directed deficient professional conduct.	I, II, IV
II) Administrative supervision of nurses' professional conduct	Early intervention for nurses' professional conduct by nurse managers include - creating an understanding of the situation - strengthening a nurses' professional capacity - re-shaping of a nurse's working arrangements - monitoring a nurse's progress in the early intervention process Sanctioned actions set by the managers include - termination of the nurse's working contract - administrative conversation - investigation of the nurse's ability to work - written warning - restriction of the nursing tasks	III, IV
III) Nurses who encountered disciplinary decisions	Characteristics of the disciplined nurses include age, gender, type of license, the time to be licensed, working career as years, working sector and criminal background.	I, II
IV) Supervisory authority's disciplinary decisions for nurses' deficient professional conduct	Supervisory authority's disciplinary decisions include - reprimand or warning - restriction to practice (probation, limitation, remediation) - suspension of the nurse license - revocation of the nurse license - criminal charges, penalties or fines	I, III

Deficient professional conduct by nurses was described as a nurse-based issue concerned with their well-being at work and how they implemented patient care, complied with the work framework and behaved in the working community. It included individual factors related to their professional capacity, competence and ability to practice. In addition, it included actions directed to patients and patient care, organisation and working unit and supervisory authority (Papers I, II and IV.) Deficient professional conduct by nurses affected patients and patient care and safety. It was observed by the nurses themselves, working communities, managers, organisations and the supervisory authority (Papers I, II, III and IV).

Managers addressed nurses' professional conduct through early interventions, focusing on understanding the situation, enhancing professional capacity, and adjusting work arrangements. Early intervention methods focused on assessing nurses' situations, recognizing strengths and barriers, and providing individualized support through respectful communication. Progress was monitored, and in serious cases, administrative discussions and work ability assessments were conducted. (Paper IV.) In serious cases posing patient safety risks, managers imposed organizational sanctions, including written warnings, task restrictions, and employment termination. After that, a complaint about the nurses was issued to the supervisory authority if the administrative supervision was not enough to ensure safe practice. (Papers III and IV.)

The characteristics of disciplined nurses included age, gender, type of license, the time of licensure, working career in years, working sector and criminal background. In Finland, the disciplined nurses were on average 44 years old, mostly female with an average of five years since graduation as a registered nurse and approximately 16 years of working career. The demographics complied to previous studies. (Papers I and II and updated review.) The disciplinary process was initiated after administration level of supervision with a complaint about the nurse’s deficient professional conduct. The disciplinary process could last from less than one month to over five years. The investigations about the nurses’ professional conduct were based on several reports from healthcare organisations, managers and other officials. The supervisory authority could issue a temporary, permanent or indefinite disciplinary decision for the nurses. These decisions included reprimands or warnings, restrictions to practice, such as probation, limitation or remediation, suspension from practising or using a nursing license or revocations of a professional nursing licence. The nurses could also be subject to criminal charges, penalties or fines. (Papers I, II and III and updated review.)

6 Discussion

This study produced new knowledge about nurses' deficient professional conduct and its supervision in both administrative and supervisory authority levels. The study's ultimate aim was to produce knowledge that helps to identify and address deficient professional conduct by nurses before it poses a risk to patient safety. The main findings are discussed in relation to recent literature on this topic, drawing on two study phases (Papers I-IV). The discussion focuses on the complexity of deficient professional conduct among nurses and the challenges of overseeing this issue across multiple levels of professional supervision in nursing. The strengths and limitations of the study are evaluated in terms of the validity and reliability of the research methods used. In addition, the discussion highlights gaps in existing knowledge, suggesting areas for further research.

6.1 Discussion of the results

This study explored and synthesized knowledge of nurses' deficient professional conduct through a range of overlapping concepts from both previous research and new findings. These findings encompass issues related to nurses themselves, as well as those directing patients, organisations, work units, and supervisory authorities. This study highlights that deficient professional conduct is a complex issue, shaped by a variety of personal, professional, and work-related factors. The findings showed that deficient professional conduct attracts attention from the nurses themselves, their colleagues, managers, and supervisory authorities. These actions affect not only the nurses but also patient care, the organisation, and the workplace. (Figure 10.)

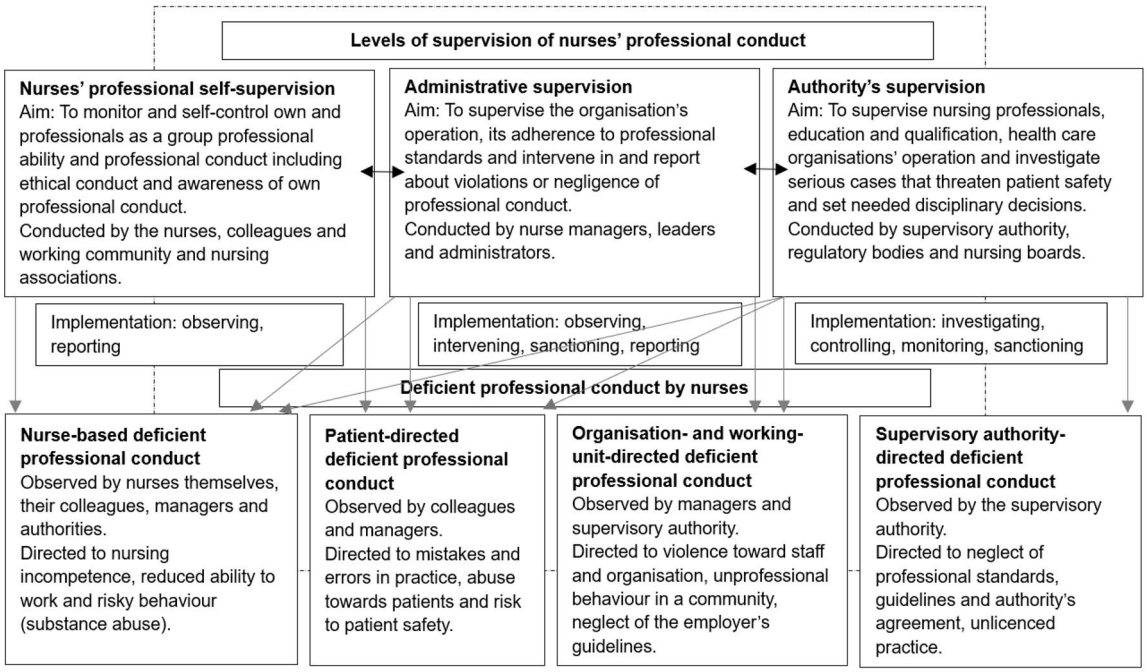

Figure 10. Levels of nurses' deficient professional conduct and its professional supervision.

6.1.1 Complexity of deficient professional conduct

Nurses' individual background factors and visible changes in professional conduct

Nurses' deficient professional conduct could result from personal, professional or workplace factors, as this study shows (Papers I, II and IV). Nurses' individual issues such as health, skills, and behaviour were identified as visible factors that raise concerns, which complies with previous research (Birkeland et al., 2013; Foong-Reichert et al., 2021; Kenward, 2008). The causes of deficient professional conduct are divided into individual or human, procedural, environmental, or organizational factors (Beardwood & Kainer, 2015; Donaldson et al., 2000; Ghobadi et al., 2023; Mattox, 2012; Pugh, 2011). This study found that female nurses aged over 45 years with one or more nursing degrees, a short-term employment contract, a single employer and working in a hospital were more frequently disciplined for substance use disorder (Paper II). In addition, male nurses represented a larger share among the disciplined nurses in Finland (18 %) (Paper II) than in the national nursing population (Finnish Nurses Association, 2020b; National Supervisory Authority for Welfare and Health in Finland, 2019). The same has been also indicated in other

countries (AbuDagga et al., 2019; Chiarella & Adrian, 2014; Foong-Reichert et al., 2021; Hester et al., 2011; Hudson & Droppers, 2011; Kenward, 2008; Zhong et al., 2009; Zhong & Kenward, 2009).

The ageing nursing workforce may contribute to work-related issues, as based on this study, the average age of disciplined Finnish nurses was 44 (Paper II). It has been shown that the decline in well-being among Finland's working-age population, due to increased workloads, has led to partial work-related disability and negative work outcomes, including absenteeism, decreased performance, and employee turnover (Pomaki et al., 2012; Van Hees et al., 2022; Ki & Choi-Kwon, 2022). Nurses' well-being is critical for ensuring patient safety. These deficiencies can manifest in various ways, including in the form of negligence, inattention or fatigue (Benner et al., 2002; Johnstone & Kanitsaki, 2005; Maurits et al., 2016). This study is in line with previous studies' findings that nurses' memory problems, work-related stress or burnout may lead to serious errors in practice (Paper IV), such as documentation errors, mismanagement of medication, or failure to observe the patient's condition (Berland & Bentsen, 2017; Halpern et al., 2016; Härkänen et al., 2016; Mattox, 2012).

Based on this study, nurses' substance abuse was overwhelmingly the most common reason for complaints concerning their deficient professional conduct (Papers I and II and updated review). Substance abuse not only poses a danger to patients but also signifies deeper personal and professional issues that affect the nurse's ability to work (Russell, 2020; Shuster, 2021; Smiley & Reneau, 2020; Trinkoff et al., 2021). Healthcare professionals are reported to have a higher risk for mental health problems and substance use disorders, which can affect their work performance (Kesti et al., 2023; Lehtoaro et al., 2018; Ministry of Economic Affairs and Employment, 2021; Statistics Finland, 2019). In addition, the connection between substance abuse and mental health problems has been demonstrated previously (Braquehais et al., 2024; Cares et al., 2015). Substance abuse, often linked to health issues, must be considered and treated as a disease of dependency (Banerjee, 2006; Braquehais et al., 2024; Kunyk, 2015). It was, in particular, the most often reported cause of disciplinary action, due to nurses' easier access to medications and knowledge about how to use them based on the nurse's profession which increases the risk of such conduct (Cares et al., 2015; Darbro & Malliarakis, 2013). Nurses' stressful work environments could also be linked to substance abuse problems (Cares et al., 2015).

This study also found that most of the disciplined nurses were working in long-term care facilities or hospitals (Azuri et al., 2014; Benton et al., 2014; da Silva et al., 2016; Hester et al., 2011; Zhong & Thomas, 2012) (Paper I), and in Finland, they were more often employed in the public sector (Paper II). The differences in supervision and reporting of professional conduct between the public and private

sectors also warrant further research. This study found that over one-third of Finnish nurses facing disciplinary actions held additional degrees at the level equivalent or below to a registered nurse qualification (Paper II). This reflects a common trend in Finland that involves many nurses continuing their education and advancing to registered nurse status. Notably, several of the disciplined nurses worked in roles other than registered nursing, some of them in administrative positions (Paper II). This raises concerns about accountability when supervisors or managers are involved in harmful incidents, highlighting the need for better oversight of those in leadership roles. This study also highlighted that the nurses who were disciplined by their supervisory authorities had remarkably short employment contracts or frequently moved between different healthcare employers which complies with earlier studies (Zhong & Thomas, 2012). From the point of view of supervision, it is important to understand what is happening in these nurses' careers and how to deal with the rapid employee turnover. In addition, frequently moving between different employers and workplaces through a temporary employment agency can also make it difficult to monitor deficient professional conduct and early signs of potential risk.

From the perspective of patient safety, it is important to identify the factors that lead to deficient professional conduct in nursing. This study highlighted the importance of recognizing the early warning signs of diminished performance and ability to practice (Papers I, II and IV), which can be detected through organizational supervision (Papers III and IV) (Moll, 2014). While nurses may sometimes identify their own errors (Affara & Al-Jabri, 2016; Benton et al., 2013; Lehtoaro et al., 2018), in many cases, their mistakes are noticed by others, such as colleagues, patients, or managers. On the other hand, nurses may not always recognize their own reduced ability to work or may have a different opinion on their situation (Paper IV). This emphasizes the need for more research into nurses' perspectives on why deficient professional conduct occurs and how disciplinary actions are applied. The study also showed that nurses' views on the situation often differ from those of their supervisors (Papers II and IV), indicating that future research should pay more attention to the experiences of the nurses themselves.

Demographic information about disciplined nurses helps identify patterns that can lead to the early detection of risk factors, as this study indicated, allowing for better prevention of harmful behaviours, rather than blaming certain groups (Ross et al., 2018). This knowledge helps to understand that deficient professional conduct can happen to anyone, emphasizing the importance of recognizing and addressing these risks within the nursing community. Thus, more research is needed on how individual and contextual factors contribute to deficient professional conduct and how these issues can be better detected and managed in working communities. However, further research is needed to examine the impact of individual factors, such as well-being at work, age, gender, and employment conditions, on patient safety risks.

Deficient professional conduct: unintentional or intentional and conscious acts

The intentional or unintentional nature of deficient professional conduct was indirectly described in different data. Nurses' deficient professional conduct varied from unintentional mistakes to deliberate and conscious actions (Papers I, II and IV) that breach professional standards (Johnstone & Kanitsaki, 2006; Mattox, 2012; Sameera et al., 2021). Unintentional errors often arise from factors such as lack of knowledge, physical and mental health issues, or factors related to the work environment such as resources, hurry and high workloads. In such situations, the nurses are unable to influence the conditions themselves, which may affect or pose a risk to the performance of work (Brous, 2008; Thomas, 2010). Most errors are preventable, but some may go unnoticed, highlighting the need for strong systems to monitor and address both unintentional and intentional violations (Azemian et al., 2021).

Instead, intentional deficient professional conduct, such as stealing medications or falsifying patient records (Papers I and II), most often refers to the pursuit of self-interest instead of the patient's best interest. It represents a conscious violation of professional standards which can be due to substance abuse or other personal issues motivating the harmful activity (Eisenmann, 2020; Foli et al., 2019). Substance abuse is an addiction disease that drives individuals to seek more substances, leading to serious violations such as stealing medication. This behaviour is a conscious act and often signals broader substance abuse problems, which are key indicators of deficient professional conduct. (Eisenmann, 2020; Foli et al., 2019; Monroe & Kenaga, 2011.)

Deficient professional conduct, such as violations of boundaries, unprofessional relationships with patients, or physical, mental or material abuse of patients, are other examples of intentional deficient professional conduct that seriously violate professional and ethical standards (AbuDagga et al., 2019; Baca, 2009; Björklund & Hemberg, 2024; Chiarella & Adrian, 2014; Fischer et al., 2008) and were also addressed in this study (Papers I and II). Such actions are more likely to lead to severe disciplinary measures (Paper III), as they not only harm patients but also undermine trust in the nursing profession. It also refers to lack of a sense of professional ethics or its neglect (Kangasniemi et al., 2015).

This study also demonstrated that several disciplined nurses had already previous disciplinary cases in their employment history which makes the issue even more complicated and demonstrates the severity of the nurses' possible problems. Moreover, recent studies have indicated recidivism among nurses subject to disciplinary actions which refers to nurses' repeating their professional violations (Zhong et al., 2022; Zhong & Martin, 2022). In addition, this study found that several of the disciplined nurses have reported being subject to a criminal investigation

during the case involving their deficient professional conduct and previous studies have shown that they can have a criminal background (Clevette et al., 2007; Kenward, 2008; Zhong et al., 2009). As a question related to professional ethics, it is extremely difficult to define the extent to which an individual is acting consciously when they make a decision to act wrongly. The level of consciousness can probably be only determined by the individuals themselves. The complexity of the issue lies in the multiple coexisting factors affecting nurses' professional conduct, ability, and competence (Paper II), making it challenging to pinpoint the core problem. Often, issues only become evident in practice, such as through incorrect procedures, and it is only after lengthy investigations that the underlying causes (Paper III), such as serious substance abuse or personal life challenges, are uncovered.

Deficient professional conduct: variations in seriousness and risks to patient safety

This study addresses that nurses' deficient professional conduct can range from minor deficiencies in work performance to more serious risks that directly threaten patient safety. These issues range from temporary lapses in competence, such as stress or burnout, to more critical violations such as medication theft, which could indicate substance dependency (Papers I, II, III and IV). Common examples of practical errors that refer to nurses' deficient professional conduct and serious risk to patient safety were medication administration errors (Papers I, II and IV), such as administering incorrect doses, miscounting medication, or preparing medications incorrectly (Berland & Bentsen, 2017; Härkänen et al., 2016; Oyeleye, 2019), which could be tied to a lack of professional knowledge and skills or even substance abuse problems (Eisenmann, 2020; Foli et al., 2019; Kunyk & Deschenes, 2019; Luurila et al., 2022). Thus, more systematic classification of severity levels may be needed to address these issues.

Based on this study, nurses may display substandard competencies or reduced ability to work due to health-related issues, leading to unsafe practices (Papers I and II and updated review). This study highlighted that the level of seriousness in deficient professional conduct can be difficult to define and evaluate, especially when considering factors such as physical or mental health problems that diminish the nurse's ability to work (Paper IV). Fatigue and illness are common among nurses, similar to the general population. However, work-related burnout and reduced well-being in nurses can pose significant risks to patient safety, as demonstrated in previous studies (Havermans et al., 2018; Kesti et al., 2023; Khamisa et al., 2013; Kurt et al., 2017; Melnyk et al., 2018). Burnout and long-term fatigue as well as the use of painkillers or antidepressants are also risk for substance abuse (Livingston et al., 2012; Ross et al., 2018; Smith, 2013; Trinkoff et al., 2021). It is crucial to support

nurses' physical, emotional, and mental well-being to maintain their ability to care for patients (McClelland et al., 2018; Rothwell et al., 2021).

This study emphasizes the complexity of deficient conduct and the need for its early identification. It is further complicated by the fact, which was also referred to in this study, that nurses may already have severe problems related to their professional conduct during their degree education. A nursing student's substance abuse or mental health problems challenge educational institutions and internships in organizations in relation to early prevention (Mansbach et al., 2014; McPherson & Wendler, 2020; Monroe, 2009; Strobbe & Crowley, 2017). This is a critical issue for early supervision at the beginning of the nurses' employment relationship and career in nursing as well as in the selection of students and their aptitude for the field (Cramer & Davidhizar, 2008; McPherson & Wendler, 2020). However, little is known about educational organizations' and healthcare employers' collaboration and information sharing in these kinds of situations.

In this study, the complexity of the phenomenon is also illustrated by the fact that a disciplinary case could include several coexisting reasons that explained why the nurses were investigated for deficient professional conduct by the supervisory authority (Paper II). Such a combination of multiple factors could also relate to harmful incidents.

6.1.2 Challenges in multilevel supervision in nursing

Identifying the phenomenon: from early signs to serious risks

This study shows that supervision at the administrative level in organisations can identify and address deficient professional conduct among nurses by detecting early warning signs, often seen as minor issues (Papers III and IV). This study highlighted the importance of early detection, as minor issues can escalate into significant risks if not addressed in time. Nurse managers' responsibility for monitoring employee well-being, performance, and professional competence is central to effective supervision, as this study also indicated (Papers III and IV). Early interventions by nurse managers in cases of deficient conduct (Gagnon & Perron, 2020; Malek, 2010; Mansbach et al., 2014) are often linked to whistleblowing by colleagues (Cleary & Duke, 2019; Leslie et al., 2021; Martin et al., 2021; Pohjanoksa et al., 2019; Rauwolf & Jones, 2019).

The importance of self-monitoring in nursing communities emerged through descriptions of both administrative and authority-level supervision (Papers III and IV). In some cases, the harmful issues were self-recognized by the nurses, while in others, they were observed only by colleagues or managers (Papers III and IV). Previous studies have shown that communities may have challenges in being aware

of nurses' deficient professional conduct as a phenomenon and recognising it in clinical practice (Foong-Reichert et al., 2021; Leslie et al., 2021; Martin & Kaminski-Ozturk, 2022). However, most nurses have recognized some kind of deficient professional conduct at some point during their working careers (Chiarella & Adrian, 2014; Moore & McAuliffe, 2012; National Supervisory Authority for Welfare and Health in Finland, 2016; Sipiläinen, 2016). Thus, the importance of colleagues and the working communities in reporting violations is remarkably important (Leslie et al., 2021; Maurits et al., 2016; Weenink et al., 2015). A major challenge identified in this study is the difficulty of fostering open communication about deficient professional conduct within nursing teams (Paper IV). As previous studies have shown, nurses fulfil their legal, social, and professional duties, build a sense of belonging, communicate and work effectively in teams with a patient-centred approach, and uphold ethical standards for professional growth (Azemian et al., 2021). Still, the ability to discuss work-related problems openly is often underdeveloped and needs more attention in the future.

Regularly conducted development discussions and early interventions between a nurse and a manager can prevent problems from deteriorating further (Paper IV), emphasizing the need for structured reporting models at all levels of supervision (Karlsson et al., 2023; Moll, 2014). Previous research has emphasized the value of early support for healthcare employees who are dealing with mental health issues or stress (Havermans et al., 2018; Peterson et al., 2008; Ruotsalainen et al., 2020; Van Wyk & Pillay-Van Wyk, 2010) both of which can impact professional conduct (Moll, 2014). Nurse managers frequently face the uncomfortable task of addressing sensitive issues when a nurse's performance is causing concern, leading to tension (Devik et al., 2020; Khodayarimotlagh et al., 2022; Koesnell et al., 2019). However, transparency and trust enable open dialogue, fostering early intervention and problem-solving and better communication. (Aitamaa et al., 2016, 2021) but its development needs to be supported by further research. However, sustained management support is crucial for successful intervention and requires ongoing commitment.

More structured approaches are needed to monitor and address visible, early signs of deficient professional conduct among nurses at the organizational level, particularly through regular supervision and professional development discussions (Zaghini et al., 2016). In addition, identifying early signs of nurses' substance abuse aids prevention and supports recovery programs for which more systematic knowledge is needed (Russell, 2020; Shuster, 2021). Failure to recognize and address these issues early on could lead to repeated violations, underscoring the importance of organizational responsibility in maintaining professional standards (Zhong et al., 2009; Zhong & Martin, 2022).

Supporting disciplined nurses in the process: facilitating safe return to work

For nurses, disciplinary processes are often long, burdensome and multi-generational (Papers I and III). Many nurses continue to work throughout the supervision process, but little is known about how they are coping with the situation and how they can be supported to remain in their jobs and continue to work. This study demonstrated that supporting nurses who have been disciplined or have experienced reduced work capacity is crucial for their well-being at work and successful reintegration into the workplace (Paper IV). Nurse managers play a key role in supporting nurses' work-related well-being (Baumann et al., 2016; Murray et al., 2016; Sherman et al., 2013). A positive work environment, including manageable workloads, sufficient resources, and a strong labour organisation, is linked to improved patient outcomes and nurse commitment (Azemian et al., 2021; De Braganca & Nirmala, 2017; Baumann & Kolotylo, 2009). This study emphasized the importance of understanding that nurses, like all humans, may face personal or professional challenges that affect their performance at work (Papers I, II and IV). It is essential to view nurses holistically and individually and ensure that early interventions are aimed at their well-being while upholding professional standards (Peterson et al., 2008; Van Wyk & Pillay-Van Wyk, 2010).

Helping nurses return to work safely after supervision or disciplinary process requires tailored support and rehabilitation measures as well as continuous monitoring. Nurse managers take care of reshaping the nurses' work arrangements and provide the necessary support to ensure that the nurses can continue their careers, even if their capacity is diminished (Paper IV). In addition, nurses should familiarize themselves with the disciplinary process to protect their license and career in case of a complaint (Benton & Thomas, 2021; Martin & Kaminski-Ozturk, 2022). It is important to consider hiring an attorney for proper representation, especially if the issue may have impacts beyond the nurse's license. Additionally, nurses should ensure they have adequate professional liability insurance to avoid further complications (Balestra, 2012).

Challenges in supervision: gaps in the supervision chain

Based on this study, it was possible to recognize the complexity of the matter of nurses' deficient professional conduct from the documents of both the healthcare organisation and the supervisory authority (Papers II, II and IV). However, the documents in question only bring out the legally binding content related to the matter. The information produced by this study can help to develop organizational documentation of the supervision processes and identify and report them even better. Despite efforts to monitor nurses' professional conduct, gaps in supervision remain, especially when cases reach the supervisory authority, limiting timely interventions

to prevent patient safety risks (Kirwan et al., 2019). While nurse managers are engaged in addressing issues through discussions, warnings, and task adjustments, high turnover in leadership and inconsistent supervision practices undermine the process. Additionally, large work units and managers disconnected from daily operations further complicate effective supervision. Previous studies have suggested that standardized models for supervision are essential to ensuring continuous oversight and quality patient care (Choi & Lee, 2024; Kunyk et al., 2016). In addition, effective instruments, models and attributes have been developed for measuring and demonstrating professional conduct in nursing (Elksas et al., 2021; Kim et al., 2017; Shohani & Zamanzadeh, 2017).

This study emphasizes the need for stronger collaboration and mutual understanding between supervisory authorities and organizational administration, particularly as managers rarely encounter cases of deficient professional conduct by nurses (Gallagher & Saleem, 2022). Strengthening the supervision chain would enable earlier interventions, preventing minor issues from escalating. Nurse managers play a crucial role in maintaining high-quality care and patient safety by monitoring staff, ensuring adherence to professional standards, and promptly addressing any deviations (Devik et al., 2020; Jankelová & Joniaková, 2021). Additionally, support structures such as ethical discussions and regular evaluations can help nurse managers address challenges early and foster a healthy work environment (Azemian et al., 2021). Organisations can also support the supervision authorities by streamlining information retrieval, potentially shortening and streamlining the supervision process for affected employees.

6.2 Validity and reliability of the study

This study carried out with a multi-method approach has been rigorously conducted, following method-specific criteria (O'Cathain et al., 2007; Tashakkori & Teddlie, 2010; Vivek & Nanthagopan, 2021). Validity and reliability are indicated separately for each study phase. The quality of the study is strengthened by reporting the rationale and design of each sub-study to reach transparency and clarity (Tashakkori & Teddlie, 2010). This approach enhances the validity of the whole study by enabling a comprehensive exploration of the topic from multiple perspectives. Combining results across methods provided a broader description of the phenomenon. Appendix 3 outlines both the strengths and limitations of each sub-study and the summary.

Integrative review (Paper I)

In the first study phase, the integrative review was used as the research method (Paper I) to identify relevant scientific papers about the topic. The use of this method was justified for reducing bias and enhancing rigour (Whittemore & Knafl, 2005). In addition, the method allowed the inclusion of different types of study designs in the review, which concerned the topic and answered the set research questions (Pluye et al., 2011). Four scientific databases were used to increase the validity of the searches. The review was structured according to the Preferred Reporting Items for Systematic reviews and Meta-Analysis (PRISMA) instructions (Moher et al., 2009). Double-checking of the selected data by two researchers confirmed the reliability of the study (Whittemore & Knafl, 2005) (Paper I). Quality criteria that encompass different research designs and literature were used (MMAT) to strengthen the reliability of the selection and to reduce selection bias (Whittemore, 2005). In the first review (Paper I), this was conducted by two researchers independently and in the updated review, by the corresponding researcher.

The strengths and limitations of the integrative review concern potential biases in the literature search, study selection, and data analysis (Whittemore & Knafl, 2005). Incorporating diverse study designs, methodologies, and additional manual searches enhanced the comprehensiveness of the review, likely reducing publication bias. Predefined inclusion and exclusion criteria, informed by preliminary searches, supported precise data selection. The review also benefited from three case studies that provided detailed descriptions of the disciplinary actions for nurses. However, these studies lacked a specific study design, which may limit comparability across findings. There was a total of 24 eligible original studies included in this study which were all focused on the topic which indicates the need for further research but could also have affected the credibility of the study findings (Graneheim & Lundman, 2004).

The limitations of the integrative review relate to the search strategy. Despite careful planning and consultation with an information specialist, some relevant search results may have been missed and some results included grey literature. Reports from national nursing supervisory authorities and regulatory bodies were excluded to focus specifically on prior scientific research in this area. Notably, most studies included in the review were conducted in the US, which may introduce geographic bias and also suggest that the phenomenon has received little attention in other countries or regions.

Document analysis on supervisory authority's documents (Papers II and III)

The quantitative document analysis was conducted with an extraction matrix which enabled the collection and systematic analysis of textual data (Bowen, 2009;

Moilanen et al., 2022). All analysed documents were original papers produced by the national supervisory authority. The documents included typed and handwritten forms in Finnish and Swedish. Using the text as research material sets specific boundary conditions regarding how the text is to be understood and whether it contains irrelevant content from the point of view of the research (Bowen, 2009; Siegner et al., 2018). Document analysis as a research method was employed to utilize documents as data sources not previously gathered for research purposes (Moilanen et al., 2022). Given that most previous studies on this topic were conducted in the US, there were justifications to focus this study on the national decision document material for the first time (Papers II and III).

To ensure the reliability of the study, a data extraction matrix was systematically developed based on previous literature and pilot-tested (Papers II and III). Using purposeful sampling, data saturation was monitored as data collection and analysis progressed simultaneously (Moilanen et al., 2022). In addition, data reliability was strengthened through double-checking the data collection by two researchers. Total sampling over a ten-year period enhanced the reliability of the study. However, the limited number of disciplinary cases among registered nurses highlights the rarity of the phenomenon, posing statistical limitations for analysing significant associations between factors. While a thorough description was achieved, a larger dataset might have enhanced the study's validity and credibility (Moilanen et al., 2022; Polit & Beck, 2017). However, this document analysis study focused on protected documents about closed disciplinary cases within a set timeframe, meaning it does not report on the general incidence of deficient professional conduct cases among nurses or complaints as a whole that may lead or not to disciplinary action.

To reduce interpretative subjectivity, the data analysis was completed and validated in collaboration with the research group. The documents used in this study were not originally meant for research purposes, leading to occasional gaps in desired information and the inclusion of some irrelevant content. However, the researchers had not prior connection to the material and were thus unable to influence it. (Rasmussen et al., 2012.)

Document analysis on early intervention documents (Paper IV)

The trustworthiness of the qualitative document analysis, the approach of the data collection method, the sampling strategy, and the selection of a suitable unit of analysis were followed (Paper IV) to strengthen the validity of the study (Elo et al., 2014). Ensuring the trustworthiness of data collection was key to the study's overall validity (Elo et al., 2014; Graneheim & Lundman, 2004). The selection of the most appropriate data collection method ensured the reliability of the content analysis (Graneheim & Lundman, 2004), which refers to confidence in how well the data

reflect the intended focus of the research, and this was carefully maintained during the research process (Elo et al., 2014; Polit & Beck, 2017). The time limit was set to ensure that the information obtained was as current and sufficient as possible.

Author bias is known to be related to the authorship of original documents (Moilanen et al., 2022; Rasmussen et al., 2012), and it was noted that the documents had been filled out by both the employees and their supervisors, but the results were reported as a summary of both descriptions. Data and interpretation bias existed during the data collection in this study when the used documents had not been directly filled out or they included inaccuracies such as faults and unedited texts (Bowen, 2009) which were not analyzed or reported. In addition, the researcher must consider her own experience of the phenomenon to be studied to minimize any bias of her own influence (Bengtsson, 2016). The analysis matrix of the inductive content analysis was based on the methodological literature (Paper IV) (Elo et al., 2014; Kyngäs et al., 2020). The original expressions of the documents supported the results (Paper IV) as well as the reliability of the research and data analysis (Elo et al., 2014; Graneheim & Lundman, 2004; Polit & Beck, 2017). However, there was a potential data bias due to duplicates in the original expressions in different documents (Moilanen et al., 2022).

This qualitative document analysis used a deductive data selection strategy based on purposeful sampling and focused on the organisation where an early intervention programme was used. Rigour was ensured in the document analysis by carefully considering the type of documents, their selection, and the analysis process to reduce potential bias. Purpose bias was addressed by selecting documents that aligned with the study's aims. Selection bias was minimized by clearly reporting data selection, inclusion and exclusion criteria, and providing a detailed description of the data analysis. The rigour of the selection process was strengthened by pilot-testing the data extraction matrix (Moilanen et al., 2022.)

The main limitation was that data were collected from a single healthcare organisation, with limited sample size and qualitative data. Demographic information was excluded for ethical reasons, affecting the findings' reporting. Some documents lacked details about why early intervention programs were initiated and their impact on nursing practice and patient safety. Additionally, incidents involving substance abuse or unprofessional behaviour were reported in separate administrative documents.

6.3 Practical implications

This study highlights several practical implications for enhancing nurses' professional conduct and patient safety, and related supervision at different levels. The topic of this study is marginal but important when underlying the fact that

deficient professional conduct happens during nursing professionals which is socially significant as the target to meet people's health care needs and provide them the best possible, high-quality and safe care. Also, this study indicates the importance of professional ethics in nursing and how it should be better recognized in the everyday practice.

The findings of this study can inform the development of supervision during nursing education, particularly by raising awareness of the issue in education institutions in the field and developing their collaboration with healthcare organisations. In addition, self-supervision among nurses can be enhanced by improving their understanding of professional ethics and the legislation that guides their conduct. Increasing nurses' awareness of self-supervision and reporting mechanisms is essential for promoting safe patient care. Finally, educational organizations and healthcare employers should collaborate more closely to support early intervention during nursing education and enhance their information sharing in cases that involve identifying early signs of a nursing student's deficient professional conduct.

In addition, support structures for nurses dealing with substance abuse or other personal issues can be improved. This approach will not only enhance patient safety but also promote nurses' well-being and job retention. Developing procedures to identify early signs of nurses' substance abuse could significantly reduce its prevalence, as it should be treated as a preventable and manageable health issue, with more supportive and targeted services dedicated to nurses affected by it. Establishing a zero-tolerance policy for deficient professional conduct in healthcare organisations is crucial, as is reinforcing the importance of supervision for all employees.

The role of the work community in observing and reporting concerns relating to deficient professional conduct can be improved by utilizing the insights from this study. Encouraging nurses and their colleagues to take responsibility for identifying and addressing early signs of deficient professional conduct can prevent issues from escalating, creating a safer and more supportive work environment. This demands the development of a culture of open discussion in healthcare organisations. The study underscores the importance of fostering open communication within nursing teams. Encouraging transparency and trust will allow staff to discuss performance concerns without fear, promoting early intervention and preventing work-related issues from escalating. Implementing these practical measures will improve supervision and support systems, helping healthcare organisations to proactively address deficient professional conduct and ensure patient safety.

The findings of this study help to identify and address deficient professional conduct among nurses and to develop early detection and intervention, which are critical, as minor issues can escalate into serious risks if left unchecked. By creating consistent early support and intervention models alongside standardized reporting

procedures, organisations can better address issues of deficient professional conduct. Furthermore, the findings can be used to train supervisors and nursing staff, increasing their knowledge about what constitutes this issue and how to respond to it effectively.

The administrative supervision of healthcare organisations can be improved based on this research. Strengthening supervision at the administrative level is necessary, particularly where early signs of nurses' deficient professional conduct are first observed. In this context, nurse managers play a vital role. The monitoring of staff performance and clear guidelines and reporting structures can be developed by utilizing the findings of this study. Moreover, it is important to investigate how both individual and contextual factors contribute to deficient professional conduct and how these can be better managed within working communities. Early intervention and support strategies should focus on maintaining nurses' physical, emotional, and mental well-being to sustain nurses' ability to provide quality care. These are essential for standardizing practices across healthcare organisations.

Improving the flow of information at supervisory levels is another area where this research can contribute to enhancing overall supervision. The development of better reporting practices across all sectors, along with smooth collaboration and data transfer between the organisations and supervisory authorities, is essential to ensure that organisations and nurse managers will be able to process cases of violation of professional standards effectively. Improved mentoring by the supervisory authorities and guidance from supervisory authorities can help nurse managers address deficient professional conduct more precisely, ensuring timely interventions and minimizing risks. Addressing gaps in supervision will also improve it.

6.4 Suggestions for further research

This study suggests further research concerning nurses' deficient professional conduct and its supervision as a more precisely defined phenomenon and supervision process, what factors affect it and how it can be better supervised in the future. This study corresponds to the essence of basic research in nursing science in that a little-studied subject area is made more visible with the findings of this study. In addition, this study showed the suitability of the used research method for studying the corresponding topic and encourage the use of different health care documents in research purpose in future. This study has also elements of applied research, as the information produced can be used to develop the quality and supervision of nursing professional conduct from the point of view of nursing ethics, supervision, education and management. The research object was examined in this study from the perspective of providing a nursing service for the population and thus promoting their health, as well as the professional conduct in nursing, so that the care of sick

people in different care environments and by different actors would be safe, high-quality and ethical.

There was variation in the language used in these regulations and in the decision documents and reports in all the jurisdictions reviewed, which serves as an argument for a need for the harmonization of supervisory concepts. A deeper and more systematic understanding of deficient professional conduct in nursing is needed, including defining it as a phenomenon with various levels of severity and distinguishing between unintentional errors and conscious deficient professional conduct. This could help in addressing the core issues more effectively. Additionally, research should focus on how individual factors, such as nurses' substance abuse, impact patient safety.

More research should also focus on nurses' personal experiences with deficient professional conduct, supervision, and disciplinary processes in serious cases. This could provide valuable insight into improving these processes. Thus, research-based structured approaches are needed to monitor, address and report early, visible signs of deficient professional conduct at the organizational level. This involves supporting self-supervision among individual nurses, work communities, and organisations. The role of the employee and the work community in detecting early signs that rise concerns and the obligation to report such situations should be emphasized, as taking action is key to preventing escalation and should be paid attention to in the future.

Further knowledge is needed about differences in supervision and reporting practices between public and private healthcare sectors, as possible discrepancies may influence patient safety and professional conduct. Special attention should be paid to the effects of short-term contracts and high staff turnover on nursing performance and the potential risks they pose to patient care. In addition, there is a need for uniform control models for supervision and reporting deficient professional conduct in nursing in the future, both nationally and internationally, to create a consistent framework, especially within regions such as the EU, relying on consistent further research.

7 Conclusions

This study explored and synthesized the knowledge about nurses' deficient professional conduct. By bringing attention to this marginalized topic, the study lays the groundwork for ongoing exploration and discussion in this important area which is a relatively unknown topic in need of better clarification, which the information provided by this study enables. This study illustrates the complex issue of nurses' deficient professional conduct that can stem from inadequate nursing competence or reduced work capacity due to health issues varying from minor incorrect activities to serious errors and intentional violations. It is essential for every nurse to take personal responsibility for their professional conduct and meet ethical standards, a point that cannot be overstated. As the backbone of the healthcare workforce, nurses play a critical role in public health, which making it central to manage their supply, demand, qualifications, responsibilities, and duties effectively.

The supervision of professional conduct in nursing aims to uphold standards of excellence, ensure patient safety and quality care, and maintain public trust in the nursing profession. Compliance with professional supervision is essential for nurses to practice ethically, competently, and responsibly. However, supervising professional nursing is challenging and needs to evolve with changing trends and advancements in healthcare. Regular updates to professional supervision in nursing, as suggested by the framework in this study, are crucial for advancing nursing professionalism, and for detecting and intervening in deficient professional conduct.

This study addresses the often-overlooked topic of deficient professional conduct among a small segment of the nursing population. This study highlights that, like other professionals, nurses face work-related challenges, but their professional role uniquely binds them to the responsibility of caring for others. Even a single case of deficient professional conduct can lead to serious consequences for patient safety. The strength of this research lies in its reliance on indisputable documentary evidence from supervisory authorities and healthcare organisations. The findings underscore the complexity and sensitivity involved in addressing deficient professional conduct in nursing, indicating that much more research is needed.

Acknowledgements

This publication is a tribute to all nursing professionals, whose dedication to nursing and caring embodies the essence of their profession and commitment to providing the best possible care to those in need, both in healthcare settings and within society. The pride they take in their work, their passion for caring for others - especially the vulnerable ones, often without request - and commitment to advancing the quality of care define them as professionals. However, the high standards of the nursing profession do not diminish the fact that nurses, like all human beings, experience their own challenges and sufferings. This only highlights the importance of providing support to ensure that nursing professionals can continue to deliver high-quality, safe and ethical care.

This study was conducted in the Department of Nursing Science, Faculty of Medicine, University of Turku. During the doctoral research process, I have been privileged to have such a support from several parties. At first, I'd like to express my sincerest appreciation to my excellent supervisors, Professor Mari Kangasniemi from University of Turku and Professor Arja Häggman-Laitila from University of Eastern Finland. Both of you have shared with me your superior expertise in the field of nursing science and supported me in my process with gentle encouragement and endless enthusiasm, which has enabled the development of my own thinking. Mari, our journey together has been long and co-operation very rewarding. You always know how to support, create a positive and encouraging atmosphere and see meaning in doing. I truly respect your intelligence and innovative, diverse thinking in nursing ethics, which have inspired me a lot in my career. Arja, I highly value your intelligence and expertise in health care supervision and your long-term contribution to this research. Our discussions have been so rewarding and have advanced my understanding and the entire research process. I humbly want to thank you both a thousand times for all your time, support and expertise. I respect you both immensely.

Separately, I thank the Department of Nursing Science at the University of Eastern Finland where this study process was able to start and Department of Nursing Science at the University of Turku, where it was able to finish.

I extend my sincere gratitude to the co-writers of the sub-publications, MSc, Anna-Maija Liedenpohja, for your contribution and expertise of healthcare supervision at the authority level as well as statistician specialist Miko Pasanen for your valuable insight into statistical analysis. Special appreciation goes to our exceptional research team, including MSc, PhD candidate Katrimaija Luurila and MSc, Maija Turkulainen for the collaboration in data collection as well as MSc, PhD candidate Satu Tynkkynen engaging scientific discussions regarding to the research topic. Furthermore, I would like to express my thanks to statistician specialist Jouko Katajisto from University of Turku and information specialists Margit Heikkala from University of Oulu and Leeni Lehtiö from University of Turku, for their contribution for this research. Thank you, Annette Whibley (UK) and Elisa Wulff for your contribution to language maintenance of the research.

I would like to thank the member of my follow-up committee, Professor Riitta Suhonen from University of Turku for the support in finalizing the doctoral thesis. In addition, I express my deep gratitude to Professor Outi Kanste from University of Oulu and Professor Elizabeth Peter from University of Toronta (CAN), the official reviewers of the doctoral thesis for their constructive feedback to improve the summary. I sincerely thank you, Docent, PhD Heljä Lundgrén-Laine for accepting the invitation to be the opponent of my doctoral research.

I would like to express my thanks to The Union of Health and Social Care Professionals (Tehy) for their suggestion for this important research topic. I wish to thank the representation of The National Supervisory Authority for Welfare and Health, Valvira, especially Director Helena Mönttinen and the team for their collaboration and an incredibly committed contribution during the challenging data collection. In addition, I thank the representatives of the participation organizations for the collaboration in data collection.

Warm thanks to the doctoral seminar group in the Doctoral Programme in Nursing Science at the University of Turku. My sincerest gratitude the constructive discussion and support to Professor Helena Leino-Kilpi, Professor Katja Joroinen and Docent, PhD Tella Lantta. I would like to thank the brilliant fellow Doctoral candidates over the years. Especially heartfelt thanks to MSc, PhD candidate Piiku Pakkanen and MSc, PhD candidate Sirpa Mäki-Turja-Rostedt for the incredible support and discussions which have truly supported this process forward at the time of great desperation. Also, thanks to every roommate in Kuopio, Turku and Helsinki, those have been memorable times with you all.

This study was financially supported by the Faculty of Medicine and Department of Nursing Science at the University of Turku, The Finnish Association of Nursing Research (Hoitotieteiden tutkimusseura ry), The Union of Health and Social Care Professionals (Tehy), The Finnish Nursing Education Foundation (Sairaanhoitajien koulutussäätiö), The Finnish Nurses Association (Suomen Sairaanhoitajat), The

Northern Ostrobothnia Nurses Association (Pohjois-Suomen Sairaanhoitajat ry) and The Finnish Oncology Nursing Society (Suomen Syöpäsairaanhoitajat ry), to all of whom I am grateful for the financial support. I also would like to thank my longtime employer, the Northern Ostrobothnia Wellbeing County (prev. the Northern Ostrobothnia Hospital District) for its' support in enabling research work alongside my regular work. I thank also all supervisors, colleagues and partners for the collaboration during the years.

Finally, the warmest and deepest, heartfelt thanks to my nearest and dearest ones, friends and family members. You all have, in together and separately, supported my journey with your presence, taking my mind off the research world for a while, being there when I needed you, with all the conversations, laughs, cries and hugs. Especially the newest little one in the family, you have come to delight our life once and for all.

To my dear spouse: thank you from the bottom of my heart for your understanding and for always being there, even when I could not be. Words will never be enough to express my gratitude to you. Together, we have come such a long way and hopefully from here on out. And finally, special thanks to our furry family members, Mr. Tuuva and Mr. Viljo, who increased the text extremely much in times.

And Mum and Dad above the clouds, I wish you would have been proud of this.

Oulu, February 14, 2025
Oili Papinaho

References

AbuDagga, A., Wolfe, S. M., Carome, M., & Oshel, R. E. (2019). Crossing the line: Sexual misconduct by nurses reported to the National Practitioner Data Bank. *Public Health Nursing (Boston, Mass.)*, *36*(2), 109–117. https://doi.org/10.1111/phn.12567

Adams, T. L. (2020). Health professional regulation in historical context: Canada, the USA and the UK (19th century to present). *Human Resources for Health*, *18*(1), 72. https://doi.org/10.1186/s12960-020-00501-y

Affara, F. A., & Al-Jabri, S. S. (2016). Professional Self-Regulation for Nursing and Midwifery in Oman: Protecting the Public and Enhancing the Quality of Care. *Oman Medical Journal*, *31*(4), 243–244. https://doi.org/10.5001/omj.2016.48

Ahmad, E. R., Qahtani, N. H. A., Nafee, H., & Al-Eraky, M. (2017). Teaching professionalism to Saudi nursing students using guided reflection on clinical vignettes. *Journal of Nursing Education and Practice*, *8*(1), 1. https://doi.org/10.5430/jnep.v8n1p1

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. https://doi.org/10.1177/0969733015579309

Aitamaa, E., Suhonen, R., Iltanen, S., Puukka, P., & Leino-Kilpi, H. (2021). Ethical problems in nursing management: Frequency and difficulty of the problems. *Health Care Management Review*, *46*(1). https://journals.lww.com/hcmrjournal/Fulltext/2021/01000/Ethical_problems_in_nursing_management__Frequency.4.aspx

Al Abrawi, S. (2024). A concept analysis of misconduct: Application to nursing education. *Nursing Ethics*, *31*(1), 89–100. https://doi.org/10.1177/09697330231183080

Alidina, K. (2012). Professionalism in post-licensure nurses in developed countries. *Journal of Nursing Education and Practice*, *3*(5), p128. https://doi.org/10.5430/jnep.v3n5p128

ALLEA - All European Academies. (2023). *The European Code of Conduct for Research Integrity*. ALLEA - All European Academies. https://doi.org/10.26356/ECoC

Azemian, A., Ebadi, A., & Afshar, L. (2021). Redefining the concept of professionalism in nursing: An integrative review. *Frontiers of Nursing*, *8*(4), 327–340. https://doi.org/10.2478/fon-2021-0033

Baca, M. (2009). Sexual boundaries: Are they common sense? *Journal for Nurse Practitioners*, *5*(7), 500–505.

Balestra, M. (2012). The Best Defense for Registered Nurses and Nurse Practitioners: Understanding the Disciplinary Process. *Journal of Nursing Law*, *15*(2), 39–44.

Banerjee, L. (2006). Ask a practice advisor. Substance misuse and chemical dependency by nurses. *SRNA Newsbulletin*, *8*(1), 10–10.

Baumann, A., Crea-Arsenio, M., Akhtar-Danesh, N., Fleming-Carroll, B., Hunsberger, M., Keatings, M., Elfassy, M. D., & Kratina, S. (2016). Strategic Workforce Planning for Health Human Resources: A Nursing Case Analysis. *Canadian Journal of Nursing Research*, *48*(3–4), 93–99. https://doi.org/10.1177/0844562116680715

Beardwood, B. A., & Kainer, J. M. (2015). Exploring risk in professional nursing practice: An analysis of work refusal and professional risk. *Nursing Inquiry*, *22*(1), 50–63. https://doi.org/10.1111/nin.12048

Beckstead, J. W. (2005). Reporting peer wrongdoing in the healthcare profession: The role of incompetence and substance abuse information. *International Journal of Nursing Studies*, *42*(3), 325–331.

Bengtsson, M. (2016). How to plan and perform a qualitative study using content analysis. *NursingPlus Open*, *2*, 8–14. https://doi.org/10.1016/j.npls.2016.01.001

Benton, D. C., González-Jurado, M. A., & Beneit-Montesinos, J. V. (2013). A structured policy review of the principles of professional self-regulation. *International Nursing Review*, *60*(1), 13–22. https://doi.org/10.1111/inr.12003

Benton, D. C., González-Jurado, M. A., & Beneit-Montesinos, J. V. (2014). Professional regulation, public protection and nurse migration. *Collegian*, *21*(1), 53–59. https://doi.org/10.1016/j.colegn.2013.01.001

Benton, J. H., & Flynn, J. (2013). Identifying and Minimizing Risk Exposures Affecting Nursing Practice to Enhance Patient Safety. *Journal of Nursing Regulation*, *3*(4), 4–9. https://doi.org/10.1016/S2155-8256(15)30179-4

Benton, K. K., & Thomas, K. A. (2021). Realizing the Value of Nursing Through Innovative Regulation. *Nursing Administration Quarterly*, *45*(3), 197–200. https://doi.org/10.1097/NAQ.0000000000000473

Berland, A., & Bentsen, S. B. (2017). Medication errors in home care: A qualitative focus group study. *Journal of Clinical Nursing*, *26*(21–22), 3734–3741. https://doi.org/10.1111/jocn.13745

Birkeland, S., Depont Christensen, R., Damsbo, N., & Kragstrup, J. (2013). Characteristics of complaints resulting in disciplinary actions against Danish GPs. *Scandinavian Journal of Primary Health Care*, *31*(3), 153–157. https://doi.org/10.3109/02813432.2013.823768

Björklund, J., & Hemberg, J. (2024). Unethical conduct as a multifaceted phenomenon in psychiatric care: Nurse leaders' perspectives. *Nursing Ethics*, 09697330241299523. https://doi.org/10.1177/09697330241299523

Bowen, G. A. (2009). Document Analysis as a Qualitative Research Method. *Qualitative Research Journal*, *9*(2), 27–40. https://doi.org/10.3316/QRJ0902027

Braquehais, M. D., Mozo, X., Llavayol, E., Gausachs, E., Santiago, R., Nieva, G., Valero, S., Grau-López, L., Ramos-Quiroga, J. A., & Bruguera, E. (2024). Comparing nurses attending a specialised mental health programme with and without substance use disorder: A retrospective, observational study in Spain. *BMJ Open*, *14*(4), e078012. https://doi.org/10.1136/bmjopen-2023-078012

Brecher, B. (2014). 'What is professional ethics?' *Nursing Ethics*, *21*(2), 239–244. https://doi.org/10.1177/0969733013484485

Brous, E. (2008). The criminalization of unintentional error: Implications for TAANA. *Journal of Nursing Law*, *12*(1), 5–12.

Brous, E. (2012). Professional licensure: Investigation and disciplinary action. *The American Journal of Nursing*, *112*(11), 53–60. https://doi.org/10.1097/01.NAJ.0000422256.95706.9b

Burford, B., Morrow, G., Rothwell, C., Carter, M., & Illing, J. (2014). Professionalism education should reflect reality: Findings from three health professions. *Medical Education*, *48*(4), 361–374. https://doi.org/10.1111/medu.12368

Cadiz, D., Truxillo, D. M., & O'Neill, C. (2015). Common risky behaviours checklist: A tool to assist nurse supervisors to assess unsafe practice. *Journal of Nursing Management (John Wiley & Sons, Inc.)*, *23*(6), 794–802. https://doi.org/10.1111/jonm.12214

Cadiz, D., Truxillo, D., & O'Neill, C. (2012). Evaluation of a training program for nurse supervisors who monitor nurses in an alternative-to-discipline program. *ANS.Advances in Nursing Science*, *35*(2), 135–144. https://doi.org/10.1097/ANS.0b013e31824fe6e0

Cao, H., Song, Y., Wu, Y., Du, Y., He, X., Chen, Y., Wang, Q., & Yang, H. (2023). What is nursing professionalism? A concept analysis. *BMC Nursing*, *22*(1), 34. https://doi.org/10.1186/s12912-022-01161-0

Cares, A., Pace, E., Denious, J., & Crane, L. A. (2015). Substance use and mental illness among nurses: Workplace warning signs and barriers to seeking assistance. *Substance Abuse*, *36*(1), 59–66. https://doi.org/10.1080/08897077.2014.933725

Çelik, S., & Hisar, F. (2012). The influence of the professionalism behaviour of nurses working in health institutions on job satisfaction: Professionalism behaviour of nurses. *International Journal of Nursing Practice*, *18*(2), 180–187. https://doi.org/10.1111/j.1440-172X.2012.02019.x

Chiarella, M., & Adrian, A. (2014). Boundary violations, gender and the nature of nursing work. *Nursing Ethics*, *21*(3), 267–277. https://doi.org/10.1177/0969733013493214

Choe, K., Kwon, S., & Kim, S. (2022). How do ethically competent nurses behave in clinical nursing practice? A qualitative study. *Journal of Nursing Management*, *30*(8), 4461–4471. https://doi.org/10.1111/jonm.13884

Choi, S., & Lee, W. (2024). Optimizing the Regulation of Nursing in the Asian Context: Development and Application of a Legal Framework. *Asian Nursing Research*, S1976131724001026. https://doi.org/10.1016/j.anr.2024.09.004

Church, C. D. (2016). Defining Competence in Nursing and Its Relevance to Quality Care. *Journal for Nurses in Professional Development*, *32*(5), E9–E14. https://doi.org/10.1097/NND.0000000000000289

Cleary, S., & Duke, M. (2019). Clinical governance breakdown: Australian cases of wilful blindness and whistleblowing. *Nursing Ethics*, *26*(4), 1039–1049. https://doi.org/10.1177/0969733017731917

Clevette, A., Erbin-Roesemann, M., & Kelly, C. (2007). Nursing licensure: An examination of the relationship between criminal convictions and disciplinary actions. *Journal of Nursing Law*, *11*(1), 5–11.

College of Nurses of Ontario. (2023). *Code of Conduct*. College of Nurses of Ontario Canada. https://www.cno.org/globalassets/docs/prac/49040_code-of-conduct.pdf

Cooke, H. (2006). Examining the disciplinary process in nursing: A case study approach. *Work, Employment and Society*, *20*(4), 687–707. https://doi.org/10.1177/0950017006069809

Cramer, C., & Davidhizar, R. (2008). Helping at-risk nursing students succeed on the National Council Licensure Examination-Registered Nurse. *The Health Care Manager*, *27*(3), 269–276. https://doi.org/10.1097/01.HCM.0000318758.14030.81

Cronquist, R. (2013). Management of Complaints Against Nurses: Review, Investigation, Action, Resolution. *Journal of Nursing Regulation*, *4*(1), 25–33. https://doi.org/10.1016/S2155-8256(15)30171-X

Currie, G., Richmond, J., Faulconbridge, J., Gabbioneta, C., & Muzio, D. (2019). Professional Misconduct in Healthcare: Setting Out a Research Agenda for Work Sociology. *Work, Employment and Society*, *33*(1), 149–161. https://doi.org/10.1177/0950017018793352

Cusack, L., Drioli-Phillips, P. G., Brown, J. A., & Hunter, S. (2019). Re-engaging Concepts of Professionalism to Inform Regulatory Practices in Nursing. *Journal of Nursing Regulation*, *10*(3), 21–27. https://doi.org/10.1016/S2155-8256(19)30144-9

Darbro, N., & Malliarakis, K. D. (2013). Substance Abuse: Risks Factors and Protective Factors. *Missouri State Board of Nursing Newsletter*, *15*(1), 6–7.

De Braganca, A. V., & Nirmala, R. (2017). Professionalism among Nurses: A concept analysis. *International Journal of Business and Management Invention*, *6*(7), 60–66.

Dehghani, A., Salsali, M., & Cheraghi, M. A. (2016). Professionalism in Iranian Nursing: Concept Analysis. *International Journal of Nursing Knowledge*, *27*(2), 111–118. https://doi.org/10.1111/2047-3095.12082

Devik, S. A., Munkeby, H., Finnanger, M., & Moe, A. (2020). Nurse managers' perspectives on working with everyday ethics in long-term care. *Nursing Ethics*, *27*(8), 969733020935958. https://doi.org/10.1177/0969733020935958

Dixon, K. A. (2013). Unethical conduct by the nurse: A critical discourse analysis of Nurses Tribunal inquiries. *Nursing Ethics*, *20*(5), 578–588. https://doi.org/10.1177/0969733012468465

Donaldson, M. S., Corrigan, J. M., & Kohn, L. T. (2000). *To Err Is Human. Building a Safer Health System.* National Academies Press. https://ebookcentral-proquest-com.ezproxy.uef.fi:2443/lib/uef-ebooks/detail.action?docID=3375380

Doyle, L., McCabe, C., Keogh, B., Brady, A., & McCann, M. (2020). An overview of the qualitative descriptive design within nursing research. *Journal of Research in Nursing*, *25*(5), 443–455. https://doi.org/10.1177/1744987119880234

Dozier, A. M. (1998). Professional Standards: Linking Care, Competence, and Quality. *Journal of Nursing Care Quality*, *12*(4), 22–29. https://doi.org/10.1097/00001786-199804000-00007

Eid, A., Ahmed, M., Safan, S., & Mohamed, S. (2018). Nursing professionalism: A concept analysis. *Menoufia Nursing Journal*, *3*(2), 63–69. https://doi.org/10.21608/menj.2018.121319

Eisenmann, N. (2020). Differences between Licensed Healthcare Professionals with Substance Use-Related Licensure Discipline. *Substance Use & Misuse*, *55*(12), 2035–2042. https://doi.org/10.1080/10826084.2020.1788090

Elksas, E. I., Rahman, R. M. A. E., & Ali, N. H. (2021). Developing an Instrument for Measuring Bachelor's Degree Nursing Professionalism. *International Journal of Novel Research in Healthcare and Nursing*, *8*(1), 376–389. https://www.noveltyjournals.com/upload/paper/Developing%20an%20Instrument%20for%20Measuring.pdf

Elo, S., Kääriäinen, M., Kanste, O., Pölkki, T., Utriainen, K., & Kyngäs, H. (2014). Qualitative Content Analysis: A Focus on Trustworthiness. *SAGE Open*, *4*(1), 2158244014522633. https://doi.org/10.1177/2158244014522633

European Union. (2016). *EU General Data Protection Regulation (GDPR)* ((EU) 2016/679). https://eur-lex.europa.eu/legal-content/EN/TXT/?uri=celex%3A32016R0679

Evans, S. (2010). Assessing and Managing Sexual Misconduct. *Journal of Nursing Regulation*, *1*(2), 52–56. https://doi.org/10.1016/S2155-8256(15)30352-5

Evans, S., Berry, J. G., Smith, B. J., Esterman, A., Selim, P., O'Shaughnessy, J., & DeWit, M. (2006). Attitudes and barriers to incident reporting: A collaborative hospital study. *Quality & Safety in Health Care*, *15*(1), 39–43.

Fidanci, B. E., PhD RN, Yildiz, D., RN, Konukbay, D., Msc, RN, Akyol, M., PhD, Akbayrak, N., RN, & Hatipoglu, S., RN. (2014). Assessment of the Malpractice Tendencies of Nurses Working in an Educational and Research Hospital. *International Journal of Caring Sciences*, *7*(1), 294–301. ProQuest Central; Publicly Available Content Database. https://www.proquest.com/scholarly-journals/assessment-malpractice-tendencies-nurses-working/docview/1501334223/se-2?accountid=14774

Finnish National Board on Research Integrity. (2019). *The ethical principles of research with human participants and ethical review in the human sciences in Finland.* <https://tenk.fi/sites/default/files/2021-01/Ethical_review_in_human_sciences_2020. pdf>

Finnish National & Board on Research Integrity. (2023). *The Finnish code of conduct for research integrity and procedures for handling alleged violations of research integrity in Finland. Guideline of the Finnish National Board on Research Integrity TENK 2023* [Publications of the Finnish National Board on Research Integrity TENK 4/2023]. https://tenk.fi/sites/default/files/2023-11/RI_Guidelines_2023.pdf

Finnish Nurses Association. (2020a). *Nurses' Ethical Principles*.

Finnish Nurses Association. (2020b). *Statistics of Nurses. 2020. Https://sairaanhoitajat.fi/ammatti-ja-osaaminen/tilastoja-sairaanhoitajista-2/ (accessed 16.3.2020)*. https://sairaanhoitajat.fi/ammatti-ja-osaaminen/tilastoja-sairaanhoitajista-2/

Fischer, H. R., Houchen, B. J., & Ferguson-Ramos, L. (2008). Professional boundaries violations: Case studies from a regulatory perspective. *Nursing Administration Quarterly*, *32*(4), 317–323.

Flook, D. M. (2003). The professional nurse and regulation. *Journal of Perianesthesia Nursing : Official Journal of the American Society of PeriAnesthesia Nurses*, *18*(3), 160–167.

Foli, K. J., Reddick, B., Zhang, L., & Edwards, N. (2019). Substance Use in Registered Nurses: Where Legal, Medical, and Personal Collide. *Journal of Nursing Regulation*, *10*(2), 45–54. https://doi.org/10.1016/S2155-8256(19)30115-2

Foong-Reichert, A.-L., Fung, A., Carter, C. A., Grindrod, K. A., & Houle, S. K. D. (2021). Characteristics, Predictors and Reasons for Regulatory Body Disciplinary Action in Health Care: A Scoping Review. *Journal of Medical Regulation*, *107*(4), 17–31. https://doi.org/10.30770/2572-1852-107.4.17

Fox, S., & Spector, P. E. (Eds.). (2005). *Counterproductive work behavior: Investigations of actors and targets.* American Psychological Association. https://doi.org/10.1037/10893-000

Gagnon, M., & Perron, A. (2020). Whistleblowing: A concept analysis. *Nursing & Health Sciences*, *22*(2), 381–389. https://doi.org/10.1111/nhs.12667

Gallagher, C. T., & Saleem, F. (2022). How the United Kingdom's Nursing and Midwifery Council Applies Guidance When Exercising Its Disciplinary Functions. *Journal of Nursing Regulation*, *13*(3), 52–59. https://doi.org/10.1016/S2155-8256(22)00080-1

Garrett, B. M., & MacPhee, M. (2014). The slippery slope of nursing regulation: Challenging issues for contemporary nursing practice in Canada. *Nursing Leadership (Toronto, Ont.)*, *27*(3), 51–69.

Ghadirian, F., Salsali, M., & Cheraghi, M. A. (2014). Nursing professionalism: An evolutionary concept analysis. *Iranian Journal of Nursing and Midwifery Research*, *19*(1), 1–10.

Ghobadi, A., Sayadi, L., Nayeri, N. D., Shabestari, A. N., & Varaei, S. (2023). The nurses' perception of the factors influencing professional misconduct: A qualitative study. *Nursing Ethics*, 09697330231184469. https://doi.org/10.1177/09697330231184469

Gibson, W., & Brown, A. (2009). *Working with Qualitative Data*. SAGE Publications. https://books.google.fi/books?id=zdzYwxtXKWQC

Gil, A. P. (2019). Quality procedures and complaints: Nursing homes in Portugal. *Journal of Adult Protection*, *21*(2), 126–143. https://doi.org/10.1108/JAP-09-2018-0018

Gittler, G. J., & Goldstein, E. J. C. (1996). The Elements of Medical Malpractice: An Overview. *Clinical Infectious Diseases*, *23*(5), 1152–1155. https://doi.org/10.1093/clinids/23.5.1152

Graneheim, U. H., & Lundman, B. (2004). Qualitative content analysis in nursing research: Concepts, procedures and measures to achieve trustworthiness. *Nurse Education Today*, *24*(2), 105–112. https://doi.org/10.1016/j.nedt.2003.10.001

Griffith, R., & Tengnah, C. (2013). Maintaining professional boundaries: Keep your distance. *British Journal of Community Nursing*, *18*(1), 43–46. https://doi.org/10.12968/bjcn.2013.18.1.43

Halpern, K. J., McKinnon, R., Okolo, A. N., Sanzio, T. M., & Dolan, C. (2016). A Medication Error and Legislation Designed to Punish: The American Association of Nurse Attorneys Defends Just Culture in Nursing. *The Journal for Nurse Practitioners*, *12*(2), 109–112. https://doi.org/10.1016/j.nurpra.2015.10.018

Halter, M., Brown, H., & Stone, J. (2007). *Sexual Boundary Violations by Health Professionals – an overview of the published empirical literature. April 2007. The Council for Healthcare Regulatory Excellence*. The Council for Healthcare Regulatory Excellence.

Härkänen, M., Koskiniemi, S., Syyrilä, T., Ranta, J., Säilä, M., Mäntymaa, M., Pehkonen, A., & Vehviläinen-Julkunen, K. (2023). Abuse of social care clients committed by nurses and other social service employees—Analysis of employees' reports. *Journal of Advanced Nursing*, jan.15713. https://doi.org/10.1111/jan.15713

Härkänen, M., Turunen, H., & Vehviläinen-Julkunen, K. (2016). Differences Between Methods of Detecting Medication Errors: A Secondary Analysis of Medication Administration Errors Using Incident Reports, the Global Trigger Tool Method, and Observations. *Journal of Patient Safety*, *24*(Journal Article). https://doi.org/10.1097/PTS.0000000000000261

Havermans, B. M., Brouwers, E. P. M., Hoek, R. J. A., Anema, J. R., Van Der Beek, A. J., & Boot, C. R. L. (2018). Work stress prevention needs of employees and supervisors. *BMC Public Health*, *18*(1), 642. https://doi.org/10.1186/s12889-018-5535-1

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. https://doi.org/10.1111/j.1365-2648.2006.03912.x

Hester, M. G., Green, A., Thomas, M. B., & Benton, M. (2011). Data Analysis of Texas RNs with Multiple Disciplinary Actions. *Journal of Nursing Regulation*, *2*(2), 51–56. https://doi.org/10.1016/S2155-8256(15)30288-X

Hudson, M. L., & Droppers, O. J. (2011). Licensed nurses disciplined in Oregon between September 1996 and June 2008. *Western Journal of Nursing Research*, *33*(8), 1030–1046. https://doi.org/10.1177/0193945910384491

Hudspeth, R. (2009). Understanding discipline of nurse practitioners by boards of nursing. *Journal for Nurse Practitioners*, *5*(5), 365–371.

Hulme, S., Hughes, C. E., & Nielsen, S. (2019). What factors contributed to the misconduct of health practitioners? An analysis of Australian cases involving the diversion and supply of pharmaceutical drugs for non-medical use between 2010 and 2016. *Drug and Alcohol Review*, *38*(4), 366–376. https://doi.org/10.1111/dar.12918

International Committee of Medical Journal Editors [ICMJE]. (2024). *Recommendations for the Conduct, Reporting, Editing, and Publication of Scholarly Work in Medical Journals*. International Committee of Medical Journal Editors. https://www-sagepub-com.ezproxy.utu.fi/ICMJE-msg

International Council of Nurses. (2012). *The ICN Code of Ethics for Nurses*. International Council of Nurses.

International Council of Nurses. (2014). *2014. Regulatory Board Governance Toolkit. ICN Regulation Series.* Developed by Jean Barry for the International Council of Nurses. https://www.icn.ch/sites/default/files/inline-files/2014_Regulatory_Board_Governance_Toolkit.pdf

International Council of Nursing. (2021). *THE ICN CODE OF ETHICS FOR NURSES*. https://www.icn.ch/sites/default/files/2023-06/ICN_Code-of-Ethics_EN_Web.pdf

Jacoby, S. R., & Scruth, E. A. (2017). Negligence and the Nurse: The Value of the Code of Ethics for Nurses. *Clinical Nurse Specialist*, *31*(4), 183–185. https://doi.org/10.1097/NUR.0000000000000301

Jankelová, N., & Joniaková, Z. (2021). Communication Skills and Transformational Leadership Style of First-Line Nurse Managers in Relation to Job Satisfaction of Nurses and Moderators of This Relationship. *Healthcare (Basel, Switzerland)*, *9*(3), 346. doi: 10.3390/healthcare9030346. https://doi.org/10.3390/healthcare9030346

Johnstone, M. J. (2012). Unethical professional conduct. *Australian Nursing Journal (July 1993)*, *19*(11), 34.

Johnstone, M. J., & Kanitsaki, O. (2006). The ethics and practical importance of defining, distinguishing and disclosing nursing errors: A discussion paper. *International Journal of Nursing Studies*, *43*(3), 367–376. https://doi.org/10.1016/j.ijnurstu.2005.04.010

Jones, J. S., Fitzpatrick, J. J., & Drake, V. K. (2008). Frequency of Postlicensure Registered Nurse Boundary Violations with Patients in the State of Ohio: A Comparison Based on Type of Prelicensure Registered Nurse Education. *Archives of Psychiatric Nursing*, *22*(6), 356–363. https://doi.org/10.1016/j.apnu.2007.09.001

Kaae, S., & Traulsen, J. M. (2015). *Qualitative methods in pharmacy practice research* (I Z-U-D. Babar (red.), Pharmacy Practice Research Methods (s. 49-68).). Springer. https://doi.org/10.1007/978-3-319-14672-0_4

Kangasniemi, M., Pakkanen, P., & Korhonen, A. (2015). Professional ethics in nursing: An integrative review. *Journal of Advanced Nursing*, *71*(8), 1744–1757. https://doi.org/10.1111/jan.12619

Kangasniemi, M., Papinaho, O., Moilanen, T., Leino-Kilpi, H., Siipi, H., Suominen, S., & Suhonen, R. (2022). Neglecting the care of older people in residential care settings: A national document analysis of complaints reported to the Finnish supervisory authority. *Health & Social Care in the Community*, *30*(4). https://doi.org/10.1111/hsc.13538

Karlsson, I., Kwak, L., Axén, I., Bergström, G., Bültmann, U., Holmgren, K., & Björk Brämberg, E. (2023). Experiences of participating in a problem-solving intervention with workplace involvement in Swedish primary health care: A qualitative study from rehabilitation coordinator's, employee's, and manager's perspectives. *BMC Public Health*, *23*(1), 940. https://doi.org/10.1186/s12889-023-15899-y

Kenward, K. (2008). Discipline of nurses: A review of disciplinary data 1996-2006. *JONA'S Healthcare Law, Ethics and Regulation*, *10*(3), 81–84.

Khodayarimotlagh, Z., Ahmadi, F., Sadooghiasl, A., & Vaismoradi, M. (2022). Professional protection as the strategy of nurse managers to deal with nursing negligence. *International Nursing Review*, *69*(4), 442–449. https://doi.org/10.1111/inr.12744

Kiljunen, O., Partanen, P., Välimäki, T., & Kankkunen, P. (2019). Older people nursing in care homes: An examination of nursing professionals' self-assessed competence and its predictors. *International Journal of Older People Nursing*, *14*(2), e12225. https://doi.org/10.1111/opn.12225

Kim, Y. H., Jung, Y. S., Min, J., Song, E. Y., Ok, J. H., Lim, C., Kim, K., & Kim, J.-S. (2017). Development and validation of a nursing professionalism evaluation model in a career ladder system. *PLOS ONE*, *12*(10), e0186310. https://doi.org/10.1371/journal.pone.0186310

Kirwan, M., Riklikiene, O., Gotlib, J., Fuster, P., & Borta, M. (2019). Regulation and current status of patient safety content in pre-registration nurse education in 27 countries: Findings from the Rationing - Missed nursing care (RANCARE) COST Action project. *Nurse Education in Practice*, *37*, 132–140. https://doi.org/10.1016/j.nepr.2019.04.013

Koesnell, A., Bester, P., & Niesing, C. (2019). Conflict pressure cooker: Nurse managers' conflict management experiences in a diverse South African workplace. *Health SA = SA Gesondheid*, *24*(Journal Article), 1128. https://doi.org/10.4102/hsag.v24i0.1128

Konings, K. J., Gastmans, C., Numminen, O. H., Claerhout, R., Aerts, G., Leino-Kilpi, H., & de Casterlé, B. D. (2021). Measuring nurses' moral courage: An explorative study. *Nursing Ethics*, *Journal Article*, 9697330211003211. https://doi.org/10.1177/09697330211003211

Kulju, K., Stolt, M., Suhonen, R., & Leino-Kilpi, H. (2016). Ethical competence: A concept analysis. *Nursing Ethics*, *23*(4), 401–412. https://doi.org/10.1177/0969733014567025

Kunyk, D. (2015). Substance use disorders among registered nurses: Prevalence, risks and perceptions in a disciplinary jurisdiction. *Journal of Nursing Management*, *23*(1), 54–64. https://doi.org/10.1111/jonm.12081

Kunyk, D., & Deschenes, S. (2019). Disciplinary Decisions Regarding Professional Nurses: Exploring Regulatory Decisions in a Western Canadian Province. *Journal of Nursing Regulation*, *10*(3), 28–33. https://doi.org/10.1016/S2155-8256(19)30145-0

Kunyk, D., Milner, M., & Overend, A. (2016). Disciplining virtue: Investigating the discourses of opioid addiction in nursing. *Nursing Inquiry*, *23*(4), 315–326. https://doi.org/10.1111/nin.12144

Kyngäs, H., & Kaakinen, P. (2019). Deductive Content Analysis. *The Application of Content Analysis in Nursing Science Research*, *Journal Article*.

Kyngäs, H., Mikkonen, K., & Kääriäinen, M. (Eds.). (2020). *The Application of Content Analysis in Nursing Science Research*. Springer International Publishing. https://doi.org/10.1007/978-3-030-30199-6

Lehtoaro, S., Josefsson, K., & Sinervo, T. (2018). Professionals' self-rated quality of care and its relation to competence, national guidelines and policies—A cross-sectional study among Finnish elderly care workers. *BMC Health Services Research*, *18*(1), 896-018-3705–3706. https://doi.org/10.1186/s12913-018-3705-6

Leslie, K., Bourgeault, I. L., Carlton, A.-L., Balasubramanian, M., Mirshahi, R., Short, S. D., Carè, J., Cometto, G., & Lin, V. (2023). Design, delivery and effectiveness of health practitioner regulation systems: An integrative review. *Human Resources for Health*, *21*(1), 72. https://doi.org/10.1186/s12960-023-00848-y

Leslie, K., Dunk, M., Staempfli, S., & Cook, K. (2021). Mandatory Reporting of Colleagues to Regulators: An Overview of Requirements for Registered Nurses in 12 Canadian Jurisdictions. *Journal of Nursing Regulation*, *12*(3), 68–77. https://doi.org/10.1016/S2155-8256(21)00118-6

Letvak, S. (2013). We Cannot Ignore Nurses' Health Anymore: A Synthesis of the Literature on Evidence-Based Strategies to Improve Nurse Health. *Nursing Administration Quarterly*, *37*(4), 295–308. https://doi.org/10.1097/NAQ.0b013e3182a2f99a

Luurila, K., Kangasniemi, M., Hult, M., & Häggman-Laitila, A. (2022). Nurses' substance use disorder in disciplinary procedures: A retrospective document analysis. *Journal of Clinical Nursing*, *32*(11–12), 2663–2671. https://doi.org/10.1111/jocn.16343

Malek, J. (2010). To Tell or Not to Tell? The Ethical Dilemma of the Would-Be Whistleblower. *Accountability in Research*, *17*(3), 115–129. https://doi.org/10.1080/08989621003791929

Mansbach, A., Kushnir, T., Ziedenberg, H., & Bachner, Y. G. (2014). Reporting Misconduct of a Coworker to Protect a Patient: A Comparison between Experienced Nurses and Nursing Students. *The Scientific World Journal*, *2014*, 1–6. https://doi.org/10.1155/2014/413926

Martin, B., & Kaminski-Ozturk, N. (2022). Evaluating the Operational Efficiency of Nursing Regulatory Boards' Discipline Case Management. *Journal of Nursing Regulation*, *13*(1), 62–69. https://doi.org/10.1016/S2155-8256(22)00035-7

Martin, G. P., Chew, S., & Dixon-Woods, M. (2021). Uncovering, creating or constructing problems? Enacting a new role to support staff who raise concerns about quality and safety in the English National Health Service. *Health: An Interdisciplinary Journal for the Social Study of Health, Illness and Medicine*, *25*(6), 757–774. https://doi.org/10.1177/1363459319901296

Mattar E Silva, T. W., McLean, D., & Velloso, I. C. (2022). Disciplinary power on daily practices of nurses and physicians in the hospital. *Nursing Inquiry*, *29*(2). https://doi.org/10.1111/nin.12455

Matthews, D. W., Benton, K. K., Moreland, S. C., & Wagner, T. (2019). Addressing Nursing Practice Breakdown: An Alternative Approach to Remediation. *Journal of Nursing Regulation*, *10*(1), 28–34. https://doi.org/10.1016/S2155-8256(19)30080-8

Mattox, E. A. (2012). Strategies for Improving Patient Safety: Linking Task Type to Error Type. *Critical Care Nurse*, *32*(1), 52–78. https://doi.org/10.4037/ccn2012303

Maurits, E. E., de Veer, A. J., Groenewegen, P. P., & Francke, A. L. (2016). Dealing with professional misconduct by colleagues in home care: A nationwide survey among nursing staff. *BMC Nursing*, *15*(Journal Article), 59-016-0182-2. eCollection 2016. https://doi.org/10.1186/s12912-016-0182-2

McPherson, S., & Wendler, M. C. (2020). Safe clinical practice in pre-licensure nursing students: A concept analysis. *Nursing Forum*, *55*(3), 513–522. https://doi.org/10.1111/nuf.12457

Millbank, J. (2020). Serious misconduct of health professionals in disciplinary tribunals under the National Law 2010-17. *Australian Health Review : A Publication of the Australian Hospital Association*, *44*(2), 190–199. https://doi.org/10.1071/AH18239

Miller, B. K. (1988). A model for professionalism in nursing. *Today's OR Nurse*, *10*(9), 18–23.

Miller, B. K., Adams, D., & Beck, L. (1993). A behavioral inventory for professionalism in nursing. *Journal of Professional Nursing*, *9*(5), 290–295. https://doi.org/10.1016/8755-7223(93)90055-H

Ministry of Justice. (1994). *Act on Health Care Professionals 559/1994*. *Laws/Statutes*. https://www.finlex.fi/en/laki/kaannokset/1994/en19940559_20110312.pdf

Ministry of Justice. (2008). *Act on the Licensing and Supervision Agency for Social and Health Care 669/2008*. *Laws/Statutes*. https://www.finlex.fi/fi/laki/ajantasa/2008/20080669#P6

Ministry of Social Affairs and Health. (2002). *Occupational Safety And Health Act 738/2002*. https://finlex.fi/en/laki/kaannokset/2002/en20020738_20210755.pdf

Ministry of Social Affairs and Health. (2022). *The Client and Patient Safety Strategy and Implementation Plan 2022–2026* (Publications of the Ministry of Social Affairs and Health 2022:2). https://julkaisut.valtioneuvosto.fi/bitstream/handle/10024/163858/STM_2022_2.pdf?sequence=1&isAllowed=y

Ministry of Social Affairs and Health. (2023). *Act on Social and Healthcare Supervision*. https://www.finlex.fi/fi/laki/alkup/2023/20230741

Moher, D., Liberati, A., Tetzlaff, J., Altman, D. G., & PRISMA Group. (2009). Preferred reporting items for systematic reviews and meta-analyses: The PRISMA statement. *Annals of Internal Medicine*, *151*(4), 264–269, W64.

Moilanen, T., Kangasniemi, M., Papinaho, O., Mynttinen, M., Siipi, H., Suominen, S., & Suhonen, R. (2021). Older people's perceived autonomy in residential care: An integrative review. *Nursing Ethics*, *28*(3), 414–434. https://doi.org/10.1177/0969733020948115

Moilanen, T., Sivonen, M., Hipp, K., Kallio, H., Papinaho, O., Stolt, M., Turjamaa, R., Häggman-Laitila, A., & Kangasniemi, M. (2022). Developing a Feasible and Credible Method for Analyzing Healthcare Documents as Written Data. *Global Qualitative Nursing Research*, *9*, 233339362211087. https://doi.org/10.1177/23333936221108706

Moll, S. E. (2014). The web of silence: A qualitative case study of early intervention and support for healthcare workers with mental ill-health. *BMC Public Health*, *14*(1), 138. https://doi.org/10.1186/1471-2458-14-138

Monroe, T. (2009). Educational innovations. Addressing substance abuse among nursing students: Development of a prototype alternative-to-dismissal policy. *Journal of Nursing Education*, *48*(5), 272–278.

Monroe, T., & Kenaga, H. (2011). Don't ask don't tell: Substance abuse and addiction among nurses: Substance misuse among nurses. *Journal of Clinical Nursing*, *20*(3–4), 504–509. https://doi.org/10.1111/j.1365-2702.2010.03518.x

Moore, L., & McAuliffe, E. (2012). To report or not to report? Why some nurses are reluctant to whistleblow. *Clinical Governance: An International Journal*, *17*(4), 332–342. https://doi.org/10.1108/14777271211273215

Murray, T. A., Pole, D. C., Ciarlo, E. M., & Holmes, S. (2016). A Nursing Workforce Diversity Project: Strategies for Recruitment, Retention, Graduation, and NCLEX-RN Success. *Nursing Education Perspectives*, *37*(3), 138–143.

National Council of State Boards of Nursing [NCSBN]. (2022). *Nursing Regulation—Discipline.* https://www.ncsbn.org/nursing-regulation/discipline.page

National Supervisory Authority for Welfare and Health. (2016, July 13). *Terhikki Register [JulkiTerhikki]*.

National Supervisory Authority for Welfare and Health. (2021, March 12). *Good practice [Hyvä ammatinharjoittaminen]*. https://www.valvira.fi/terveydenhuolto/hyva-ammatinharjoittaminen

National Supervisory Authority for Welfare and Health. (2023). *Social and healthcare national monitoring program for the years 2020–2023 Update for 2023 [Sosiaali- ja terveydenhuollon valtakunnallinen valvontaohjelma vuosille 2020–2023, Päivitys vuodelle 2023]* (V/2740/2023). https://www.valvira.fi/documents/14444/1006217/Sote_valvontaohjelma_2023.pdf/c90eefd8-1209-2702-1e47-2dc6317beb84?t=1676537158594

National Supervisory Authority for Welfare and Health. (2024). *Statistics on the number of control solutions [Valvontaratkaisujen lukumäärätilastoja]*. https://www.avoindata.fi/data/fi/dataset/valvontaratkaisujen-lukumaaratilastoja/resource/a6c2a5e8-206a-48fa-b589-0f72fad38e3e?view_id=0960ebd4-75a9-407b-b460-9f84aa682158&filters=Ammattioikeus%3Alaillistettu+sairaanhoitaja

National Supervisory Authority for Welfare and Health in Finland. (2016). *2016. Report of victimization in elderly care*. National Supervisory Authority for Welfare and Health. https://www.valvira.fi/-/93-valviran-kyselyyn-vastanneista-on-havainnut-vanhusten-kaltoinkohtelua-kysely-paljasti-myos-puutteita-omavalvonnan-ja-ilmoitusvelvollisuuden-toteutu

National Supervisory Authority for Welfare and Health in Finland. (2019). *2019. Health care surveillance statistics. New, resolved and unfinished health care supervision cases in 2009-2018 by Valvira*. National Supervisory Authority for Welfare and Health. https://www.valvira.fi/terveydenhuolto/tilastot

Neale, A. (1996). Professional Conduct and Professional Misconduct: A Framework and Its Application to the Accounting Profession. *Journal of Business Ethics*, *15*(2), 219–226. http://www.jstor.org/stable/25072747

Numminen, O., Repo, H., & Leino-Kilpi, H. (2017). Moral courage in nursing: A concept analysis. *Nursing Ethics*, *24*(8), 878–891. https://doi.org/10.1177/0969733016634155

Nursing & Midwifery Council. (2018). *The Code Professional Standards of Practice and Behaviour for Nurses, Midwives and Nursing associates.* https://www.nmc.org.uk/globalassets/sitedocuments/nmc-publications/nmc-code.pdf

Nursing and Midwifery Council. (2009). *Fitness to Practice Annual Report 1 April 2008 to 31 March 2009*. https://www.nmc.org.uk/globalassets/sitedocuments/annual_reports_and_accounts/ftpannualreports/nmc-fitness-to-practise-annual-report-2008-2009.pdf

O'Brien, B. C., Harris, I. B., Beckman, T. J., Reed, D. A., & Cook, D. A. (2014). Standards for Reporting Qualitative Research: A Synthesis of Recommendations. *Academic Medicine*, *89*(9), 1245–1251. https://doi.org/10.1097/ACM.0000000000000388

O'Cathain, A., Murphy, E., & Nicholl, J. (2007). Why, and how, mixed methods research is undertaken in health services research in England: A mixed methods study. *BMC Health Services Research*, *7*(1), 85. https://doi.org/10.1186/1472-6963-7-85

Oxford English Dictionary. (2023). Oxford University Press.

Oyeleye, O. A. (2019). Examining Board Discipline of Nurse Practitioners for Medical Records Infractions. *The Journal for Nurse Practitioners*, *15*(9), 613–617. https://doi.org/10.1016/j.nurpra.2019.06.009

Peterson, U., Demerouti, E., Bergström, G., Samuelsson, M., Åsberg, M., & Nygren, Å. (2008). Burnout and physical and mental health among Swedish healthcare workers. *Journal of Advanced Nursing*, *62*(1), 84–95. https://doi.org/10.1111/j.1365-2648.2007.04580.x

Pluye, P., Robert, E., Cargo, M., Bartlett, G., O'Cathain, A., Griffiths, F., Boardman, F., Gagnon, M. P., & Rousseau, M. C. (2011). *Proposal: A mixed methods appraisal tool for systematic mixed*

studies reviews. Department of Family Medicine, McGill University, Montreal, Canada. http://mixedmethodsappraisaltoolpublic.pbworks.com

Pohjanoksa, J., Stolt, M., Suhonen, R., Löyttyniemi, E., & Leino-Kilpi, H. (2019). Whistle-blowing process in healthcare: From suspicion to action. *Nursing Ethics. 2019; 26(2):526-540.*, *Journal Article*. https://doi.org/10.1177/0969733017705005

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. https://doi.org/10.1111/jan.12213

Poikkeus, T., Suhonen, R., Katajisto, J., & Leino-Kilpi, H. (2020). Relationships between organizational and individual support, nurses' ethical competence, ethical safety, and work satisfaction. *Health Care Management Review*, *45*(1), 83–93. https://doi.org/10.1097/HMR.0000000000000195

Polit, D. F., & Beck, C. T. (2017). *Nursing Research: Generating and assessing evidence for nursing practice* (10. Edition, International edition). Wolters Kluwer.

Poorchangizi, B., Borhani, F., Abbaszadeh, A., Mirzaee, M., & Farokhzadian, J. (2019). Professional Values of Nurses and Nursing Students: A comparative study. *BMC Medical Education*, *19*(1), 438. https://doi.org/10.1186/s12909-019-1878-2

Pugh, D. (2009). The phoenix process: A substantive theory about allegations of unprofessional conduct. *Journal of Advanced Nursing*, *65*(10), 2027–2037. https://doi.org/10.1111/j.1365-2648.2009.05038.x

Pugh, D. (2011). A fine line: The role of personal and professional vulnerability in allegations of unprofessional conduct. *Journal of Nursing Law*, *14*(1), 21–31. https://doi.org/10.1891/1073-7472.14.1.21

Raper, J. L., & Hudspeth, R. (2008). Why board of nursing disciplinary actions do not always yield the expected results. *Nursing Administration Quarterly*, *32*(4), 338–345.

Rasmussen, P., Muir-Cochrane, E., & Henderson, A. (2012). Document analysis using an aggregative and iterative process. *International Journal of Evidence-Based Healthcare*, *10*(2), 142–145. https://doi.org/10.1111/j.1744-1609.2012.00262.x

Rauwolf, P., & Jones, A. (2019). Exploring the utility of internal whistleblowing in healthcare via agent-based models. *BMJ Open*, *9*(1), e021705-2018–021705. https://doi.org/10.1136/bmjopen-2018-021705

Riegel, F., Crossetti, M. D. G. O., Martini, J. G., & Nes, A. A. G. (2021). Florence Nightingale's theory and her contributions to holistic critical thinking in nursing. *Revista Brasileira de Enfermagem*, *74*(2), e20200139. https://doi.org/10.1590/0034-7167-2020-0139

Ritter, A. Z., Bowles, K. H., O'Sullivan, A. L., Carthon, M. B., & Fairman, J. A. (2018). A Policy Analysis of Legally Required Supervision of Nurse Practitioners and Other Health Professionals. *Nursing Outlook*, *66*(6), 551–559.

Ross, C. A., Berry, N. S., Smye, V., & Goldner, E. M. (2018). A critical review of knowledge on nurses with problematic substance use: The need to move from individual blame to awareness of structural factors. *Nursing Inquiry*, *25*(2), e12215. https://doi.org/10.1111/nin.12215

Rothwell, C., Kehoe, A., Farook, S. F., & Illing, J. (2021). Enablers and barriers to effective clinical supervision in the workplace: A rapid evidence review. *BMJ Open*, *11*(9), e052929. https://doi.org/10.1136/bmjopen-2021-052929

Rowland, A. W. (2016). *What is Professionalism? The Validation of a Comprehensive Model of Professionalism* [Western Kentucky University]. https://digitalcommons.wku.edu/theses/1741/

Ruotsalainen, S., Jantunen, S., & Sinervo, T. (2020). Which factors are related to Finnish home care workers' job satisfaction, stress, psychological distress and perceived quality of care? - A mixed method study. *BMC Health Services Research*, *20*(1), 896. https://doi.org/10.1186/s12913-020-05733-1

Russell, K. (2020). Components of Nurse Substance Use Disorder Monitoring Programs. *Journal of Nursing Regulation*, *11*(2), 20–27. https://doi.org/10.1016/S2155-8256(20)30106-X

Russell, K., & Radtke, B. K. (2014). An Evidence-Based Tool for Regulatory Decision Making: The Regulatory Decision Pathway. *Journal of Nursing Regulation*, *5*(2), 5–9. https://doi.org/10.1016/S2155-8256(15)30078-8

Sadooghiasl, A., Parvizy, S., & Ebadi, A. (2018). Concept analysis of moral courage in nursing: A hybrid model. *Nursing Ethics*, *25*(1), 6–19. https://doi.org/10.1177/0969733016638146

Salyers, M. P., Bonfils, K. A., Luther, L., Firmin, R. L., White, D. A., Adams, E. L., & Rollins, A. L. (2017). The Relationship Between Professional Burnout and Quality and Safety in Healthcare: A Meta-Analysis. *Journal of General Internal Medicine*, *32*(4), 475–482. https://doi.org/10.1007/s11606-016-3886-9

Sameera, V., Bindra, A., & Rath, G. P. (2021). Human errors and their prevention in healthcare. *Journal of Anaesthesiology Clinical Pharmacology*, *37*(3), 328–335. https://doi.org/10.4103/joacp.JOACP_364_19

Schmidt, B. J., & McArthur, E. C. (2018). Professional nursing values: A concept analysis. *Nursing Forum*, *53*(1), 69–75. https://doi.org/10.1111/nuf.12211

Sherman, R. O., Chiang-Hanisko, L., & Koszalinski, R. (2013). The ageing nursing workforce: A global challenge. *Journal of Nursing Management*, *21*(7), 899–902. https://doi.org/10.1111/jonm.12188

Shohani, M., & Zamanzadeh, V. (2017). Nurses' Attitude towards Professionalization and Factors Influencing. *Journal of Caring Sciences*, *6*(4), 345–357. https://doi.org/10.15171/jcs.2017.033

Shuster, R. (2021). Monitoring Programs for Nurses With Substance Use Disorders: One Nurse's Journey and Recommendations. *Journal of Psychosocial Nursing and Mental Health Services*, *59*(3), 13–17. https://doi.org/10.3928/02793695-20210212-02

Siegner, M., Hagerman, S., & Kozak, R. (2018). Going deeper with documents: A systematic review of the application of extant texts in social research on forests. *Forest Policy and Economics*, *92*(Generic), 128–135. https://doi.org/10.1016/j.forpol.2018.05.001

Sipiläinen, H. (2016). *The perceptions of elder abuse by care staff in round-the-clock care units: Vol. Dissertations in Health Sciences Number 354. University of Eastern Finland, Faculty of Health Sciences Publications of the University of Eastern Finland* (p. 115 p.).

Smiley, R., & Reneau, K. (2020). Outcomes of Substance Use Disorder Monitoring Programs for Nurses. *Journal of Nursing Regulation*, *11*(2), 28–35. https://doi.org/10.1016/S2155-8256(20)30107-1

Snowdon, D. A., Leggat, S. G., & Taylor, N. F. (2017). Does clinical supervision of healthcare professionals improve effectiveness of care and patient experience? A systematic review. *BMC Health Services Research*, *17*(1), 786. https://doi.org/10.1186/s12913-017-2739-5

Starc, A. (2009). Nursing professionalism in Slovenia: Knowledge, power, and ethics. *Nursing Science Quarterly*, *22*(4), 371–374. https://doi.org/10.1177/0894318409344758

Stievano, A., Caruso, R., Pittella, F., Shaffer, F. A., Rocco, G., & Fairman, J. (2019). Shaping nursing profession regulation through history—A systematic review. *International Nursing Review*, *66*(1), 17–29. https://doi.org/10.1111/inr.12449

Stone, K., Traynor, M., Gould, D., & Maben, J. (2011). The management of poor performance in nursing and midwifery: A case for concern. *Journal of Nursing Management*, *19*(6), 803–809. https://doi.org/10.1111/j.1365-2834.2011.01219.x

Strobbe, S., & Crowley, M. (2017). Substance Use Among Nurses and Nursing Students: A Joint Position Statement of the Emergency Nurses Association and the International Nurses Society on Addictions. *Journal of Addictions Nursing*, *28*(2), 104–106. https://doi.org/10.1097/JAN.0000000000000150

Sullivan, W., & Benner, P. (2005). Challenges to Professionalism: Work Integrity and the Call to Renew and Strengthen the Social Contract of the Professions. *American Journal of Critical Care*, *14*(1), 78–84. https://doi.org/10.4037/ajcc2005.14.1.78

Tabari, Yekta, Z. P., Kiger, A. M., & Ahmadi, F. (2006). Professional competence: Factors described by nurses as influencing their development. *International Nursing Review*, *53*(1), 66–72. https://doi.org/10.1111/j.1466-7657.2006.00432.x

Tashakkori, A., & Teddlie, C. (2010). *SAGE Handbook of Mixed Methods in Social & Behavioral Research*. SAGE Publications, Inc. https://doi.org/10.4135/9781506335193

Thomas, M. B. (2010). Registered Nurses Select Multiple Factors Associated with their Errors. *Safety*, *22*(2), 279–282. https://doi.org/10.1016/j.ccell.2010.03.010

Thomas, M. B., McDermott, E., Green, D., & Benbow, D. (2020). Evaluation of Nursing Practice-Breakdown: A Resource for Peer Review. *Journal of Nursing Regulation*, *11*(1), 42–47. https://doi.org/10.1016/S2155-8256(20)30060-0

Tomagová, M., Kohanová, D., Žiaková, K., & Čáp, J. (2023). Nurses' Perception of Professionalism in Practice: A Review of Qualitative Studies. *Nursing Science Quarterly*, *36*(4), 387–398. https://doi.org/10.1177/08943184231187866

Tønnessen, S., Scott, A., & Nortvedt, P. (2020). Safe and competent nursing care: An argument for a minimum standard? *Nurs Ethics*, *27*(6), 1396–1407. https://doi.org/10.1177/0969733020919137

Toren, O., & Wagner, N. (2010). Applying an ethical decision-making tool to a nurse management dilemma. *Nursing Ethics*, *17*(3), 393–402. https://doi.org/10.1177/0969733009355106

Trinkoff, A. M., Yoon, J. M., Selby, V. L., Storr, C. L., Edwin, H. S., & Baek, H. (2021). Registered Nurses' Awareness of Workplace Signs, Actions, and Interventions for Nurses With Substance Use Disorder. *Journal of Nursing Regulation*, *12*(3), 20–29. https://doi.org/10.1016/S2155-8256(21)00113-7

Vaismoradi, M., Tella, S., A. Logan, P., Khakurel, J., & Vizcaya-Moreno, F. (2020). Nurses' Adherence to Patient Safety Principles: A Systematic Review. *International Journal of Environmental Research and Public Health*, *17*(6), 2028. https://doi.org/10.3390/ijerph17062028

Van Wyk, B. E., & Pillay-Van Wyk, V. (2010). Preventive staff-support interventions for health workers. In The Cochrane Collaboration (Ed.), *Cochrane Database of Systematic Reviews* (p. CD003541.pub2). John Wiley & Sons, Ltd. https://doi.org/10.1002/14651858.CD003541.pub2

Varaei, S., Nayeri, N. D., Sayadi, L., Shahmari, M., & Ghobadi, A. (2024). Outcomes of professional misconduct by nurses: A qualitative study. *BMC Nursing*, *23*(1), 200. https://doi.org/10.1186/s12912-024-01859-3

Vivek, R., & Nanthagopan, Y. (2021). Review and Comparison of Multi-Method and Mixed Method Application in Research Studies. *European Journal of Management Issues*, *29*(4), 200–208. https://doi.org/10.15421/192119

Weenink, J. W., Westert, G. P., Schoonhoven, L., Wollersheim, H., & Kool, R. B. (2015). Am I my brother's keeper? A survey of 10 healthcare professions in the Netherlands about experiences with impaired and incompetent colleagues. *BMJ Quality & Safety*, *24*(1), 56–64. https://doi.org/10.1136/bmjqs-2014-003068

Weld, K. K., & Garmon Bibb, S. C. (2009). Concept Analysis: Malpractice and Modern-Day Nursing Practice. *Nursing Forum*, *44*(1), 2–10. https://doi.org/10.1111/j.1744-6198.2009.00121.x

West, J. C. (2007). Criminalization of medical errors: When is a mistake more than just a mistake? *Journal of Healthcare Risk Management: The Journal of the American Society for Healthcare Risk Management*, *27*(1), 25–30, 33–36. https://doi.org/10.1002/jhrm.5600270106

Whittemore, R. (2005). Analysis of integration in nursing science and practice. *Journal of Nursing Scholarship : An Official Publication of Sigma Theta Tau International Honor Society of Nursing*, *37*(3), 261–267.

Whittemore, R., & Knafl, K. (2005). The integrative review: Updated methodology. *Journal of Advanced Nursing*, *52*(5), 546–553.

Witczak, I., Kołtuniuk, A., Rypicz, Ł., Panczyk, M., Grzebieluch, W., Młynarska, A., & Uchmanowicz, I. (2022). Self-assessment of Rationing and Quality of Nursing Care. *Journal of Nursing Care Quality*, *37*(3). https://journals.lww.com/jncqjournal/Fulltext/2022/07000/Self_assessment_of_Rationing_and_Quality_of.18.aspx

Wolf, Z. R. (2012). Nursing practice breakdowns: Good and bad nursing. *Medsurg Nursing : Official Journal of the Academy of Medical-Surgical Nurses*, *21*(1), 16–22, 36.

Worsley, A., Shorrock, S., & McLaughlin, K. (2020). Protecting the Public? An Analysis of Professional Regulation—Comparing Outcomes in Fitness to Practice Proceedings for Social Workers, Nurses and Doctors. *The British Journal of Social Work*, *50*(6), 1871–1889. https://doi.org/10.1093/bjsw/bcaa079

Zaghini, F., Fida, R., Caruso, R., Kangasniemi, M., & Sili, A. (2016). What is Behind Counterproductive Work Behaviors in the Nursing Profession? A Systematic Review. *Journal of Clinical Research and Bioethics*, *7:4*(Journal Article), 1–7.

Zhong, E. H., & Kenward, K. (2009). *Factors affecting remediation outcomes: Vol. National Council of State Boards of Nursing, 41 2009*. National Council of State Boards of Nursing.

Zhong, E. H., Kenward, K., Sheets, V. R., Doherty, M. E., & Gross, L. (2009). Probation and recidivism: Remediation among disciplined nurses in six States. *American Journal of Nursing*, *109*(3), 48–58. https://doi.org/10.1097/01.NAJ.0000346931.36111.e9

Zhong, E. H., & Martin, B. (2022). Risk Factors for Recidivism in Nursing Practice: A Criminal Conviction Case Review Cohort Study. *Journal of Nursing Regulation*, *13*(2), 34–39. https://doi.org/10.1016/S2155-8256(22)00067-9

Zhong, E. H., Martin, B., & Alexander, M. (2022). A Comparison of Discipline Between Nurses Holding a Multi- or Single-State License. *Journal of Nursing Regulation*, *13*(1), 22–26. https://doi.org/10.1016/S2155-8256(22)00030-8

Zhong, E. H., & Thomas, M. B. (2012). Association Between Job History and Practice Error: An Analysis of Disciplinary Cases. *Journal of Nursing Regulation*, *2*(4), 16–18. https://doi.org/10.1016/S2155-8256(15)30249-0

Žiaková, K., Kohanová, D., Čáp, J., & Kurucová, R. (2023). A thematic analysis of professionalism from the perspective of nurse managers. *Nursing Practice Today*. https://doi.org/10.18502/npt.v10i4.14080

List of Figures, Tables and Appendices

Figures

Tables

Appendices

Appendices

Appendix 1. Summary of the literature searches.

Search phrases	Limitations	Databases	Results	Included studies in the literature review
(nurse OR nurses) AND (“professional regulation”[Mesh] OR “employee discipline” OR “professional discipline” OR “license revocation”)	2019-2024 English language Abstract available Peer reviewed	CINAHL	349	7
		PubMed	101	
		Scopus	82	
		Web of Science	77	
nurs* AND ("professional identit*" OR professionalism* OR "professional conduct*" OR "professional competence*") AND ("concept analysis" OR meta-analysis OR "meta synthesis")	2010-2024 English language Peer-reviewed	CINAHL	127	12
		PubMed	100	
		Scopus	110	
		Web of Science	88	
Nurs* AND professional* AND (incomplete* OR deficien* OR impaired* OR improper* OR unprofessional* OR misconduct* OR incompetence* OR malpractice* OR unethical* OR violat* OR neglect* OR unaccept*) AND ("concept analysis" OR meta-analysis OR "meta synthesis")	2010-2024 English language Abstract available	CINAHL	47	12
		PubMed	153	
		Scopus	102	
		Web of Science	134	

Appendix 2. List of the professional standards, legislations and guidelines regarding professional nursing used in the study.

Guidelines for human rights	Legislation	Professional standards and guidelines in nursing
Universal Declaration of Human Rights 1948. United Nations	Act on Health Care Professionals 559/1994. Finnish Ministry of Justice	Code of Conduct. College of Nurses of Ontario 2023. https://www.cno.org/globalassets/docs/prac/49040_code-of-conduct.pdf
European Convention on Human rights 1950/2013. European Court of Human Rights	Act on checking the criminal background of persons working with children 504/2002. Finnish Ministry of Justice	Codes of ethics for nurses. Finnish Nurses Association 2021
	Act on the Licensing and Supervision Agency for Social and Health Care 669/2008. Finnish Ministry of Justice	The ICN Code of Ethics for Nurses. International Council of Nurses 2021
	Act on Social and Healthcare Supervision 741/2023. Finnish Ministry of Social Affairs and Health	The Client and Patient Safety Strategy and Implementation Plan 2022–2026. Publications of the Ministry of Social Affairs and Health 2022:2
	Act on Occupational Health Care 1283/2001. Ministry of Social Affairs and Health	Regulatory Board Governance Toolkit. ICN Regulation Series 2014. International Council of Nurses
	Act on Occupational Safety and Health 738/2002. Ministry of Social Affairs and Health	The Code Professional standards of practice and behaviour for nurses, midwives, and nursing associates 2018. Nursing & Midwifery Council
	Law on amending the Occupational Safety and Health Act 222/2023. Ministry of Social Affairs and Health	

Appendix 3. Summary of the included studies in the updated review.

Author(s), year, country, quality score (MMAT)	Aim	Study design and method	Sample	Main findings
Abudagga et al. (2019), USA **MMAT 4/6**	To examine nurse sexual-misconduct–related reports in the National Practitioner Data Bank (NPDB) and to compare them with reports for other types of offenses.	Cross-sectional study with descriptive, statistical analysis.	NPDB's reports of adverse state nursing board licensure actions and malpractice payments for 882 nurses from January 1, 2003, to June 30, 2016.	882 nurses had sexual-misconduct–related reports. Most were aged 35–54 (63.2%), male (63.2%), and registered or advanced practice nurses (61.5%). The disciplinary actions noted in the 988 nurses-sexual-misconduct-related licensure reports were more frequently serious than those noted in the 207,023 reports for other offenses committed by nurses (90.8% vs. 74.8%, respectively; $p < 0.001$). Of the 33 nurses with sexual-misconduct–related malpractice-payment reports, 48.5% were not disciplined by any state board of nursing for these offenses. Three-quarters of the victims in the 47 sexual-misconduct–related malpractice-payment reports were female, with "emotional injury only" reported as the severity of injury in 91.5% of these reports.
Gallagher & Saleem (2022), UK **MMAT 3/6**	To assess whether the NMC considers relevant factors at all stages of its deliberations into nurse misconduct, as required by the determinations in the appeal cases of Cohen v. General Medical Council (GMC), Zygmunt v. GMC, and Azzam v. GMC, and to assess whether the circumstances described in its Sanctions Guidance warranting the suspension	Descriptive study with statistical analysis. Specific factors, including patient safety and dishonesty, included when determining impairment of fitness to practice were compared with their subsequent consideration when determining the severity of sanction. Pearson's $\chi 2$ and Fisher's exact tests were used to	191 cases that involved a nurse or midwife between July and September 2021 that highlighted aggravating circumstances deemed as serious enough to warrant removal were identified and included in this study.	59 cases met the inclusion criteria. Each of the four factors considered was more likely to be heard when determining a sanction after first being factored into the consideration of impairment. Where the aggravating factors of dishonesty or risk of harm to patients or the public were identified as an aspect of a nurse's misconduct, the sanctions of suspension or removal were no more likely to be imposed than when they were absent.

	or removal of a nurse from the practice register lead to that outcome.	detect any variation from the expected distribution of data.		
Leslie et al. (2021), Canada **MMAT 2/6**	To compare the comprehensiveness and content of legislative requirements for registered nurses (RNs) to report concerns about colleagues to regulatory bodies across 12 Canadian jurisdictions.	Document analysis with a content analysis.	Legislation and regulatory documents from 12 Canadian jurisdictions between April and September 2020.	There is variation in the legislative mandatory reporting frameworks across these Canadian jurisdictions, primarily in the scope of reportable conduct and the threshold that triggers the requirement to report. Eight provinces have statutory requirements for RNs to report certain concerns about fellow healthcare professionals to regulators. The most common reportable conduct was sexual misconduct or sexual abuse of a patient. In six provinces, mandatory reporting requirements extend beyond sexual abuse or misconduct to concerns about conduct, competence, and capacity. There was variability in the language used in these legislative provisions across all reviewed jurisdictions.
Martin & Kaminski-Ozturk (2022), USA **MMAT 6/6**	To identify indicators of operational efficiency that transcend individual jurisdictions for the disciplinary process.	Quantitative study with descriptive statistics. Generalized estimating equation models, characteristic curves, and natural language processing techniques were used to assess the efficiency of case resolution.	Investigative staff at 10 U.S. NRBs entered detailed de-identified discipline case management information of 55 cases into a secure online database between June 2018 and June 2020.	A total of 55 cases from 10 states in various regions of the United States were submitted. Nearly three-quarters of all cases (73%) were resolved, and the median closure time was 177 calendar days. On multivariable analysis, the volume of open caseloads (adjusted OR = 1.12, 95% CI = 1.06, 1.19, $p < .001$), number of case steps (adjusted OR = 1.08, 95% CI = 1.03, 1.13, $p < .001$), and umbrella agency type (adjusted OR = 1.71, 95% CI = 1.06, 2.78, $p = .02$) had the strongest associations with inefficient case resolution.
Oyeleye (2019), USA **MMAT 3/6**	To examine the medical record practices of NPs for which they were disciplined by the Texas Board of Nursing, with a view to enlightening NPs about	Qualitative review of the records.	118 records of nurse practitioners (NPs) who were disciplined in Texas by the Board of Nursing between 2015 and 2017, specifically	The percentage of nurses in Texas who faced board disciplinary action in the years studied was less than 1%. The specific details of the infractions were failing to document clinical events that occurred and falsely documenting events that did not occur. Wherever the NPs provided a reason or rationale for their actions,

	such practices and, ideally, preventing them.		those who were disciplined for documentation-related infractions.	and those were the specific sanctions handed down by the Texas Board of Nursing in each case. The results in this study seem to indicate that most nurses who come before the board do not commit offenses that warrant getting their licenses revoked. There are consequences that range from a warning up to a license revocation. However, a revocation was not common.
Worsley et al. (2020), UK **MMAT 4/6**	To examine the publicly available data on Fitness to Practice cases from UK regulatory bodies relating to the professions of social workers, nurses, midwives and doctors.	Quantitative (mixed method), statistical analysis and a conceptual content analysis enabling the existence and frequency of a concept to be quantified.	Data included in this research was gathered from the six professional bodies that regulate social workers, doctors, nurses and midwives in the UK, with each regulatory body having their own specific website. Based on the criteria that FTP hearings and or decisions had to occur between 1st January 2018 and 1st January 2019, a total of 830 cases were recorded by all six professional bodies or tribunals.	Of th 830 cases, 83% were able to download and outcomes (n=688). 50% of all downloaded cases per professional body were analysed, resulting in 348 cases included in the final analysis. There were several areas where significant differences arise, namely gender, attendance and representation between these professional groupings. Of the 348 cases analysed, 46% related to doctors (n=160), with nurses /midwives accounting for 29% of cases (n=100 with Nurses comprising 95% of those cases). PSA regulated social workers were linked to 21% of cases (n=74), whilst non-PSA regulated social workers represented 4% of the cases analysed (n=14). Over half of FTP registrants were male (n=210, 60%), with a significant association between a registrant's gender and professional background being found. The main type of allegation, regardless of professional background was misconduct (n=223, 72%), followed by a caution/conviction (n=55, 18%), implying that regardless of professional background, hearings were addressing behaviour of a similar nature. The association between professional background and type of allegation was non-significant.
Zhong & Martin (2022.), USA	To assess the impact of a nurse's prior criminal conviction(s) on the risk of	A cohort study, a longitudinal case review	Nursys discipline data from 2008–2018 (N = 2,429) to	The 5-year recidivism rate of nurses who received disciplinary actions for criminal convictions between 2012 and 2013 was 38%,

MMAT 6/6	recidivism in nursing practice and to investigate whether nurses who were disciplined by BONs for a crime but retained an active nursing license posed a subsequent risk to public safety.	with descriptive statistics.	compare the risk of recidivism for nurses sanctioned for criminal convictions between 2012–2013 and those disciplined for other violations.	which is comparable to the recidivism rate among nurses in the control group (36%). Among those who had a criminal conviction history yet retained an active license, 4% committed a practice-related violation or crime within the 5-year post-disciplinary period. Three factors correlated with recidivism: committing a crime related to substance use disorder, committing a crime related to nursing practice, and committing multiple crimes.

Appendix 4. Strength and limitations of the sub-studies and the summary.

Study phase	Issue	Strengths	Limitations
SUB-STUDY I	**Data collection**	Four scientific databases were used: CINAHL, PubMed, Scopus, Web of Science. Integrative review enabled to review heterogeneous literature and previous studies with different study designs. Broad search limitations. The search terms were produced in a collaboration with an information specialist. Manual searches strengthen the comprehensiveness of the review. Detailed description of the data collections phase.	Time limitation could decrease the search results. Used search terms could limit the search results. Limited results in systematic searches, possible missing of the relevant studies. Regulatory nursing boards' reports of the disciplinary cases were excluded. Three included studies were case-based studies without any research method. Nationality bias due to most of the included studies were conducted in the USA.
	Data analysis	Inductive content analysis yielded comprehensive description of the data. Methodological quality of the selected studies was evaluated by Mixed Methods Appraisal Tool (MMAT) checked by two researchers, scores varied between 2-6 points.	Inconsistent description of the results in included studies due to different methods and study designs.
	Results	Comprehensive description of the topic. Sample size was suitable for integrative literature review.	Scarce sample size. Possible bias in the results.
SUB-STUDY II and III	**Data collection**	Cross-sectional, retrospective purposeful sampling supported the study design. Pre-defined data extraction matrix based on the previous literature. Pilot testing of data collection. Pre-defined inclusion and exclusion criteria. One document was excluded based on the criteria. Double-checking of the collected data by two researchers. Data was used for research purpose at the first time.	Confidential information in the documents was secured. Information in the documents varied, was missing or was not systematically available. Data included irrelevant information. Data limitation for the closed disciplinary cases in set time reduced the use of open cases as data. Information from the attachment documents were not systematically collected.
SUB-STUDY II	**Data analysis**	Descriptive quantitative data analysis was suitable based on the data sample and yielded comprehensive answer for the study aim. Statistical tests were checked by the statistician.	Data must be moved from the extraction matrixes to data analysis program manually. Analysis and statistical tests were conducted by the researcher. Limited rate of the cases set a limitation for statistical analysis.
	Results	Results produced comprehensive answers to set research questions.	Generalization of the results were not possible based on the data.

Study phase	Issue	Strengths	Limitations
SUB-STUDY III	**Data analysis**	Descriptive quantitative data analysis was suitable based on the data sample and yielded comprehensive answer for the study aim. Analysis was conducted by the researcher and statistician.	Limited rate of the cases set a limitation for statistical analysis.
	Results	Results produced comprehensive answers to set research questions.	Generalization of the results were not possible based on the data.
SUB-STUDY IV	**Data collection**	Cross-sectional purposeful sampling supported the study design. Pre-defined data collection frame based on the previous literature. Pilot testing of data collection. Pre-defined inclusion and exclusion criteria.	Excluded documents was not known by the researcher. Confidential information in the documents was secured. Ethical requirements set limitation to collect demographic information of nurses. Data bias.
	Data analysis	Inductive content analysis yielded comprehensive answer for the study aim. Data varied in content, some of the data were rich and diverse. Analysis was conducted by the researcher with the consensus in the research group.	Data varied in the content of the documents. Some of the data were sparce and fragmented. Data must be moved from the extraction matrixes to data analysis program manually.
	Results	Inductive content analysis yielded comprehensive description of the topic.	Generalization of the findings was not possible.
SUMMARY	**Data collection and analysis** Previous literature	Search terms were produced with a consulting of the information specialist. Used scientific databases: CINAHL, PubMed, Scopus, Web of Science. Peer-reviewed previous studies were included. The synthesis of the previous literature was conducted with the consensus in the research group.	Quality appraisal of all previous studies was missing. The synthesis of previous literature was conducted by the researcher.
	Data collection and analysis Sub-studies	The synthesis of the sub-studies based on the multi-method approach with quantitative and qualitative designs.	The synthesis of the study designs of the sub-studies I-IV was conducted by the researcher.
	Results	Synthesis of the results based on the sub-studies I-IV. Papers I-IV are peer-reviewed on published in the international journals.	The synthesis of results in the sub-studies I-IV was conducted by the researcher.

TURUN
YLIOPISTO
UNIVERSITY
OF TURKU

Painosalama, Turku, Finland 2025

ISBN 978-952-02-0068-8 (PRINT)
ISBN 978-952-02-0069-5 (PDF)
ISSN 0355-9483 (Print)
ISSN 2343-3213 (Online)