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Integrative review of studies about nurses who have been disciplined by their professional regulatory bodies

Papinaho, Oili

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Corresponding author:
¹²³⁴ Oili Papinaho
PhD student in Nursing Science, MSc, RN, Junior Charge Nurse
Email: oili.a.papinaho@utu.fi
Phone number: +358453181593

Authors:
³⁴ Arja Häggman-Laitila PhD, Professor, Chief Nursing Officer
⁵ Anna-Maija Liedenpohja, RN, MSc, Senior Inspector
¹ Mari Kangasniemi RN, PhD, Docent, University Researcher

¹ University of Turku, Department of Nursing Science
Joukahaisenkatu 3-5
20520 Turku
Finland

² Oulu University Hospital
Kajaanintie 50
90229 Oulu
Finland

³ University of Eastern Finland, Department of Nursing Science
P.O. BOX 1627
70211 Kuopio
Finland

⁴ Department of Social Services and Health Care,
City of Helsinki

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Finland

The National Supervisory Authority for Welfare and Health (Valvira)
P.O. BOX 210
00281 Helsinki
Finland

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The authors have no conflicts of interest declare.

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Integrative review of studies about nurses who have been disciplined by their professional regulatory bodies

ABSTRACT

Aim: To synthesize knowledge in studies about nurses who had been disciplined by their professional regulatory bodies.

Background: Unprofessional conduct that violates patient safety, nursing standards or legislation can result in disciplinary action that affects nurse’s professional rights to practice. However, research on disciplinary procedures in nursing is fragmented.

Evaluation: An integrative review was carried out with systematic searches between January 2006 and November 2018, using the CINAHL, PubMed, Scopus and Web of Science databases, and manual searches. The quality of the 17 included studies was evaluated with the Mixed Method Appraisal Tool.

Key issues: The evidence in the included studies focused on various databases. Disciplined nurses were described in relation to their characteristics and disciplined because of numerous patients, practice and behaviour related violations. Similar disciplinary actions against nurses was reported.

Implication for Nursing Management: This review provides knowledge on contributory risk factors that can be used to develop professional standards and early interventions in nursing management. More systematic research is needed, together with clear definitions of disciplinary procedures. This knowledge could strengthen the abilities of nurse managers to
recognize and prevent events, that seldom occur but seriously threaten the safety of patients
and nurses when they do.

**Keywords:** disciplinary action, integrative review, nurse, professional discipline,
professional regulation, substance use disorder

**INTRODUCTION**

Nurses’ professional rights to practice are based on national legislation. The main aim of
professional regulation is to ensure patient safety and, provide standards in nursing practice
that are balanced with nurses’ professional rights (Garrett & MacPhee, 2014; Hewitt, 2007)
and that prevent and avoid harm (Brecher, 2014). Many factors can influence harmful or
unprofessional conduct in nursing practice (Beardwood & Kainer, 2015; Donaldson,
Corrigan, & Kohn, 2000). Violating or failing to meet nursing standards or relevant
legislation (Johnstone & Kanitsaki, 2005; Maurits, de Veer, Groenewegen, & Francke, 2016;
Pugh, 2009) may be a result of a nurse's lack of skills or knowledge, negligence, inattention,
fatigue or bad behaviour (Benner et al., 2002; Johnstone & Kanitsaki, 2006; Reason, 1990).

**Background**

Professional regulation refers to guidance on professional conduct that is based on ethical and
legal norms. The nursing profession carries this out at individual, organizational and national
professional regulatory levels. The individual level refers to self-regulation of nurses’ own
responsibility for their professional knowledge and practical skills (Balestra, 2012; Cooke,
2006b; Cronquist, 2013). On the organisational level, professional regulation refers to
healthcare managers monitoring, controlling and advising employees (Cooke, 2006b).
Professional regulation is exercised at an authority level by national nursing boards,
regulatory bodies or other supervisory authorities and they are responsible for investigating
whether the actions of nurses have violated patient safety or legislation (Cooke, 2006b; Raper & Hudspeth, 2008).

Professional regulatory nursing bodies in different countries adopt common approaches to regulation due to similar professional standards and legislation (Garrett & MacPhee, 2014). A typical disciplinary process begins with an oral or written complaint (Brous, 2012; Cronquist, 2013; Hudspeth, 2009) and the authorities evaluate whether the complaint is within their jurisdiction and whether there has been a violation of nursing legislation or standards.

A nurse’s unprofessional conduct can cause serious consequences. Disciplinary action that affects the right of nurses to practice aims to protect the public from nurses who neglect nursing and ethical standards. Disciplinary actions can include reprimanding or suspending a nurse, revoking their licence or a combination of these sanctions (Balestra, 2012; Brous, 2012; Cronquist, 2013; Flook, 2003; Garrett & MacPhee, 2014; Raper & Hudspeth, 2008). The disciplinary procedure may also affect a nurse’s ability to work (Brous, 2012; Cronquist, 2013).

This review focused on the authority levels of the professional regulations and exclusively explored what kinds of factors led to nurses being disciplined and what form of disciplinary action was taken. Although nursing science has paid some attention to unprofessional conduct by nurses, few previous studies have focused on disciplinary actions against nurses’ professional rights.

This paper addresses situations involving nurses that do not occur frequently but can seriously threaten patient safety and quality of care when they do. During their career, nurse managers may seldom, or never, need to instigate disciplinary procedures. Our study gathered and synthesized previous published evidence, in order to strengthen the abilities of nurse managers to understand the phenomenon, develop methods to prevent risks that could lead to poor nursing conduct and to take early action if problems occur.

THE REVIEW

Aim

The aim of this review was to synthesize knowledge in studies about nurses who had been disciplined by their professional regulatory bodies.
Our research questions were:

1. What methods were used in previous studies about to research nurses who had been disciplined?
2. What characteristics were reported with regard to nurses who had been disciplined?
3. What reasons for taking disciplinary action against nurses have been reported?
4. What kinds of disciplinary action against nurses have been reported?

Design

We selected an integrative review method to describe previous knowledge about nurses who had been disciplined by professional regulators. Developing a comprehensive understanding of previous research this review allowed to compare heterogeneous literature. Using the five-stage method documented by Whittemore and Knafl (2005), we identified the problem, conducted the systematic searches, selected the data, evaluated and analyzed the data and presented the results and the conclusion. We structured this review according to the preferred reporting items for systematic reviews and meta-analysis (PRISMA) instructions (Moher, Liberati, Tetzlaff, Altman, & PRISMA Group, 2009) (Figure 1).

Search method

We started the review by identifying the topic and creating the research questions based on preliminary literature searches (Whittemore & Knafl, 2005). After that, we conducted systematic electronic and manual searches (Figure 1). The electronic search focused on four electronic databases: CINAHL, PubMed, Scopus and Web of Science. We formulated search terms by conducting preliminary searches with the assistance of an information specialist. The search phrases consisted of MeSH terms, free words and their combinations and synonyms about nurses and professional regulation. We limited the searches to studies that were published in English between January 2006 and November 2018, were peer-reviewed and had an abstract available (Figure 1).

Search outcome
The studies were selected in two stages by using the pre-defined inclusion and exclusion criteria. We selected 1,438 studies based on their titles, and these were reduced to 168 studies based on their abstracts and then 26 based on their full text (Figure 1). This resulted 11 published studies that focused on the professional regulation of nurses with regard to disciplinary actions. We excluded studies that focused on nurses’ certification or registration, healthcare education or management and studies where the target groups were nursing students, mentally or physically disabled nurses or patients or which focused on nurse’s private lives and studies with low-quality methodological fields and grey literature.

We conducted two types of manual searches based on the same limitations and inclusion and exclusion criteria. Firstly, we screened all the reference lists of the selected studies and found one more study. We also screened 1,986 studies in 151 issues of three scientific journals and found five more studies. The searches provided a total of 17 studies about nurses who had been disciplined (Figure 1). Two of authors (OP, MK) worked together to select the data and all the authors agreed on the final decisions.

**Quality appraisal**

We evaluated the quality of the selected studies by using the Mixed Methods Appraisal Tool (MMAT). This allowed us to include the most common types of study design methods, which focused on data or participants, research questions and finding or results (Pluye et al., 2011). MMAT includes two screening questions for all types of studies and four questions for different types of studies. The mixed method part includes three questions and the answers are *yes, no or cannot tell* for each question. Every *yes* answer was allocated one point and the score ranged from one to six points. Due to the number of case-based studies that we selected, we modified the scale for the question about an acceptable response rate and decided that it referred to the systematic selection of the documented cases during a specific time. The quality scores for the selected quantitative studies varied from five to six points and the qualitative studies varied from two to six points (Table 1). The most common element that was lacking in the quantitative studies was appropriately reported measurements. The main issue with the qualitative studies was unclear selection criteria for the cases or documents. Two authors evaluated the quality of the studies independently (OP, MK).
Data abstraction and synthesis

We analysed the data according to the research questions by using the inductive content analysis method (Graneheim & Lundman, 2004). First, we read each study several times to get an understanding of the content. After that, we extracted the data and tabulated it according to the author, aim, design, methods, settings, data and key findings (Table 1). Then we identified the content by coding and grouping the similarities and differences and named them based on the content. We found several sub-categories, which we combined to main categories. One author (OP) conducted the data extraction and analysis until the sub-categories were complete. Once our analysis was completed, the main categories were created and confirmed by the research group.

RESULTS

Description of the selected studies

The 17 studies were published in English between 2007 and 2016 and 12 were published between 2008 and 2011. We found that 14 studies were conducted in the USA and there was one each from Australia (Chiarella & Adrian, 2014), Israel (Azuri, Haron, Riba, & Sar-Lev, 2014) and Brazil (da Silva, da Silva Candido, M. C., Duarte, & dos Santos, 2016) (Table 1).

Methods used by the selected studies

There were 12 studies conducted with quantitative methods, one with a qualitative method (Chiarella & Adrian, 2014) and one with a combination of both methods (Azuri et al., 2014). A further three studies were reviews of legal cases related to disciplinary procedures, with no specific research method. The quantitative studies were conducted with statistical analysis methods (Azuri et al., 2014; Benton & Flynn, 2013; Hester, Green, Thomas, & Benton, 2011; Hudspeth, 2007; Kenward, 2008; Strong, 2011; Zhong, Kenward, Sheets, Doherty, & Gross, 2009; Zhong & Thomas, 2012), post-hoc analysis (Evangelista & Sims-Giddens, 2008), retrospective analytic desk research (da Silva et al., 2016), a longitudinal retrospective cohort study design (Hudson & Droppers, 2011) and comparative descriptive study design (Jones, Fitzpatrick, & Drake, 2008). The qualitative method used was content analysis (Azuri et al., 2014; Chiarella & Adrian, 2014). (Table 1).
The three case-based studies reviewed several legal cases about disciplinary procedures against nurses in the USA (Brous, 2008; Cady, 2009; Fischer, Houchen, & Ferguson-Ramos, 2008). There were 12 boundary violation cases based on complaints investigated by the Ohio Board of Nursing. The cases were described from a state regulation point of view. They provided an overview of the major types of boundaries cases and the disciplinary outcomes (Fischer et al., 2008). One study identified the legal bases for criminal charges for nursing errors based on three cases from the American states of Colorado, Wisconsin and New York (Cady, 2009). In addition, one study reviewed two other cases from the American states of Louisiana and Ohio that resulted in criminal charges for unintentional errors in nursing (Brous, 2008). The data used in 14 register-based studies were from databases and registers maintained by government (Azuri et al., 2014) and nursing authorities (Clevette et al., 2007; Chiarella & Adrian, 2014; da Silva et al., 2016; Evangelista & Sims-Giddens 2008; Hester, 2011; Jones et al., 2008; Hudson & Droppers, 2011; Hudspeth, 2007; Kenward, 2008; Strong, 2011; Zhong et al., 2009; Zhong & Thomas, 2012), and insurance companies (Benton & Flynn, 2013) (Table 2).

The data from government and nursing authority databases contained information about the disciplinary procedures, nurses’ licences and certifications and demographics of the nurses who had been disciplined (Hester et al., 2011; Hudspeth, 2007; Hudson & Droppers, 2011; Kenward, 2008; Strong, 2011) (Table 2). The insurance company databases included closed claims attributed to insured nurses who had been disciplined (Benton & Flynn, 2013). Several studies mentioned public records (Hudson & Droppers, 2011; Jones et al., 2008; Strong, 2011) and one was confidential (da Silva et al., 2016). A specific data collection tool was used in three studies (Hudspeth, 2007; Zhong et al., 2009; Zhong & Thomas) (Table 2). The number of cases examined in the register-based studies varied from 27 to 52,297 and these concerned boundary violations (Jones et al., 2008), practice breakdown cases (Zhong & Thomas, 2012) and complaints (da Silva et al., 2016). One study described the availability of disciplinary data from a public electronic database and did not directly report disciplinary cases (Strong, 2011).

The data in the register-based studies consisted of the characteristics of the nurses who had been disciplined, the facts of the cases, records of previous disciplinary actions, types of violation, allegations, complaints or the reasons for the disciplinary actions and, the disciplinary action taken (Azuri et al., 2014; Clevette, Erbin-Roesemann, & Kelly, 2007;
The characteristics of the nurses who had been disciplined

The characteristics of the nurses who had been disciplined were reported in 13 studies. Seven studies reported their age at the time of disciplinary action, and these ranged from 20 to 76 years. Eight studies reported their gender and the majority were female. Although, the number of male nurses who had been disciplined was smaller, they were more likely to be disciplined when looked at cases as a percentage of the total workforce of each sex (Jones et al., 2008; Kenward, 2008; Zhong et al., 2009). Three studies reported the ethnicity of nurses who had been disciplined and the majority were white. (Hester et al., 2011; Hudson & Droppers, 2011).

All 17 studies reported the type of licences held by the nurses who had been disciplined. The majority were registered nurse (RN). The others were licenced practice nurses, licenced vocational nurses, advanced practice registered nurses (Benton & Flynn, 2013; Hudson & Droppers, 2011; Hudspeth, 2007; Zhong et al., 2009; Zhong & Thomas, 2012), registered midwives (Chiarella & Adrian, 2014), practical nurses (Azuri et al., 2014), nurse practitioners (Azuri et al., 2014; Kenward, 2008) and nursing technicians (da Silva et al., 2016). In one study, two separate types of nursing education programmes were compared (Jones et al., 2008). Nurses who had been disciplined were reported to have been licenced for more than 14 years at the time of being disciplined (Zhong & Thomas, 2012) and five years for those with a criminal conviction and more than 11 years for those without (Clevette et al., 2007). Their experience in nursing practice varied from less than one year to 54 years (Zhong & Thomas, 2012).

Nine studies reported the work units or employment settings where the nurses who had been disciplined were employed. These were most commonly hospital settings (Azuri et al., 2014; Benton & Flynn, 2013; da Silva et al., 2016; Hester et al., 2011) and long-term care facilities (Zhong et al., 2009; Zhong & Thomas, 2012). The nurses who had been disciplined had been working length of at the unit where the issues arose for five years or less (Azuri et al., 2014) to more than 21 years (Benton & Flynn, 2013). The average time in practice was almost 12 years (Kenward, 2008).
Three studies reported the criminal backgrounds of nurses who had been disciplined and the likelihood of them repeating criminal actions (Clevette et al., 2007; Kenward, 2008; Zhong et al., 2009). Nurses with a previous criminal conviction tended to face disciplinary action earlier in their nursing career (Clevette et al., 2007). More than one-third of the nurses who had committed criminal offences in relation to their work as a nurse were reported to have a history of other criminal convictions (Kenward, 2008). In addition, significant associations were reported between a criminal conviction and earlier probation and the frequency with which nurses committed criminal offences in their nursing roles (Zhong et al., 2009). A quarter of the nurses who had been disciplined were reported to have committed offences more than once and they were more likely to reoffend if they had committed multiple violations (Kenward, 2008).

Reasons for disciplinary action

The reasons for disciplinary action were classified by 15 studies as patient integrity violations, mistakes in nursing processes, risky behaviour and nursing incompetence (Table 3). **Patient integrity violations** referred to breaking patient confidentiality, such as disclosing patient-related data and diagnoses to a third party (Azuri et al., 2014) or breaching professional confidentiality (da Silva et al., 2016) (Table 3). Mental integrity violations included a nurse subjecting a patient to verbal violence or mental abuse (Azuri et al., 2014; Benton and Flynn, 2013; Chiarella and Adrian, 2014; da Silva et al., 2016) and physical integrity violations related to physical violence or abuse against a patient. Sexual misconduct or harassment and violating patient’s boundaries (Azuri et al., 2014; Benton & Flynn, 2013; Chiarella & Adrian, 2014; Clevette et al., 2007; da Silva et al., 2016; Evangelista & Sims-Giddens, 2008; Strong, 2011) were also reported. In addition, patient integrity violations included stealing a patients’ money or medication (Azuri et al., 2014; da Silva et al., 2016; Evangelista & Sims-Giddens, 2008; Strong, 2011).

**Nursing process mistakes** included medication errors, such as giving a patient the wrong quantity of drugs, giving them the wrong instructions about taking them or administering medication without being told to do so (Azuri et al., 2014; Benton and Flynn, 2013; Hester et al., 2011). They also included being negligent in controlling psychoactive substances or drug-related iatrogenic events (da Silva et al., 2016) (Table 3). Nursing process mistakes also included documentation errors, where a nurse recorded the disposal of narcotics or other
information incorrectly (Benton & Flynn, 2013; Kenward, 2008; Zhong et al. 2009; Hester et al., 2011), falsified documents (Evangelista & Sims-Giddens, 2008), not recording information (da Silva et al., 2016), making mistakes in record keeping (Azuri et al., 2014; Hudson & Droppers, 2011) or destroying records (Benton & Flynn, 2013). Mistakes also referred to diagnosis-related errors, errors in patient monitoring and failing to recognize a patient’s signs and symptoms, the incomplete or faulty interpretation of the assessment of a patient and ignoring assessment findings (Azuri et al., 2014; Benton & Flynn, 2013; Zhong et al., 2009). They also included unreasonable care for inappropriate clinical reasons (Zhong et al., 2009), providing care without being asked to do so, delays in providing care (Azuri et al., 2014), practising beyond their authorized scope (Clevette et al., 2007) and misinterpreting orders from an authorized provider or physician (Hester et al., 2011; Evangelista & Sims-Giddens, 2008).

Some nurses who had been disciplined also displayed risky behaviour, such as substance abuse, violent behaviour towards staff and other unprofessional conduct (Azuri et al., 2014; Benton & Flynn, 2013; Hudson & Droppers, 2011; Hudspeth, 2007; Strong, 2011; Zhong et al., 2009) (Table 3). Substance abuse covered the use of alcohol, drugs or chemicals (Azuri et al., 2014; Benton & Flynn, 2013; Clevette et al., 2007; Evangelista & Sims-Giddens, 2008; Hudson & Droppers, 2011; Hudspeth, 2007; Kenward, 2008; Strong, 2011; Zhong et al., 2009) as well as inaccurate medication counts (Benton & Flynn, 2013) and wastage errors (Kenward, 2008). Nurses who had been disciplined were reported for working under the influence of alcohol or drugs (Benton & Flynn, 2013; Strong, 2011), procuring medication for themselves or someone else (Benton & Flynn, 2013), writing or presenting illegal prescriptions, selling drugs (Kenward, 2008), using stolen drugs for personal use (Strong, 2011) and committing practice violations while abusing substances (Zhong et al., 2009).

Nursing incompetence included working without a licence or disregarding organizational rules and standards (da Silva et al. 2016; Benton & Flynn, 2013; Zhong et al., 2009) (Table 3). Unlicensed practice referred to a nurse working under a lapsed or falsified licence (Azuri et al., 2014; Evangelista & Sims-Giddens, 2008; da Silva et al., 2016). Nursing incompetence referred to substandard nursing practices, such as the inability to carry out a task they were asked to do (da Silva et al., 2016) or substandard nursing skills (Azuri et al. 2014; Benton & Flynn, 2103; Hudson & Droppers, 2011).
Disciplinary action

Disciplinary action against nurses were reported in 11 studies and these took the form of reprimands, probation, suspension, revocation, criminal charges and fines, voluntary licence surrenders and removals from the nursing register (Table 4). Of those 11 papers, eight mentioned a link between the reason for disciplinary action and the sanctions employed. **Reprimands** for nurses who had been disciplined for violating nursing standards took the form of verbal or written formal notices or warnings (Hudson & Droppers, 2011) and these were the least punitive and restrictive form of disciplinary action (Evangelista & Sims-Giddens, 2008). **Probation** included imposing restrictions on a disciplined nurse’s licence or stipulating conditions or **limitations** that a nurse must practice under, including employment settings or job roles (Hudson & Droppers, 2011). While they were on probation, nurses who had been disciplined were required to participate in individual counselling, complete specific nursing education, submit employment reports to their board of nursing or attend psychotherapy sessions (Fischer et al., 2008). Probation was reported to last from one to seven years (Evangelista & Sims-Giddens, 2008; Fischer et al., 2008). Multiple probationary requirements were imposed on most the nurses who had been disciplined (Zhong et al. 2009).

**Suspension** was imposed for serious infractions of behaviour, where a disciplined nurse’s licence was placed on hold and they could not practice at any level during that period (Cady, 2009; Evangelista & Sims-Giddens, 2008; Hudson & Droppers, 2011). In addition, nurses who had been disciplined were reported to have been suspended from practice while undergoing counselling and therapy (Chiarella & Adrian, 2014). Suspensions lasted from one to three years (Brous, 2008; Evangelista & Sims-Giddens, 2008). **Revocation** of a disciplined nurse’s licence or certification was either temporarily or permanent (Hudson and Droppers, 2011). However, nurses could apply to be re-licenced after a specified time period had elapsed or subject to the terms and conditions set by their board of nursing (Evangelista & Sims-Giddens, 2008; Fischer et al., 2008). Revocation was reported to be the most severe form of discipline and it was imposed with immediate effect (Fischer et al., 2008).

Other consequences for nurses who had been disciplined were also described, like criminal charges and judgments against them (Brous, 2008; Cady, 2009; Fischer et al., 2008; Zhong et. al., 2009) or fines (Cady, 2009; Hester et al., 2011). Some nurses who had been disciplined gave up their licences or certificates voluntarily rather than face potential...
sanctions and this was common in substance abuse cases (Hudson & Droppers, 2011). Nurses could also be removed from the nursing register (Chiarella & Adrian, 2014).

DISCUSSION
This review described 17 studies that focused on nurses who had been disciplined by their professional regulators. We found disciplinary action was not common, but it was essential if any breaches of professional conduct related to patient safety. The cases reported in the selected studies were both scarce and fragmented. Eight papers mentioned the links between the reasons for disciplinary action and the sanction employed, but the violations committed by nurses who had been disciplined and the range of sanctions for similar offences varied. This fragmented data meant that it was not possible to establish associations between the severity of the professional breaches and the sanctions used to discipline the nurses. Also, there was heterogeneity in the data that were used, namely conceptual variations of discipline, the characteristics of the nurses who had been disciplined, the reasons for disciplinary action and the similarities in disciplinary measures.

In this review, the selected studies were mainly quantitative, conducted in the USA and based on registers and databases maintained by the national governments, nursing boards or insurance companies. Disciplinary actions in the USA are handled state by state and besides, there are also differences between the states. These variations in data led to a lack of consistent information about disciplinary procedures in nursing, which made it hard to carry out a wider comparison of disciplinary cases against nurses. This review also addressed large conceptual variations, which meant that there was little descriptive information and systematic recording and reporting of disciplinary measures. The evidence in some of the studies was also produced for other reasons than research and lacked important facts as a result.

The characteristic factors associated with a risk of disciplinary actions that were identified by our review included being male, being a licenced-, registered- or licenced practical nurse and working in a hospital settings or long-term care (McNelis et al., 2012). Having a higher level of education was associated with cases of unprofessional conduct (Baca, 2009; Hudson & Droppers, 2011; Jones et al., 2008). However, registered nurses were more likely to engage in unprofessional conduct than those holding other professional nursing licences (Stone, Traynor, Gould, & Maben, 2011). In addition, prolonged contact with vulnerable patients was reported to be a risk for unprofessional conduct (Evans, 2010; Halter, Brown, & Stone,
Nurses with criminal backgrounds faced a higher risk of disciplinary actions, which could be more effectively detected with early intervention models (Raper & Hudspeth, 2008). According to previous studies, nurses were disciplined because of many issues related to patients, nursing process, behaviour and competence. The main reason why nurses were disciplined was threatening patient safety. The influence of nurses’ risky behaviour on nursing process mistakes, like medication errors, has also been highlighted in the other studies (Härkänen, Turunen, Saano, & Vehviläinen-Julkunen, 2015; Kuitunen, Kuisma, & Hoppu, 2008; Pierson et al., 2007). It has been shown, that many kinds of harmful actions in nursing practice can risk patient safety, such as substance abuse (Dunn, 2005; Epstein, Burns, & Conlon, 2010; Kunyk, 2015; West, 2005) or patient integrity violations like sexual misconduct (Baca, 2009; Evans, 2010; Halter et al., 2007).

The disciplinary measures that were reported by the previous studies were reprimands, limitation, probation, suspensions, revocation, criminal charges and fines, voluntary licence surrenders and removal from the nursing register. In this review, we found that the selected studies described similar disciplinary actions as in previous literature regarding nursing boards (Balestra, 2012; Brous, 2012; Cronquist, 2013; Flook, 2003; Garrett & MacPhee, 2014; Raper & Hudspeth, 2008). Despite this, the most serious disciplinary actions related to licences, like suspension or revocation, were reported to be infrequent (Garrett & MacPhee, 2014). Different types of disciplinary actions varied and for example, for the use of substance abuse were given disciplinary actions as suspension, limitation, probation, revocation of license, and in addition reprimand or censure (Hudson & Droppers, 2011). Instead of adopting punitive forms of disciplinary actions, remediation was reported to be an effective type of probation when it came to correcting unsafe or incompetent practice in nursing (Harding, 2016; Zhong & Kenward, 2009). Previous studies reported similarities in disciplinary actions despite of national differences in legislation and standards.

Nurses that commit unprofessional conduct can cause a great deal of suffering for all involved, not just for the patient, but also for their fellow professionals (Johnstone & Kanitsaki, 2006). Disciplinary action has implications for a nurse’s career and employment (Brous, 2012). However, it is worth noting that nurses who had been disciplined accounted for the minority of nurses (Kenward, 2008). Nurse managers often feel uncertain about how to handle such situations (Cooke, 2006b; Pugh, 2009; Traynor, Stone, Cook, Gould, & Maben, 2014). That is why they need more knowledge and support to recognize problems.
and make the possible risks more visible. Nursing errors have been reported to decrease in well-developed organizational structures that encourage anonymous incident reporting and those that systematically follow and analyze results, as well as in open and accountable organizations with no blame cultures (Cooke, 2006a; Pastorius, 2007; Rouse & Al-Maqbali, 2014; Wolf, 2012).

Strengths and limitations

The limitations of this study were related to the search strategy. Despite the broad search limitations and the fact that we consulted an information specialist, we may have missed other studies with relevant findings. The combination of diverse study designs, and the methodologies of the included studies and the use of manual searches strengthened the comprehensiveness of this review and might have reduced the risk of publication bias. However, we excluded reports from bodies that regulate nurses as we were keen to find out what previously published studies had reported about this topic. Most of the studies were conducted in the USA, which suggests that this phenomenon has not been studied much in other countries. Three case-based studies were also included in this review and these contained descriptions of disciplinary procedures against nurses in the USA. Another strength was that two of the authors conducted the data selection and analysis, which confirmed the reliability of the decisions that were made.

CONCLUSION

This review described published studies about nurses who had been disciplined by their professional regulators and found that the literature was limited and fragmented in this area. There were variations in the concepts of discipline, and these could partially be explained by national differences in nursing registers, the data used and the legislation and nursing standards in operation. However, the concepts that were used were not homogeneous in the data provided by the selected studies, even though most of the studies were conducted in the USA. In addition, the consequences of disciplinary actions, especially for a nurse’s professional career, have rarely been studied. Despite this, the disciplinary actions against nurses that were reported were quite similar, and there was large variation of disciplinary
actions given for certain types of reasons such as substance abuse. Developing uniform conceptual definitions of disciplinary processes would make it easier to carry out wider scientific and professional conversations.

More systematic reporting of disciplinary procedures is needed so that this infrequent, but serious, issue can be understood. This will give nurse managers greater support to tackle issues when they arise and product both the safety care of patients and nursing colleagues. More research needs to be carried out that contributes to the ethical and professional support of high-quality nursing practice. Evidence of the factors that contribute to the need for disciplinary procedures in nursing can be used at individual, organizational and professional body levels to regulate the nursing profession. Exploring and comparing data from national nursing boards registers would be a focus for future research in this field. In addition, the future and wider migration of nurses creates challenges for coexisting legislation and professional standards. Appropriate and highly developed professional regulations protect nurses’ professional rights and ensure patient safety, the quality of care that nurses provide and the respect that they receive from society.

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<table>
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<tr>
<th>Authors, year, country, Quality score (MMAT)</th>
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<th>Design and method</th>
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<th>Key findings</th>
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<tr>
<td>Azuri et al. (2014), Israel 4/5</td>
<td>To review the disciplinary decisions of the last decade and examine the sentencing policies of the Ministry of Health regarding the nursing profession.</td>
<td>Quantitative study with qualitative parts. Descriptive statistics and content analysis.</td>
<td>Setting: Every disciplinary case filed against a nurse by Israeli Ministry of Health Disciplinary Unit between 2002-2012 was reviewed. Data: 72 disciplinary actions against nurses.</td>
<td>Educational level: nurse practitioners 36%, registered nurses 26%, practical nurses 40%. One-fourth of the nurses had 5 years or less experience in practice. 43% of disciplined nurses worked in hospital and 29% in elderly residential care. Average length of time of the process was 2 years. Disciplinary proceedings were classified in two categories: professional negligence and criminal behaviour. In 47 cases resolution was suspension for up to a month to licence revocation. The most frequent sanction was 3-month suspension. There was great inconsistency in the range of sanctions for similar offences.</td>
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<tr>
<td>Benton and Flynn (2013), USA 5/6</td>
<td>To identify current liability patterns and trends and provide risk-control recommendations to enhance patient safety and minimize liability exposure.</td>
<td>Quantitative study. Statistical charts and analyses.</td>
<td>Settings: Claims involving registered nurses, licensed practical nurses and licensed vocational nurses that were closed between Jan 2006 and Dec 2010 (USA); I) 20 topics relating to nurses’ professional liability claims, II) 8 topics relating to license-defence claims, III) 19 highlights from the NSO 2011 nurse work profile survey. Data: I) 516 claims, II) 1,127 license-defence paid claims, III) 1,617 nurses.</td>
<td>I) 91.9% of the claims involved registered nurses, and the scope of practice had highest average indemnity payment. Allegations related to patient’s rights, patient abuse (patient-to-patient abuse, physical, sexual, verbal) and professional conduct were reviewed. Allegations related to treatment/care accounted for the highest percentage of closed claims. II) 84.5% of the claims involved registered nurses. 57.3% worked in hospital setting. Allegation types: professional conduct, medication administration errors, abuse/patient’s rights. Career-altering consequences: suspension, probation, license surrender, licence revocation. Only 5.8% terminated nurse’s career. Drug diversion or substance abuse was the top allegation for registered nurses, licensed practice nurses, licensed vocational nurses. III) Most respondents had been in nursing practice 16 years or more. Highest percentage of closed claims involved nurses worked more than 21 years. The highest proportion of nurses with claims had bachelor’s degree.</td>
</tr>
<tr>
<td>Brous (2008), USA 2/6</td>
<td>An overview of recent cases: a review of several cases demonstrates the political nature of these indictments and destructive impact they have on</td>
<td>Case study</td>
<td>Data: 5 cases from the states of Colorado, Wisconsin, Louisiana, Ohio, New York (USA).</td>
<td>Charges and sanctions varied. Negligent homicide: one-year license suspension, probation, criminal charge (acquitted); neglect of a patient causing great bodily harm. Criminal complaint charge: potential penalty of six years in prison, three years of probation. Numerous of patient died: principal to second degree murder (charges were dropped). Accidental overdose to homicide. Nurse abandoned patients when resigning: nursing licensure initially suspended (reinstated). Patient safety</td>
</tr>
<tr>
<td>Author</td>
<td>Year, Country</td>
<td>Methodology</td>
<td>Research Objectives</td>
<td>Data/Settings</td>
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<tr>
<td>Cady et al.</td>
<td>2009, USA</td>
<td>Case study</td>
<td>To identify the legal basis for criminal charges for nursing errors, list 3 errors likely to result in criminal prosecution, and discuss licensure implications of criminal charges for nursing errors.</td>
<td>Data: 3 cases from the states of Colorado, Wisconsin, Louisiana (USA). Settings: The results of a study undertaken for the New South Wales Nurses and Midwives Board (Australia), reviewing the findings of close to 200 disciplinary decisions relating to registered nurses (RN) and registered midwives in NSW from 1999 to 2006.</td>
</tr>
<tr>
<td>Chiarella and Adrian</td>
<td>2014, Australia</td>
<td>Qualitative study</td>
<td>To explore the spectrum of boundary violations in the nurse–patient relationship by reviewing disciplinary cases from the New South Wales Nurses and Midwives Tribunal and Professional Standards Committees.</td>
<td>Data: 29 boundary violation cases. Settings: The results of a study undertaken for the New South Wales Nurses and Midwives Board (Australia), reviewing the findings of close to 200 disciplinary decisions relating to registered nurses (RN) and registered midwives in NSW from 1999 to 2006.</td>
</tr>
<tr>
<td>Clevette et al.</td>
<td>2007, USA</td>
<td>Quantitative study, Statistical analysis</td>
<td>To explore the relationship between criminal convictions and disciplinary actions following nursing licensure.</td>
<td>Data: 184 disciplined nurses and 184 license applications. Settings: The convenience sample included all disciplined licensed practical nurses (LPN) and registered nurses (RN) in 2003 and 2004 in Nebraska (USA).</td>
</tr>
<tr>
<td>Da Silva et al.</td>
<td>2016, Brazil</td>
<td>Quantitative study, Retrospective analytic desk research.</td>
<td>To examine complaints filed with the Regional Board of Nursing of Mato Grosso do Sul (COREN-MS) in Midwest Brazil.</td>
<td>Data: Research of 111 complaints received by COREN-MS (Brazil) in 2003-2013.</td>
</tr>
<tr>
<td>Study</td>
<td>Purpose</td>
<td>Methodology</td>
<td>Settings</td>
<td>Findings/Implications</td>
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<tr>
<td>Hudspeth et al. (2007)</td>
<td>To describe the incidence of patient abuse and safety issues</td>
<td>Quantitative study, Descriptive report</td>
<td>Settings: All resolved complaints</td>
<td>Patient abuse and safety issues were the most frequent causes for discipline representing in 210 cases (30%) of the discipline.</td>
</tr>
<tr>
<td>Fischer et al. (2008)</td>
<td>To provide an overview, from a state regulatory standpoint, of the major types of boundaries cases observed and concuring disciplinary outcomes</td>
<td>Case study</td>
<td>Data: 12 cases occurred in the State of Ohio (USA) and are based on complaints investigated by the Ohio Board of Nursing.</td>
<td>The studies set forth basic information related to the boundary violation, relevant law and administrative regulations, and disciplinary outcomes. One can conclude that boundaries violations that result in licensure board disciplinary sanctions typically involve gross or egregious conduct. These cases tend to involve recurring patterns that may be categorized as involving 2 factors: high patient vulnerability, and prolonged patient contact.</td>
</tr>
<tr>
<td>Hester et al. (2011)</td>
<td>To evaluate the effect of BON-mandated remediation on the recurrence of practice-related disciplinary actions for registered nurses in Texas.</td>
<td>Quantitative study, Demographic variables, descriptive statistics</td>
<td>Settings: Secondary data from disciplinary data from violations of the Texas Nursing Practice Act (NPA) and the Texas BON Rules and Regulation in 2004-2008 (USA). Data: 59 registered nurses who received more than one disciplinary action for practice violations.</td>
<td>Registered nurses who were disciplined multiple times were primarily older White females with many years experiences. The percentage of male nurses with multiple disciplinary actions was high. There were eight practice violation categories: medication administration, documentation, attentiveness/surveillance, clinical reasoning, prevention, intervention, interpretation of authorized provider orders, professional responsibility/patient advocacy. The most practice violations were in the professional responsibility and patient advocacy category. The second most were in documentation and the third most were in medication administration errors.</td>
</tr>
<tr>
<td>Hudson and Droppers (2011)</td>
<td>To identify the types of errors being made by nurses in Oregon, to have a more thorough understanding of the profile of those making the errors, and to examine how the Board is sanctioning nurses through Board discipline.</td>
<td>Quantitative, a longitudinal retrospective cohort study, Statistical analysis, Pearson chi-square.</td>
<td>Settings: A data request was made to NCSBN's Nursys system for all licensed nurses who were disciplined in Oregon (USA) between September 1996 and June 2008. Data: 720 disciplinary cases, total 1,225 entries.</td>
<td>The six most commonly occurring violations, in order of frequency were substance abuse and other (failure to cooperate with the Board during an investigation, blank/missing, failure to comply with the Nurse Monitoring Program, reprimand, and evidence of ability to practice safely); substandard or inadequate care, unprofessional conduct, failure to maintain records and incompetence. The five most frequently occurring Board actions were reprimand, probation, suspension, revocation and voluntary surrender. The substance abuse violation indicated a significant difference among license types.</td>
</tr>
<tr>
<td>Evangelista and Sims-Giddens (2008)</td>
<td>To compare formal license discipline against male and female Missouri nurses during a 4-year period to determine whether there are gender differences in discipline.</td>
<td>Quantitative study, Post hoc analysis, Statistical analysis.</td>
<td>Settings: The discipline lists of the Missouri Board of Nursing (USA), for the period from February-March-April 2000 through November-December 2003-January 2004. Data: 627 disciplined nurses.</td>
<td>Male nurses received a share of discipline that was, on average, 2.5 times greater than their representation in nursing. The five most common infractions found were misappropriation of drugs, illegal drug use off the job, violating a prior board agreement, working under a lapsed license, and care errors. Infractions for which male rates were two or more times greater than female rates were abuse of a patient (4.2 times greater), sexual contact with a patient (2.8 times greater), and falsification of skill or license level (2.4 times greater).</td>
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<tr>
<td>Author(s)</td>
<td>Year, Country</td>
<td>Study Design</td>
<td>Methodology</td>
<td>Settings</td>
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<tr>
<td>Jones et al. (2008), USA</td>
<td>To address the issue of boundary violation between nurses and patients. The difference in frequency of incidents of violations between associate degree-prepared registered nurses (AND) and baccalaureate degree-prepared registered nurses (BSN).</td>
<td>Quantitative study. A comparative descriptive design. Statistical analysis, chi-square analysis.</td>
<td>Settings: Secondary data, using data from public records from the Ohio Board of Nursing reports (USA) in 2002-2006. Data: 27 boundary violation cases.</td>
<td>81% of the nurses were associate degree-prepared registered nurses and 5% baccalaureate degree-prepared registered nurses. The age was 27-67 years and mean age was 44.81 years. 78% of the nurses were women. 37% has experienced some type of disciplinary action. The incidents of boundary violation for associate degree-prepared registered nurses were statistically significantly higher than those with baccalaureate degree-prepared.</td>
</tr>
<tr>
<td>Kenward (2008), USA</td>
<td>To describe at a national level about disciplinary actions taken by state boards of nursing.</td>
<td>Quantitative study. Descriptive statistics.</td>
<td>Settings: National Council of State Boards of Nursing’s (USA) Nursys databank of license and discipline information. Data provided by 44 boards of nursing to Nursys between in 1996-2006. Data: 52,297 nurses reported for a disciplinary action.</td>
<td>A very small percentage (less than 1%) of nurses are disciplined in a given year. There were statistically significant between nurses with different types of licenses. PNs are more likely to be disciplined than RNs or APRNs. Drug-related violations represent 24% of all violations. Males are disproportionately disciplined especially among nurses with a chemical dependency problem. Almost 96% of disciplined nurses have been disciplined in only one state. Discipline occurs less frequently among nurses with 1 year or less of experience, and 39% of disciplined nurses have been licensed between 10 and 24 years. One-fifth (21%) of disciplined nurses recidivate.</td>
</tr>
<tr>
<td>Strong (2011), USA</td>
<td>To describe a study of public access to enforcement and disciplinary information provided by the</td>
<td>Quantitative study. Statistical calculation using Excel software.</td>
<td>Settings: Websites were reviewed regarding availability of enforcement and disciplinary data of state boards of dentistry.</td>
<td>The evidence produced shows that the record is mixed. All boards across the states make disciplinary data available on their websites, thus allowing public access. The quantity and quality of data available varies considerably. Regarding different professional boards, these findings confirm that medicine and nursing are</td>
</tr>
<tr>
<td>Websites of health professional regulatory boards and to determine the extent to which enforcement and disciplinary information is available and accessible to public.</td>
<td>Medicine, and nursing in each of the 50 states and the District of Columbia. <strong>Data:</strong> 3 websites of all boards of dentistry, medicine and nursing in USA.</td>
<td>Further along than dentistry in providing information for consumers to review. Examples of egregious violations found on nursing board web sites: Allegations related to stealing drugs which are assigned for administration to patients; using of stolen drugs for personal use; sexual misconduct, or abusive behaviour with patients; negligence of patients; or reporting to work under the influence of alcohol or other drugs.</td>
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Zhong et al. (2009), USA 5/6 | To determine what factors might affect the outcomes of remediation, including the likelihood of recidivism, among nurses who had been the subject of disciplinary action and had been put on probation by a state board of nursing. | Quantitative, exploratory study. A data collection instrument (a questionnaire research), x²-analysis and t-test and binary logistic regression analysis. | Two major sections: description of the characteristics of the sample: age, sex, types of licence, work setting, history of criminal conviction, disciplinary grounds and probationary requirements, remediation outcomes; and the relationship of those characteristics to remediation outcomes: history of criminal conviction, changing employers during probation, committing multiple violation, age, sex, license type. The main findings were the striking association between a history of criminal conviction and the risk of behaviour requiring disciplinary action. The data showed that 35% of the nurses who had been disciplined had a history of criminal conviction. |

Zhong and Thomas (2012), USA 5/6 | To determine possible risk factors associated with error events or practice breakdowns for nurses that were reported to boards of nursing (BONs). | Quantitative study. Standard statistical analysis. | The current data showed that 60% of the nurses who were reported to the BONs and entered into the TERCAP database for practice breakdowns had been disciplined or terminated by their current or previous employers for practice-related issues in the past. This reveals a significant association between a nurse’s job history and the risk of additional practice breakdowns. |
<table>
<thead>
<tr>
<th>The state of steering</th>
<th>Organizations mentioned in the studies</th>
<th>Analyzed data/records</th>
<th>Reference(s)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Governmental/ national steering</td>
<td>Ministry of Health’s Disciplinary Unit</td>
<td>The disciplinary records</td>
<td>Azuri et al. 2014</td>
</tr>
<tr>
<td>Nursing specific steering</td>
<td>National Council of State Boards of Nursing</td>
<td>Electronic database ‘Nursys’: Nurse’s personal information, licensing information, disciplinary information, and license verification</td>
<td>Hudson &amp; Droppers 2011 Kenward 2008</td>
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<td>Public electronic database of all boards of (dentistry, medicine) and nursing in the United States</td>
<td>Strong 2011</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Nursing’s Taxonomy of Error, Root Cause Analysis and Practice-Responsibility (TERCAP) database</td>
<td>Zhong &amp; Thomas 2012</td>
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<td>Public record on the national board of nursing website and quarterly disciplinary journal</td>
<td>Hester et al. 2011</td>
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<td>Written decisions by the Texas BON related to violations of the licensure law.</td>
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<tr>
<td>Regional nursing board</td>
<td>Regional nursing board</td>
<td>The disciplinary information including nurse licensing and disciplinary information</td>
<td>da Silva et al. 2016</td>
</tr>
<tr>
<td>Insurance companies</td>
<td>Insurance company for health industry (CNA)</td>
<td>Closed legal claims attributed to CNA-insured nurses through the NSO program.</td>
<td>Benton &amp; Flynn 2013</td>
</tr>
</tbody>
</table>
Table 3. The reasons for disciplinary actions against nurses.

<table>
<thead>
<tr>
<th>Patient integrity violations</th>
<th>Mistakes in nursing processes</th>
<th>Risky behaviour</th>
<th>Nursing incompetence</th>
</tr>
</thead>
<tbody>
<tr>
<td>Action against patient’s confidentiality and privacy</td>
<td>Medication error</td>
<td>Substance abuse</td>
<td>Unlicensed practice</td>
</tr>
<tr>
<td>Mental integrity violations</td>
<td>Documentation error</td>
<td>Violence toward staff</td>
<td>Disregard the rules</td>
</tr>
<tr>
<td>Physical integrity violations</td>
<td>Errors in diagnosis</td>
<td>Unprofessional conduct</td>
<td>Substandard nursing practice</td>
</tr>
<tr>
<td>Sexual misconduct</td>
<td>Unreasonable care</td>
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<td>Stealing patient’s property</td>
<td>Care without order</td>
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</table>
Table 4. Disciplinary actions taken against nurses.

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<tbody>
<tr>
<td>Reprimand</td>
<td>x</td>
<td>x</td>
<td>x</td>
<td>x</td>
<td>x</td>
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<td>x</td>
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<tr>
<td>Probation, limitation or remediation</td>
<td>x</td>
<td>x</td>
<td>x</td>
<td>x</td>
<td>x</td>
<td>x</td>
<td>x</td>
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<tr>
<td>Suspension of a license</td>
<td>x</td>
<td>x</td>
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<td>Revocation of a license</td>
<td>x</td>
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<td>x</td>
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<td>x</td>
<td>x</td>
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<tr>
<td>Criminal charge, penalties or fines</td>
<td>x</td>
<td>x</td>
<td>x</td>
<td>x</td>
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<td>x</td>
<td>x</td>
<td>x</td>
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<tr>
<td>Voluntary license surrenders or removing from nursing register</td>
<td>x</td>
<td>x</td>
<td>x</td>
<td>x</td>
<td>x</td>
<td></td>
<td>x</td>
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<td>x</td>
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</tbody>
</table>
Figure 1. Flow chart of the literature searches and data selection. *Publication histories with dates.

Systematic electronic searches
Search terms: (nurse OR nurses) AND
("professional regulation" OR "employee discipline"
OR "professional discipline" OR "license revocation")
(N = 1.438)
CINAHL n = 646
PubMed n = 530
Scopus n = 203
Web of Science n = 59

Included abstracts
(n = 168)
CINAHL n = 59
PubMed n = 52
Scopus n = 40
Web of Science n = 17

Included full-texts
(n = 45)
CINAHL n = 17
PubMed n = 14
Scopus n = 12
Web of Science n = 2

Included full-texts after duplicates removed
(n = 26)
CINAHL n = 17
PubMed n = 6
Scopus n = 3
Web of Science n = 0

Selected papers
(n = 11)
CINAHL n = 7
PubMed n = 3
Scopus n = 1
Web of Science n = 0

Included papers from a manual search of the reference-lists of the selected papers (n = 1)

Included papers from the selected journals (n = 5): Nursing Ethics 2006-2018 (n = 1), Journal of Nursing Law 2007-2012 (n = 0), Journal of Nursing Regulation 2010-2016 (n = 4)*

Excluded based on titles
(n = 1.270)

Excluded based on abstracts
(n = 123)

Duplicate removed
(n = 19)

Excluded based on full texts
(n = 15)

Limitations:
In English, 2006-2018, abstract available, peer-reviewed

Inclusion criteria
Peer-reviewed scientific papers focused on nurses and professional regulation related to professional discipline or licensure revocation

Exclusion criteria
Focused on nursing students, other healthcare professionals, education, certification, registration, not health care context, patient safety (not related to nurses’ practice)

Exclusion criteria
Other than research paper, focused on nursing education, management, ethical issues or disabled nurses

Inclusion criteria
Peer-reviewed scientific papers focused on nurses and professional regulation related to professional discipline or licensure revocation

Included full texts
(n = 17)