# Title page

#### • Title:

Wrongdoing and whistleblowing in healthcare

## • Short running title

Healthcare whistleblowing

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#### Abstract

**Aim(s).** To describe healthcare professionals' experiences of observed wrongdoing and potential whistleblowing acts regarding it. The main goal is to strengthen the whistleblowing process described based on the existing literature and to make it more visible for future research.

**Design.** A descriptive cross-sectional survey.

**Methods.** Data were collected between 26 June 2015 - 17 July 2015 from the Finnish trade union's membership register, electronically using one open question. A total of 226 healthcare professionals participated providing written narratives, which were analyzed using inductive content analysis.

**Findings.** The whistleblowing process in healthcare was strengthened, identifying the content of observed wrongdoings and whistleblowing acts regarding them. Three themes were identified: wrongdoing related to patients, healthcare professionals and healthcare managers. Whistleblowing acts were performed internally, externally or left undone. Three main paths: internal, external and no whistleblowing, between an observation of wrongdoing and whistleblowing act were identified.

**Conclusion.** The whistleblowing process should be further developed and ethically effective programmes and interventions should be developed for increasing whistleblowing and preventing wrongdoing in healthcare.

## **Impact**

- What problem did the study address? Wrongdoing occurs in healthcare and healthcare professionals sometimes left the whistleblowing act undone. Whistleblowing in healthcare is a complex process.
- What were the main findings? The whistleblowing process was strengthened identifying the
  content of wrongdoings observed by healthcare professionals, whistleblowing acts regarding
  them and paths combining these two.

• Where and on whom will the research have an impact? Patients, healthcare professionals and managers in healthcare, further research, healthcare education and policy.

**Keywords:** wrongdoing, whistleblowing, process, healthcare, healthcare professionals, nursing profession, nurse, qualitative research method, inductive content analysis, ethics

#### INTRODUCTION

Whistleblowing is one type of ethical activity for raising concerns about wrongdoing (Teo & Caspersz, 2011) and intentional harming of patients (World Health Organization WHO, 2009). The World Health Organization (2015) has estimated that one out of ten patients is harmed while receiving hospital care (WHO, 2015). Wrongdoing, such as illegal or unethical acts and inappropriate behaviour, occurs globally in healthcare (Ohnishi, Hayama, Asai, & Kosugi., 2008; Francis, 2013; Jackson et al., 2014), despite the legislation and ethical guidelines defining healthcare professionals' (HCP) responsibilities and duties to protect patients and colleagues from harm (Ministry of Social Affairs and Health MSAH, 1994; International Council of Nurses ICN, 2012; Nursing & Midwifery Council NMC, 2015; National Institute for Health Research NIHR, 2016).

Failure of whistleblowing on wrongdoing has been reported in healthcare during the past decades (Walshe & Shortell, 2004; Francis, 2013). Wrongdoings are ethically problematic and some of them are clearly juridical offences which should be reported to law enforcement (Walshe & Shortell, 2004). In spite of existing legislation in several countries to protect the whistleblower from retaliation and repercussions (Worth, 2013), HCPs are sometimes reluctant to become whistleblowers for fear of negative consequences (Moore & McAuliffe, 2010), such as retribution or discrimination from colleagues or healthcare managers (HCM) (Jackson et al., 2014; Pohjanoksa, Stolt, Suhonen, Löyttöniemi & Leino-Kilpi, 2017). However, whistleblowing does occur among HCPs regardless of the possible personal risks (Jackson et al., 2014). Despite these wrongdoings in healthcare and potential negative consequences for the whistleblower, research about wrongdoing and whistleblowing regarding it is limited in the healthcare context.

# Background

Whistleblowing has been an interest of international research in healthcare context since 1990s (Hunt, 1995). Even though whistleblowing is usually done with good intentions (Elliston, 1982), it

has been considered to have a negative tone throughout the decades (Elliston, 1982; Hunt, 1995; Jackson et al., 2014). In this study, whistleblowing is defined as a process as follows: a whistleblower's process where wrongdoing is observed in healthcare by a HCP, a current or former member of an organization who addresses the whistleblowing act inside or outside the organization to a person or party that can end the wrongdoing (Near & Miceli, 1985; Pohjanoksa et al., 2017). Within this definition, an act of whistleblowing is also considered to include raising concerns to the wrongdoer, colleagues and the closest HCMs, even though these could be considered as ordinary procedures when wrongdoing is observed (Ion, Smith, Nimmo, Rice & McMillana, 2015). In this study, HCP and HCM are used to mean individuals working in nursing and allied health professions. This three-phase whistleblowing process (Figure 1) begins with: 1) an observation of wrongdoing; leading to 2) a whistleblowing act regarding the observed wrongdoing; followed by 3) the consequences of the whistleblowing act for the whistleblower (Pohjanoksa et al., 2017), with the focus of this study on phases 1) and 2).

The whistleblowing process starts with an observation of one, or more wrongdoings. They can be targeted at patients, or HCPs (Orbe & King 2000). Wrongdoings have been studied among nurses (Orbe & King 2000, Ohnishi et al. 2008, Moore & McAuliffe 2010, Rabold & Goergen 2013, Maurits et al. 2016 Jackson et al. 2014), certified nurse assistants (Maurits, de Veer, Groenewegen & Francke, 2016) and HCPs (Pohjanoksa et al., 2017).

Wrongdoings have been observed in various contexts in healthcare (Pohjanoksa et al., 2017). Poor care was observed more by nurses working in acute hospital care (Moore & McAuliffe, 2010) than those working in homecare (Rabold & Goergen, 2013) or with older care recipients. The most observed wrongdoings targeted at patients were substandard (Maurits et al., 2016) or poor care (Moore & McAuliffe, 2010), inappropriate treatment (Pohjanoksa et al., 2017) and verbal abuse (Rabold & Goergen, 2013). Moreover, neglect and physical abuse of patients (Rabold & Goergen,

2013; Pohjanoksa et al., 2017) such as beating a tied patient in an acute stage of mental illness were observed in healthcare (Ohnishi et al., 2008).

Wrongdoings observed in healthcare were also targeted at HCPs as a form of workplace bullying (Pohjanoksa et al., 2017). Moreover substance (Maurits et al., 2016) and alcohol abuse by HCPs (Orbe & King, 2000) and stealing substances from patients and the workplace were observed (Pohjanoksa et al., 2017). In addition HCPs observed, HCMs hiring incompetent personnel which was accepted in the organization (Moore & McAuliffe, 2010; Pohjanoksa et al., 2017).

The whistleblowing process continues to a whistleblowing act regarding the observed wrongdoing. Whistleblowing has been studied among nurses and nursing students (Jackson et al., 2014), physiotherapists and physiotherapy students (Mansbach, Melzer & Bachner, 2012) and HCPs (Pohjanoksa et al., 2017). Nurses working in hospitals had blown the whistle on observed wrongdoings (Moore & McAuliffe, 2010; King & Scudder, 2013) more often than HCPs working in special or primary healthcare (Pohjanoksa et al., 2017).

Whistleblowing act can be either internal or external (Near & Miceli, 1985; Mesmer-Magnus & Viswesvaran, 2005). An internal whistleblowing act means addressing the act inside the organization where the wrongdoing is observed to HCMs (Jackson et al., 2013) or to occupational healthcare (Pohjanoksa et al., 2017). An external whistleblowing act is addressed to parties outside the organization where the wrongdoing is observed (Near & Miceli, 1985) such as regulatory bodies, health authorities (Hunt & Shailer, 1995) or the media (Ohnishi et al., 2008). Whistleblowing acts regarding mistreatment (Jones & Kelly, 2014), unsafe practices (Jackson et al., 2013), stealing medicine and abusing substances (Orbe & King, 2000) were addressed to HCMs.

Two studies exploring the process of whistleblowing on wrongdoing in healthcare were identified (Ohnishi et al., 2008; Pohjanoksa et al., 2017). The whistleblowing process in one Japanese psychiatric hospital was unveiled by interviewing nurses (n = 2). The results suggest that neither suspected nor awareness of wrongdoing led to whistleblowing acts. (Ohnishi et al., 2008.) However,

the whistleblowing process was also studied on the national level with HCPs (n = 278), which presented inconsistent results that both suspicions and observations of wrongdoing led to whistleblowing acts (Pohjanoksa et al., 2017).

More research on wrongdoings and whistleblowing regarding them in healthcare is required. Only a few studies were identified, that described what wrongdoings were observed and what whistleblowing acts were performed regarding them (Orbe & King, 2000; Ohnishi et al., 2008; Jackson et al., 2013; Jones & Kelly, 2014). Thus there appears to be a potential gap in the research concerning whistleblowing process, wrongdoings and whistleblowing acts regarding them, this study is aiming to describe these.

#### THE STUDY

#### Aims

The aim of the study was to describe HCPs' experiences of observed wrongdoing and potential whistleblowing acts regarding it. The main goal is to strengthen whistleblowing process described on the basis of the existing literature in healthcare and especially make the process's phases 1) observation of wrongdoing and 2) whistleblowing act on observed wrongdoing more visible for future research (Figure 1). In this study, observations of wrongdoing are considered when an HCP has themselves observed them in a healthcare organization where they have previously worked or currently work.

The research questions were as follows:

- 1. What wrongdoings have healthcare professionals themselves observed in healthcare?
- 2. What whistleblowing acts have healthcare professionals performed regarding wrongdoings observed by them?

3. What paths from an observation of wrongdoing to a whistleblowing act are identified in healthcare?

Design

A descriptive cross-sectional survey design was used.

Sample/participants

A random sampling was used on the national level. Potential participants were recruited from the membership register of the Union of Health and Social Care Professionals in Finland (Tehy) trade union. In Finland around 90 % of working HCPs are members of this union and in 2016 Tehy had 159,582 members. Out of these, 49 % were registered nurses, 21 % practical nurses and 30 % other HCPs such as physiotherapists or public health nurses. (Tehy, 2017.) The membership coordinator from Tehy handled the member registry and sent the email containing the research question, to 100,502 HCPs with a valid email address in their membership register. Total of 226 HCPs provided a narrative in response to the open question about wrongdoing and whistleblowing acts regarding it and these formed the data for this study (Table 1).

Data collection

Data were collected electronically using one open question. HCPs provided a narrative in response to this open question: "Describe one wrongdoing/wrongdoings you have observed and whether you performed a whistleblowing act regarding it/them (what happened, where did it happen, was it one incident or were wrongdoings continuing long-term, was the wrongdoing/were the wrongdoings disclosed, what were the consequences of the disclosure, if wrongdoings were not disclosed, why not)?". Data were collected from the Tehy, trade union for individuals working in nursing and allied health professions, via an email distributed to its members in June 2015. The email contained an invitation to participate in the study a link to the electronic survey. Data were collected between 26 June - 17 July in 2015.

#### Ethical considerations

The study obtained ethical approval from the Ethics Committee of the University (20/2015). According to the organizations' policies, approvals were obtained to conduct the pilot study and to use Tehy's membership register in recruiting potential participants. Good scientific standards of the responsible conduct of research guidelines were followed during every stage of the research process (World Medical Association WMA, 2013; Allea, 2017). Because of the negative nature of whistleblowing, the trade union was selected for participant recruitment as it was a neutral party. Moreover, whistleblowing is a very sensitive and emotional issue for HCPs and organizations (Jackson et al., 2014), therefore data were collected electronically, allowing anonymous participation.

Detailed information about the research, its methods, objectives and an opportunity to obtain additional information from the researcher via email was delivered to all potential participants. Participation was voluntary, confidentiality and anonymity were guaranteed and individuals or organizations were not identified from the responses. Consent to participate was considered to be obtained when the question was responded and returned. (WMA, 2013; Allea, 2017.)

## Data analysis

The data were analyzed using inductive content analysis (Denzin & Lincoln, 2000; Graneheim & Lundman, 2004). This method was considered to be suitable because previous knowledge of wrongdoings and whistleblowing acts regarding them was limited and fragmented. The unit of analysis was the HCPs' written narratives of their experiences of wrongdoings, which they have observed and whistleblowing acts regarding those wrongdoings. The nature of narratives varied in depth, from extensive and detailed to superficial descriptions of wrongdoing and whistleblowing acts. Some narratives examined only one issue providing data about wrongdoings and some provided multidimensional content about wrongdoings and whistleblowing acts regarding them. The narratives were divided into meaning units, preserving the core meaning of the narratives,

which were then condensed. (Denzin & Lincoln, 2000.) During the condensing process, the whistleblowing acts regarding observed wrongdoings were identified from the descriptions of whether the whistleblowing act was performed or not. (Table 2) The condensed meaning units were then abstracted and labelled with codes. The codes were compared for similarities and differences and sorted into eleven subthemes and three themes, which constitute the manifest content of the narratives. (Graneheim & Lundman, 2004; Polit & Beck, 2004.) The preliminary subthemes and themes were identified from the data and discussed within the research group: consensus was achieved through reflective discussion (Table 2). Lastly, the paths between wrongdoings and whistleblowing acts were identified by re-examining the data. Twenty-four paths were identified and out of these, three main paths, by connecting the observed wrongdoing to where or to whom the whistleblowing act was addressed, or whether it was left undone. (Table 3)

# Rigour

The trustworthiness of qualitative narrative research can be evaluated using four criteria: credibility, dependability, transferability and confirmability of the study (Denzin & Lincoln, 2000; Graneheim & Lundman, 2004; Whittemore, Chase & Mandle, 2011). First, credibility was enhanced with: 1) a national sample of HCPs was selected to achieve various perspectives and data richness; 2) the electronic anonymous data collection method was considered to be appropriate and well-suited for the sensitive nature of whistleblowing; 3) illustrations were made on how the meaning unit condensations and abstractions were conducted (Table 2); and 4) consensus on the codes and themes covering the data was reached by the research team (Whittemore et al., 2011). Secondly, dependability was enhanced by using an open question as a research design. Thirdly, transferability was facilitated by giving clear descriptions of context, selection and characteristics of the participants, data collection and data analysis and a rich presentation of the findings was made with appropriate quotations (Graneheim & Lundman, 2004). Finally, confirmability was enhanced by

holding meetings between the authors to discuss the findings throughout the data analysis until consensus on the codes and themes was reached. (Denzin & Lincoln, 2000; Polit & Beck, 2004).

#### **FINDINGS**

The findings describe two phases of the whistleblowing process in healthcare: 1) observed wrongdoings; and 2) whistleblowing acts regarding them and paths between these two phases. Most 226 participants were female (95 %) and over half were registered nurses (54 %). Their ages ranged from 16–66 years with a mean age of 47 and work experience ranged from 1 month to 43 years with a mean length of 20 years. Most were working either in special (40 %) or primary healthcare and mostly in elderly (24 %) or psychiatric care (10 %). (Table 1.)

# 1. Wrongdoing observed in healthcare

HCPs had observed various wrongdoings in healthcare. Out of these, three themes of wrongdoing were identified: wrongdoing related to A) patients (Table 4), B) HCPs (Table 5) and C) HCMs (Table 6).

## 1.1 Wrongdoing related to patients

Three subthemes of wrongdoings related to patients were identified: i) malpractice, ii) physical abuse and iii) stealing from patient (Table 4). These occurred in the relationships between patients and HCPs, usually nurses and patients and HCMs. Wrongdoing was usually targeted at vulnerable patients: elderly patients, patients with memory disorders or intellectual disabilities, psychiatric, hospice or bed-ridden patients, children, adolescents and patients otherwise in a vulnerable condition such as drunken or intoxicated patients.

Malpractice, such as treating patients inappropriately and neglecting their care, was observed by HCPs (Table 4). Both of these situations were observed in communication and care situations in the form of not responding to patients' physical and psychological needs adequately. In communication

situations, inappropriate treatment occurred in the form of talking negatively to or shouting at the patients and neglect in the form of not listening to them. In addition, patients were treated inappropriately by HCPs acting threateningly in care situations. Provision of medical care was also inappropriate when HCPs were administering medication to patients against doctor's orders. Moreover, patient care was neglected by leaving care tasks undone or providing delayed or insufficient care to patients (Table 4).

Physical abuse of the patients in care situations, (Table 4) was observed by HCPs. Physical abuse occurred as rough handling, restraining, over medicating and assaulting patients. HCPs observed colleagues using unnecessarily rough manners and physical forcing when caring for patients. In addition, patients were physically and medically restrained, without legal justification, using limb or medical restraints. Patients were also physically assaulted by HCPs hitting and pushing them or twisting their limbs. In addition, patients' medication and money were stolen and other personal belongings were confiscated by HCPs. (Table 4)

Observing wrongdoing related to patients aroused various feelings such as distress, emotional upset and sympathy for patients in HCPs. HCPs described wrongdoing as violating the basic human rights, autonomy and dignity of the patients. In addition, HCPs described patients being anxious, insulted, fearful and in pain after the wrongdoing.

# 1.2 Wrongdoing related to HCPs

Four subthemes of wrongdoing related to HCPs were identified (Table 5): i) bullying peers, ii) neglecting work, iii) abusing/stealing alcohol and iv) abusing/stealing substances. These wrongdoings were performed by or targeted at HCPs.

Bullying peers, including verbal, psychological and physical abuse, was observed by HCPs (Table 5). Bullying occurred between two or more persons and was considered usually as a long-term problem in the working community. HCPs were verbally abused by using an inappropriate tone and

inappropriate language when talking to or discussing them. In addition, HCPs were psychologically abused by discriminating or excluding them from the team. (Table 5) Moreover, physical abuse such as sexual harassment was observed by HCPs.

Neglecting work such as leaving tasks undone and working irresponsibly was observed by HCPs (Table 5). HCPs left tasks undone for their own personal reasons such as surfing the Internet or writing email and text messages. Observations of being constantly late from work, covering up their own mistakes and blaming others for them were also considered as neglecting work. (Table 5)

HCPs observed their colleagues abusing alcohol. HCPs came to work drunk or hungover. However, they used alcohol also during work shifts. Alcohol abuse interfered work, driving HCPs to safeguarding patients from a drunken colleague (Table 5). Moreover stealing alcohol from the workplace was observed by HCPs.

HCPs observed their colleagues abusing and stealing substances. Substance abuse changed HCPs behaviour from ordinary to suspicious and unpredictable. In addition, stealing substances was observed through the increasing consumption of medicine stocks. (Table 5.) A variety of wrongdoings related to HCPs were observed in healthcare, causing psychological and physical harm to HCPs and patients.

## 1.3 Wrongdoing related to HCMs

Four subthemes of wrongdoing related to HCMs were identified (Table 6): i) bullying subordinates, ii) abusing alcohol, iii) allowing inadequate procedures and iv) hiring incompetent personnel. These were performed by HCMs and occurred in relationships between HCMs and HCPs and HCMs and patients.

HCMs bullying subordinates such as verbal and psychological abuse was observed by HCPs. Bullying was described as a long-term problem targeted at one or several HCPs, or the entire personnel. Verbal bullying occurred in the form of verbal assaults or calling HCPs names. (Table 6)

Moreover, psychological bullying such as discrimination (Table 6), threatening behaviour and managing with fear and uncertainty was observed by HCPs.

HCMs' alcohol abuse, allowing inadequate procedures and hiring incompetent personnel were also observed by HCPs (Table 6). HCMs' came to work under the influence of alcohol. In addition, HCMs allowed inadequate procedures concerning medication policies and guidelines and incompetent personnel were hired by HCMs at all levels. (Table 6.) Wrongdoings related to HCMs were observed in healthcare as HCMs were misusing their position in the organization and their power over HCPs and patients.

## 2. Whistleblowing acts regarding observed wrongdoing

HCPs performed whistleblowing acts regarding observed wrongdoings either internally or externally. Internally, eight and externally three persons or parties were identified to which addressing whistleblowing acts (Figure 2). However HCPs also observed wrongdoings, but left the whistleblowing act undone (Tables 4-6). HCPs sometimes performed a whistleblowing act immediately after observing wrongdoing. However, wrongdoing was also tolerated for years before they acted. Moreover, whistleblowing acts could be performed once or several times during lengthy periods internally or externally.

Internal whistleblowing acts regarding observed wrongdoing were addressed once or several times, usually inside the working unit, to the wrongdoer, colleagues or the HCM. The whistleblowing was performed either one-on-one, in small work teams, or in unit meetings. However, if the manager was the wrongdoer, involved in the wrongdoing or a friend of the wrongdoer, whistleblowing acts were also addressed to higher management, occupational healthcare, the human resource manager, a safety representative or the organization's lawyer. In addition, whistleblowing acts were performed also outside the organization if the HCM was incapable, inactive or unwilling to solve the wrongdoing or when the internal reaction was insufficient.

External whistleblowing acts regarding observed wrongdoing were performed when internal acts were unsuccessful, or HCPs were advised to perform their act externally. This advice was given by the human resource manager or lawyer. Moreover, whistleblowing acts were performed externally in cases of stealing or abusing substances. External whistleblowing acts were addressed to the supervisory authorities, police or trade union representatives. However, when the HCM was the wrongdoer, HCPs performed whistleblowing acts directly externally or left them undone.

HCPs sometimes left whistleblowing acts undone regarding their observation of wrongdoing because of the workplace culture, insecurity, their HCM or the wrongdoer. Wrongdoing, such as removing nurse call buttons from patients' reach, became a part of workplace culture and normal operations. In addition, supporting the wrongdoer, covering up mistakes and working in small units made HCPs unwilling to perform a whistleblowing act. Insecurity about where or to whom to address the whistleblowing act, lack of courage, fear and previous experiences of hatred prevented HCPs from performing whistleblowing acts. Moreover, the whistleblowing act was left undone when the HCM was involved or aware of the wrongdoing, or they were a friend of the wrongdoer.

3. Paths from an observation of wrongdoing to a whistleblowing act in the whistleblowing process
Paths between the two phases of the whistleblowing process, 1) an observation of wrongdoing and
2) a whistleblowing act were identified. Whistleblowing acts regarding observed wrongdoings
related to patients were addressed internally or left undone. Apart from this, whistleblowing acts
regarding wrongdoings related to HCPs and HCMs were also addressed externally. (Table 7) A
total of twenty-four paths were identified from observed wrongdoing related to patients, HCPs or
HCMs to persons or parties, internally or externally and whistleblowing acts left undone. (Figure 2)
Out of these, three main paths from an observation of wrongdoing to a whistleblowing act were
identified: i) Internal whistleblowing, ii) External whistleblowing and iii) No whistleblowing
(Figure 3).

Whistleblowing acts regarding wrongdoings related to patients: malpractice, physical abuse and stealing from the patient, were addressed to persons inside the organization (Table 7). In addition whistleblowing acts, regarding wrongdoings related to HCPs: bullying peers, neglecting work, abusing/stealing alcohol and abusing/stealing substances, were addressed to persons inside the organization, except abusing/stealing substances also to external parties: supervisory authorities and police. Moreover, whistleblowing acts regarding wrongdoing related to HCMs: abusing alcohol, allowing inadequate procedures, bullying subordinates and hiring incompetent personnel were addressed to parties inside the organization and two latter also to external parties. However whistleblowing acts regarding malpractice, physical abuse, bullying peers, neglecting work, abusing/stealing alcohol and bullying subordinates were also left undone. (Table 7)

Out of twenty-four paths, seventeen were identified between observed wrongdoings related to patients, HCPs and HCMs and whistleblowing acts addressed to persons or parties inside organization (Figure 2). Moreover, four paths between observed wrongdoings and whistleblowing acts to external parties were identified. In addition, three paths between observations of wrongdoings related to patients, HCPs and HCMs and whistleblowing act left undone were identified. (Figure 2)

Three main paths were identified: Internal, External and No whistleblowing. The main paths combined two phases of the whistleblowing process in healthcare, 1) an observation of wrongdoing and 2) a whistleblowing act regarding them. Starting point of the process is an observation of wrongdoing. However, in phase 2) whistleblowing acts were addressed either internally or externally or they were left undone. (Figure 3)

#### **DISCUSSION**

The findings of this study contribute to knowledge of the whistleblowing process described on the basis of the existing literature. The findings provide novel evidence about the whistleblowing process in healthcare by strengthening and making the two phases of the process, 1) an observation of wrongdoing and 2) a whistleblowing act regarding it more visible and identifying the paths combining these two phases. Three themes of observed wrongdoing were identified: wrongdoing related to A) patients, B) HCPs and C) HCMs and three main paths between them and whistleblowing acts were identified: internal, external and no whistleblowing. The findings reveal that an observation of wrongdoing is always the starting point of the path; however, paths and whistleblowing acts vary.

HCPs observed various wrongdoings in healthcare. Observed wrongdoings were not solely ethically problematic. Some of them were also juridical offences. The findings indicate wrongdoings related to patients, endangering patient safety and decreasing quality of care. This is supported by previous reports about wrongdoings in healthcare (Walshe & Shortell, 2004; Francis, 2013). In addition, these wrongdoings emotionally affect patients. Consistent findings are presented in previous studies (Ohnishi et al., 2008). The findings also indicate wrongdoings related to HCPs and HCMs, especially bullying, decreasing work well-being and harming HCPs psychologically. Observing wrongdoings and performing whistleblowing acts regarding them were both emotional and distressing for HCPs and consistent findings were presented in previous studies (Ohnishi et al., 2008; Jackson et al., 2014).

Internal whistleblowing acts were performed regarding wrongdoings related to patients, HCPs and HCMs. This is supported by existing studies exploring willingness to whistleblow, using hypothetical vignettes and presenting nurses being willing to whistleblow internally rather than externally (Mansbach & Bachner, 2010). Moreover, according to guidelines, raising concerns regarding observed wrongdoing is expected to begin internally (NMC, 2017). However, some of the

wrongdoings observed by HCPs were illegal, which according to legislation and the norms of society should be reported to law enforcement. The findings revealed that whistleblowing acts regarding illegal wrongdoings, such as physical abuse or stealing from patients, were not addressed externally to the police, apart from those involving stealing substances. Consistent findings concerning physical abuse and stealing from patients (Ohnishi et al., 2008) and inconsistency regarding stealing substances were presented in previous studies (Orbe & King, 2000).

The findings indicate that whistleblowing acts were left undone because of individual characteristics such as fear and lack of courage. This is supported by previous findings (Jackson et al., 2014). Other studies also suggest whistleblowing requiring moral courage (Numminen, Repo & Leino-Kilpi, 2016) and ethical sensitivity, (Poikkeus, Suhonen, Katajisto & Leino-Kilpi, 2018) to act when wrongdoing and ethical problems are observed. In contrast, findings about individual characteristics not contributing to whistleblowing were presented by Alinaghian, Isfahani and Safari (2018). In addition, HCPs left whistleblowing acts undone when they did not know what to do or how or where to address the act. Inconsistent findings were presented by Ion, Smith, Moir and Nimmo (2016) with their argument that none of the participants reported not knowing how to raise their concerns about poor care. However currently, guidelines exist for nurses and midwives about raising concerns regarding wrongdoings (NMC, 2017).

Previous studies aiming to connect observed wrongdoing and whistleblowing acts, or identifying paths between them, were not identified. The findings revealed twenty-four paths between wrongdoings and whistleblowing acts, demonstrating the complexity of whistleblowing and the whistleblowing process in healthcare. However, two studies exploring the whistleblowing process in healthcare were identified (Ohnishi et al., 2008; Pohjanoksa et al., 2017). Inconsistent findings were presented, with the process and phases being different (Ohnishi et al., 2008). Consistent findings were also presented, as the two phases of the process, an observation of wrongdoing and whistleblowing acts, were similar (Pohjanoksa et al., 2017).

In the future, research could focus on gaining a deeper understanding of whistleblowing and the whistleblowing process, using in-depth interviews with HCPs with experiences of performing whistleblowing acts. These experiences could also be explored using creative research methods such as writing stories, using diaries, or writing lyrics or poems. Research could also focus on confirming the whistleblowing process, paths in the process and potential patterns in those paths. Moreover, research could focus on individual characteristics, such as the moral courage of HCPs who perform the whistleblowing act or leave it undone. These individual characteristics could be investigated using written or video vignettes about hypothetical wrongdoing. This method could be useful, as it allows standardizing of wrongdoing and minimizing of the bias of workplace and organization culture. Vignettes have been widely used in various disciplines, including health and nursing sciences, for exploring ethical decision-making (Hughes & Huby, 2002) and also whistleblowing (Mansbach & Bachner, 2010). However, vignettes cannot entirely capture reality and could hinder reactions regarding the complexity of real life whistleblowing (Hughes & Huby, 2002).

Future research could also concentrate on developing ethics curricula and the education of healthcare students. Increasing effective whistleblowing and thereby decreasing wrongdoing should be influenced in the early career of HCPs, instead of only correcting something which is already prevalent. Ethics curricula could be advanced by developing new creative teaching methods such as, simulations for students better recognizing and responding to wrongdoing and, more importantly gaining knowledge and the means to know how, where and to whom to effectively address the whistleblowing act regarding observed wrongdoing. The moral courage and ethical competence of the students could also be increased with ethics education. With nurses being the largest group of professionals working in healthcare (Tehy, 2017), it would be justified to concentrate on them and nursing students in future research.

# Limitations

There are some limitations in this study. Firstly, the participants were limited to HCPs working in nursing and allied professions and recruited from one national trade union. Therefore, this limitation is the exclusion of some healthcare professionals such as doctors and those who are not members of the particular trade union. The second limitation is presenting only one open question for HCPs, about wrongdoing and potential whistleblowing regarding it. The third limitation is the variation in the narratives, with some being superficial in nature. Finally, the fourth limitation is the sample being national, therefore further international research is required for transferability of the findings to other countries and cultures.

## **CONCLUSION**

This study sought to strengthen knowledge about the whistleblowing process in healthcare, by describing HCPs' observations of wrongdoing and either performing whistleblowing acts regarding their observations or leaving them undone, thereby filling a gap in existing healthcare research. In the future, information on the whistleblowing process should be further developed and focus on HCPs' individual characteristics, potentially enhancing knowledge on whistleblowing and the practice itself. In the future, ethically effective programmes and interventions for HCPs, HCMs and healthcare students should be developed to increase whistleblowing and prevent wrongdoing in healthcare.

Conflict of Interest statement

The author(s) declare no conflict of interest.

#### References

Allea. (2017). The European Code of Conduct for Research Integrity. Revised edition. Retrieved <a href="http://www.allea.org/wp-content/uploads/2017/04/ALLEA-European-Code-of-Conduct-for-Research-Integrity-2017.pdf">http://www.allea.org/wp-content/uploads/2017/04/ALLEA-European-Code-of-Conduct-for-Research-Integrity-2017.pdf</a>

Alinaghian, N., Isfahani. A.N. & Safari, A. (2018). Factors influencing whistle-blowing in the Iranian health system. *Journal of Human Behavior in the Social Environment*. 28(2), 177–192. https://doi:10.1080/10911359.2017.1349703

Denzin K.N. & Lincoln Y.S. (2000). *Handbook of qualitative research*. SAGE Publications. London.

Elliston, F.A. (1982). Anonymity and whistleblowing. *Journal of Business Ethics*. 1(3), 167–177.

Francis, R. (2013). The Mid Staffordshire NHS Foundation Trust Public Inquiry. Retrieved <a href="http://webarchive.nationalarchives.gov.uk/20150407084003/http://www.midstaffspublicinquiry.co">http://www.midstaffspublicinquiry.co</a> m/report

Graneheim, U.H. & Lundman, B. (2004). Qualitative content analysis in nursing research: concepts, procedures and measures to achieve trustworthiness. *Nurse Education Today*. 24, 105–112. <a href="https://doi:10.1016/j.nedt.2003.10.001">https://doi:10.1016/j.nedt.2003.10.001</a>

Hughes, R. & Huby, M. (2002). The application of vignettes in social and nursing research. *Methodological Issues in Nursing Research*. 37(4), 382–386.

Hunt, G. (ed). (1995). Whistleblowing in the health service. J. W. Arrowsmith Ltd. Bristol.

Hunt, G. & Shailer, B. (1995). The whistleblowers speak. In: Hunt G (ed). 1995. Whistleblowing in the health service. J. W. Arrowsmith Ltd. Bristol.

International Council of Nurses, ICN. (2012). The ICN code of ethics for nurses. Retrieved <a href="http://ethics.iit.edu/ecodes/node/5695">http://ethics.iit.edu/ecodes/node/5695</a>

Ion, R., Smith, K., Nimmo S., Rice, A. M. & McMillana, L. (2015). Factors influencing student nurse decisions to report poor practice witnessed while on placement. *Nurse Education Today*. 35, 900–905. http://dx.doi.org/10.1016/j.nedt.2015.02.006

Ion, R., Smith, K., Moir, J. & Nimmo, S. (2016). Accounting for actions and omissions: a discourse analysis of student nurse accounts of responding to instances of poor care. *Journal of Advanced Nursing*. 72(5), 1054–1064. https://doi:10.1111/jan.12893

Jackson, D., Hickman, L.D., Hutchinson, M. andrew, S., Smith, J., Potgieter, I., ... Peters, K. (2013). Understanding avoidant leadership in health care: findings from a secondary analysis of two qualitative studies. *Journal of Nursing Management*. 21(3), 572–580. <a href="https://doi:10.1111/j.1365-2834.2012.01395.x">https://doi:10.1111/j.1365-2834.2012.01395.x</a>

Jackson., D., Hickman, L.D., Hutchinson, M. andrew, S., Smith, J., Potgieter, I., ... Peters, K. (2014). Whistleblowing: An integrative literature review of data-based studies involving nurses. *Contemporary Nurse*. 48(2), 240–252.

Jones, A. & Kelly, D. (2014). Whistle-blowing and workplace culture in older peoples' care: qualitative insights from the healthcare and social care workforce. *Sociology of Health & Illness*. 36(7), 986–1002. https://doi:10.1111/1467-9566.12137

King, G. & Scudder, J.N. (2013). Reasons registered nurses report serious wrongdoings in a public teaching hospital. *Psychological Reports: Relationships & Communications*. 112(2), 626–636. https://DOI10.2466/21.13.PR0.112.2.626-636

Mesmer-Magnus, J. R. & Viswesvaran, C. (2005). Whistleblowing in organizations: An examination of correlates of whistleblowing intentions, actions and retaliation. *Journal of Business Ethics*. 62, 277-297. https://DOI10.1007/sl0551-005-0849-1

Mansbach, A., Melzer, I. & Bachner, Y. G. (2012). Blowing the whistle to protect a patient: a comparison between physiotherapy students and physiotherapists. *Physiotherapy*. 98, 307–312. https://doi:10.1016/j.physio.2011.06.001

Mansbach, A. & Bachner, Y. G. (2010). Internal or external whistleblowing: Nurses' willingness to report wrongdoing. *Nursing Ethics*. 17(4), 483–490. <a href="https://doi:10.1177/0969733010364898">https://doi:10.1177/0969733010364898</a>

Maurits, E., de Veer, A., Groenewegen, P. & Francke, A. (2016). Dealing with professional misconduct by colleagues in home care: a nationwide survey among nursing staff. *BMC Nursing*. https://DOI:10.1186/s12912-016-0182-2

Ministry of Social Affairs and Health, MSAH. (1994). Health Care Professionals Act (559/1994). Retrieved

https://www.finlex.fi/en/laki/kaannokset/1994/en19940559?search%5Btype%5D=pika&search%5Bpika%5D=1994%2F559%20

Moore, L. & McAuliffe, E. 2010. Is inadequate response to whistleblowing perpetuating a culture of silence in hospitals? *Clinical Governance*. 15(3), 166–178. https://DOI10.1108/14777271011063805

National Institute for Health Research, NIHR. 2016. Patient safety 2030. Retrieved <a href="http://www.imperial.ac.uk/media/imperial-college/institute-of-global-health-innovation/centre-for-health-policy/Patient-Safety-2030-Report-VFinal.pdf">http://www.imperial.ac.uk/media/imperial-college/institute-of-global-health-innovation/centre-for-health-policy/Patient-Safety-2030-Report-VFinal.pdf</a>

Near, J. P. & Miceli, M. P. (1985). Organizational dissidence: The case of whistleblowing. *Journal of Business Ethics*. 4, 1–16. https://doi:16.0167-4544/85/0041-0001S02.40

Numminen, O., Repo, H. & Leino-Kilpi, H. (2016). Moral courage in nursing: A concept analysis. Nursing Ethics. Original manuscript. 1–14. https://doi:10.1177/0969733016634155 Nursing & Midwifery Council, NMC. (2015). Opennes and honesty when things go wrong: the professional duty of candour. Retrieved <a href="www.gmc-uk.org/DoC\_guidance\_englsih.pdf\_61618688.pdf">www.gmc-uk.org/DoC\_guidance\_englsih.pdf\_61618688.pdf</a>

Nursing & Midwifery Council, NMC. (2017). Raising Concerns. Guidance for nurses and midwives. Retrieved <a href="https://www.nmc.org.uk/standards/guidance/raising-concerns-guidance-for-nurses-and-midwives">https://www.nmc.org.uk/standards/guidance/raising-concerns-guidance-for-nurses-and-midwives</a>

Ohnishi, K., Hayama, Y., Asai, A. & Kosugi, S. (2008). The process of whistleblowing in Japanese psychiatric hospital. *Nursing Ethics*. 15(5), 631–642. https://DOI:10.1177/0969733008092871

Orbe, M.P. & King, K.G. (2000). Negotiating the tension between policy and reality: Exploring nurses' communication about organizational wrongdoing. *Health Communication*. 12(1), 41–61.

Pohjanoksa, J., Stolt, M., Suhonen, R., Löyttyniemi, E. & Leino-Kilpi, H. (2017). Whistle-blowing process in healthcare: From suspicion to action. *Nursing Ethics*. Original manuscript. 1–15. https://doi:10.1177/0969733017705005

Poikkeus, T., Suhonen, R., Katajisto, J. & Leino-Kilpi, H. (2018). Relationships between organizational and individual support, nurses\_ ethical competence, ethical safety and work satisfaction. *Health Care Management Review*. 1–11. https://DOI: 10.1097/HMR.00000000000000195

Polit, D. F. & Beck, C. T. (2004). *Nursing Research. Principles and Methods*. 7<sup>th</sup> ed. Lippincott Williams & Wilkins, Philadelphia.

Rabold, S. & Goergen, T. (2013). Abuse and neglect of older care recipients in domestic settings – results of a survey among nursing staff of home care services in Hanover (Germany). *The Journal of Adult Protection*. 15(3), 127–140. <a href="http://dx.doi.org.ezproxy.utu.fi/10.1108/JAP-08-2012-0017">http://dx.doi.org.ezproxy.utu.fi/10.1108/JAP-08-2012-0017</a>
Tehy. (2017). Tehy tilastoina 2017. Tehyn julkaisusarja D. Tilastoja ja kartoituksia 2/2017. Grano Oy.

Teo, H. & Caspersz, D. (2011). Dissenting discourse: Exploring alternatives to the whistleblowing/silence dichotomy. *Journal of Business Ethics*. 104, 237–249. <a href="https://DOI10.1007/s10551-011-0906-x">https://DOI10.1007/s10551-011-0906-x</a>

Walshe, K. & Shortell, S.M. (2004). When things go wrong: How health care organizations deal with major failures. *Health Affairs*. 23(3), 103–111. <a href="https://doi:10.1377/hlthaff.23.3.103">https://doi:10.1377/hlthaff.23.3.103</a>

Whittemore, R., Chase, S.K., Mandle, C.L., (2011). Validity in Qualitative Research. *Qualitative health research*. 11(4), 522–537.

World Health Organization, WHO. (2009) Patient Safety Curriculum Guide. Retrieved <a href="http://apps.who.int/iris/bitstream/handle/10665/44091/9789241598316\_eng.pdf?sequence=1&isAllowed=y">http://apps.who.int/iris/bitstream/handle/10665/44091/9789241598316\_eng.pdf?sequence=1&isAllowed=y</a>

World Health Organization, WHO. (2015). 10 Facts on Patient Safety. Retrieved <a href="http://www.who.int/features/factfiles/patient\_safety/p

The World Medical Association, WMA. (2013). Ethical principles for medical research involving human subjects. World Medical Association Declaration of Helsinki. *Journal of American Medical Association*. 310(20), 2191–2194.

Worth, M. (2013). Whistleblowing in Europe Legal protections for whistleblowers in the EU.

Transparency International. Retrieved

https://issuu.com/transparencyinternational/docs/2013\_whistleblowingineurope\_en

**Table 1.** Characteristics of the participants n = 226

<b>Table 1.</b> Characteristics of the participants Variables	n – 220	Mean	SD	Range	f (%)
	11	Wican	SD	Runge	1 (70)
Age	22.4	47.0	10.5	16.66	
Years	224	47.2	10.5	16-66	
Work experience	210	20.1	11.5	0.40	
Years	219	20.1	11.5	0-43	
Gender	225				214 (05)
Female					214 (95) 11 (5)
Male	220				11 (3)
Education level	220				4 (2)
Student					4 (2) 120 (55)
Vocational school degree					77 (35)
Baccalaureate or bachelor degree					27 (10)
Master's degree	226				27 (10)
Occupation group	226				102 (54)
Registered nurse					123 (54) 28 (12)
Practical nurse					75 (33)
Other (f.e. radiographer, physiotherapist)					73 (33)
Management position	224				
Yes					45 (20)
No					179 (80)
Working shift	222				
Dayshift					118 (53)
Two shifts					47 (21)
Three shifts					57 (26)
Nature of the employment	225				
Permanent position					184 (82)
Temporary position					28 (12)
Not working at the moment					13 (6)
Working sector	221				
Public					183 (83)
Private					38 (17)
Working area	221				
Primary health care					86 (39)
Specialized health care					88 (40)
Social care					17 (8)
Other (f.e. entrepreneur)					30 (14)
Size of the working unit	222				
<20 workers, small					107 (48)
21-40 workers, medium					64 (29)
>41 workers, large					51 (23)
Specialty	220				
Elderly care					53 (24)
Psychiatric care					22 (10)
Acute care Surgery, preoperative and intensive care					20 (9)
Medical care					20 (9)
Laboratory and radiology					16 (7) 16 (7)
Other (f.e. home, child and outpatient					73 (34)
care, care of the disabled)					

**Table 2.** Example of data analysis of the themes and whistleblowing acts

Meaning unit	Condenced meaning unit	Code	Subtheme	Theme	Whistleblowing act
"Nurses were commanding the patient with memory disorder, other was even cursing." (8)	Commanding and cursing the patient with memory disorder	Commanding and cursing	Malpractice	Wrongdoing related to patients	"nurse informed about the issue; situation was not the only one." (8)
"Sometimes one employee is treating colleagues inappropriately. She/he is talking by using inappropriate tone and is disruptively interrupting work." (30)	Treating colleagues inappropriately, talking by using inappropriate tone and is disruptively interrupting work	Treating colleagues inappropriately	Bullying peers	Wrongdoing related to healthcare professionals	"I discussed the issue with my manager I also discussed with the nurse in question."
"Manager is hiring to nursing incompetent people who don't have adequate education. They don't even have medication licenses in order etc." (141)	Manager is hiring incompetent, uneducated people without medication licenses	Hiring incompetent and uneducated people	Hiring incompetent personnel	Wrongdoing related to healthcare managers	"issues are not interfered in" (141)

**Table 3.** Examples of data analysis of the paths

Quote	Path from observed wrongdoing (subtheme) to whistleblowing act	Paths from wrongdoing (theme) to whistleblowing act	Main paths
"Physical violence toward the patient I asked about the matter from the involved employee and told the manager about the incident." (126)	Physical abuse → Talking to wrongdoer Physical abuse → Telling to manager	Wrongdoing related to patients → Internal whistleblowing act	Observation of wrongdoing → internal whistleblowing act → Internal whistleblowing
"I tried to talk about the incident with my manager I made a report of an offence to the police I lacked support from the supervisory authorities to which I reported the incident orally and in writing." (5)	Abusing/stealing substances → Report to police Abusing/stealing substances → Report to supervisory authorities	Wrongdoing related to healthcare professionals → External whistleblowing act	Observation of wrongdoing → External whistleblowing act → External whistleblowing
"Manager's inappropriate behaviour toward employees. Acknowledged for a long time, lack of courage to interfere." (31)	Bullying subordinates → Fear to interfere	Wrongdoing related to healthcare managers → Whistleblowing act left undone	Observation of wrongdoing → whistleblowing act left undone → No whistleblowing

 Table 4. Examples of wrongdoing related to patients

Quote	Wrongdoing related to patients	Whistleblowing act
"dinner and evening meals are served to residents with memory disorders only if the nurse is actively taking care of it dinner and evening meals are taken from the tea trolley and served for residents to their homes residents often miss the dinner and evening meal, because the nurse (working alone on the evening shift) doesn't have time/doesn't want to take it to all residents." (11)	Malpractice	"I have reported these to my manager" (11)
"After one particular nurse two patients have been found dead in the morning. According to a new alarm system the time of death had already occurred in the evening. The nurse had not visited the patient during the whole night shift After this particular nurse I have found patients covered all over with urine and faeces Students are reporting how this particular nurse is sleeping during nights." (59)		"The issue was covered up which the personnel were not permitted to discuss" (59)
"Long-term patient's physical condition started to worsen so that they needed to be helped daily. Some nurses might push the patient to move forward and the patient would fall." (115)	Physical abuse	"Negotiation among the helpers (colleagues)" (115)
"Patient got hit. The manager absolutely forbade us to report the issue" (118)		Manager forbade to tell (118)
"Resident with intellectual disabilities is being humiliated and embarrassed through acts. For example forced to crawl on the floor." (161)		No action taken
"A practical nurse is medicating the patient during the nightshift without the registered nurse knowing, so the patient was nearly unconscious until 1 p.m. following day with the consequence that they fell and broke their hip." (50)		No action taken
"The use of tranquillizers with patients was inconsistent The nurse's peace to surf the Net must be ensured, for example toileting walking patients is not a nursing task during the night." (133)		No action taken
"A nurse stole sleeping pills from several patients for months. It was observed when the pharmacy didn't provide the medicines, because according to their register the medicines should have lasted for a longer period Residents paid themselves for the stolen medicines. Furthermore one patient was medicated with a half tablet instead of a whole one because The Social Insurance Institution didn't compensate the stolen medicine." (112)	Stealing from the patient	"to the manager" (112)
"A person in a management position worked alone during nightshifts and stole money from the patients (largest disappeared amount 1000 €)" Furthermore property of the residents was confiscated." (117)		No action taken
"Cognac was retrieved for the customer from the liquor store and money was borrowed at the same time. The borrowed money was not returned and the customer began to wonder. It was a question of an elderly patient with memory disorder whose talking couldn't always be relied on. The employee continues to work in home care" (148)		"Was told to the manager" (148)

**Table 5.** Examples of wrongdoing related to healthcare professionals (HCP)

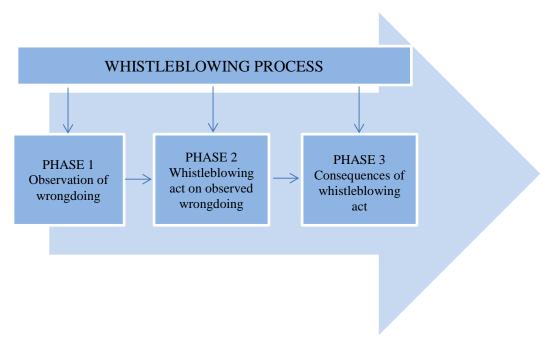
Quote	Wrongdoing related to HCPs	Whistleblowing act	
"constantly talking with a nasty tone about colleagues who are not present, even though this is forbidden in the rules of the workplace." (19)	Bullying peers	"I have recently considered how to raise concern about the issue without naming" (19)	
"Once I was working on the same shift with bullying colleagues and they left the whole workload to me while they were socializing together." (123)		"I told the manager" (123)	
"An employee was constantly late to their workstation the situation continued for a couple of years" (49)	Neglecting work "Eventually annoyed by this, a complaint was made to the manager." (49)		
"an employee is covering their mistakes and underestimates them and tries to, for example, blame the students." (147)		"Discussion among colleagues, I talked to manager" (147)	
"A practical nurse had been drinking during their nightshift." (51)	Abusing/stealing alcohol	"I told this to my manager." (51)	
"A person was drunk or in hungover. Other colleagues were watching over them so that mistakes were not made This person was a nurse." (183)		No action taken	
"I suspected a nurse colleague was stealing sleeping pills. Other nurses also suspected them. The pills were counted for a few weeks after each of their work shifts. Pills were missing almost every time somewhere else than to our patients." (76)	Abusing/stealing substances	"We told the manager" (76)	
"The changing behaviour of a registered nurse colleague aroused a suspicion of the abuse of prescription medicines. Their action continued for some time and the situation worsened, absences increased and taking care of work tasks became more difficult." (71)		"First the issue was talked about with that person The immediate superior was informed about the issue" (71)	
"We had a new registered nurse who seemed, in my opinion, suspicious from our first meeting. They had a strange look in their eyes, and it seemed to me that they abusing substances." (51)		"I informed my immediate superior and the responsible head nurse immediately of these" (51)	

 Table 6. Examples of wrongdoing related to healthcare managers (HCM)

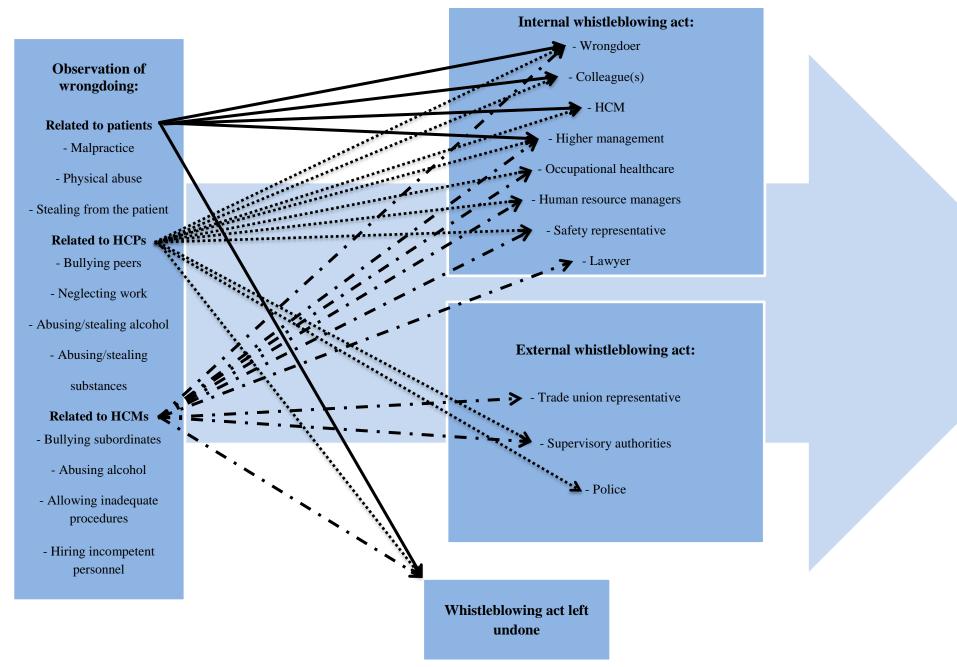
Quote	Wrongdoing related to HCMs	Whistleblowing act
"the immediate superior is treating employees inappropriately. Talks badly about and criticizes those who are not present also their own manager to the employees." (2)	Bullying subordinates	"Talked about the issue with the wrongdoer and occupational healthcare." (2)
"The nurse was not informed of the planned changes in their patient appointment schedule The manager underestimated the issue and even lied that the nurse was supposed to be informed and the issue should have been clear." (149)		"The issue was talked about in the common meeting" (149)
"Dividing the work tasks burdens the staff unequally, the most challenging tasks and also more tasks are given to certain people, others are allowed to choose their tasks." (209)		"This has been reported the process is ongoing at the moment." (209)
"A doctor in a leading management position abused alcohol Once they clearly came to work drunk. As nurses, we tried to limit their access to the patients." (95)	Abusing alcohol	"Disclosure was done with the help of nurses' immediate superior" (95)
"Manager (leading social worker) is coming to work nearly daily smelling of alcohol or hungover Doing their work somehow Small children could be in unstable families" (202)		"The manager was informed and spoke directly to the person (wrongdoer)" (202)
"In a nursing home the medicines were stored and medication was implemented against the rules Also the follow-up of the consumption of drugs was inadequate. Wrongdoings lasted for several months, nearly a year, with justifications that the new unit was searching for new operating models." (201)	Allowing inadequate procedures	"The manager and higher manager were informed of the issue." (201)
"The person was working under the wrong title according to their education, the manager knew and the higher manager had signed the contract." (14)	Hiring incompetent personnel	"I informed the staff manager and according to advice from a lawyer, the Finnish National Supervisory Authority for Welfare and Health." (14)

**Table 7.** Observed wrongdoings and whistleblowing acts addressed regarding them

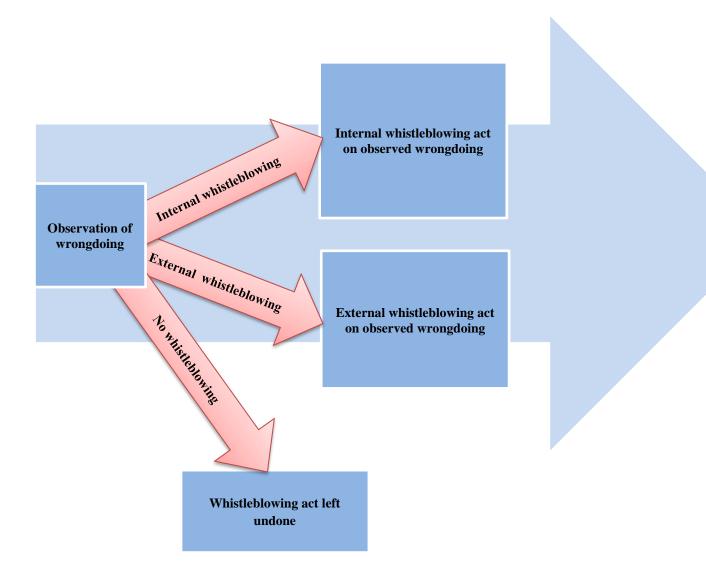
Internal Whistleblowing act	Wrongdoer	Colleague	HCM	Higher management	Occupational healthcare	Human resource manager	Safety representative	Lawyer	External whistleblowing act	Trade union representative	Supervisory authorities	Police	Whistleblowing act left undone
Wrongdoing Related to patients:													
Malpractice	Х	X	Χ	Х									Х
Physical abuse	X	X	X	Х									X
Stealing from the patient			Х	X									
Related to HCPs Bullying peers	x	x	X	x	X	X	х						x
Neglecting work	X		X	Х									Χ
Abusing/stealing alcohol	X		X	X	X		Х						х
Abusing/stealing substances	X	X	X	X	X		Х				X	Х	
Related to HCMs Bullying subordinates	X			X	X		X			X	X		X
Abusing alcohol				Х									
Allowing inadequate procedures							X						
Hiring incompetent personnel				X		X		X			Х		



**Figure 1.** Whistleblowing process described on the basis of the existing literature adapted and modified from Pohjanoksa et al. 2017



**Figure 2.** Whistleblowing process and paths from an observation of wrongdoing related to patients, healthcare professionals (HCP) and healthcare managers (HCM) to internal, external and whistleblowing act left undone



**Figure 3** Whistleblowing process' paths from observation of wrongdoing to whistleblowing acts: Internal whistleblowing, External whistleblowing and No whistleblowing