Whistleblowing over patient safety and care quality: a review of the evidence

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Single sentence summary: This paper reports the findings of a systematic review of the empirical research on whistleblowing over issues of patient safety and care quality.

Abstract

Purpose

To review existing research on whistleblowing in healthcare to develop an evidence base for policy and research.

Design/methodology/approach

A narrative review, based on systematic literature protocols developed within the management field.

Findings

We identify valuable insights on factors that influence healthcare whistleblowing, and how organizations respond, but also substantial gaps in the coverage of the literature, which is overly focused on nursing, has been largely carried out in the UK and Australia, and concentrates on the earlier stages of the whistleblowing process.

Research implications

The review identifies gaps in the research on whistleblowing in healthcare, and draws attention to an unhelpful lack of connection with the mainstream whistleblowing literature.

Practical implications

Despite limitations to the existing literature important implications for practice can be identified, including enhancing employees' sense of security and providing ethics training.

Originality/value

This paper provides a platform for future research on whistleblowing in healthcare, at a time when policymakers are increasingly aware of its role in ensuring patient safety and care quality.

Keywords: whistleblowing, raising concerns, speaking up, patient care, quality healthcare

INTRODUCTION

Whistleblowing continues to bring healthcare scandals to light, reports into poor standards of care highlight its contribution to the detection and prevention of harm to patients (Kennedy, 2001; Francis, 2015), and it has emerged as a central issue in debates over quality and safety in many health systems (Braithwaite et al., 2015). Yet compared to other sectors there remains relatively little research on whistleblowing in healthcare. In this article we review existing research on whistleblowing in healthcare, to identify what insights it offers for policy and practice, and develop a healthcare-specific research agenda. Focusing on situations where the issues relate primarily to the delivery of healthcare, we define healthcare whistleblowing as the raising of concerns about unsafe, unethical or poor quality care to persons able to effect action.

Professional body codes of conduct require healthcare professionals to act in ways which ensure no harm comes to patients, which includes taking action in cases where they observe

unsafe or unacceptable practice; failure to act may lead to them being sanctioned. This logically requires professionals to blow the whistle on unacceptable practice, yet there has been a reluctance to accept healthcare organizations and/or professionals might need to have the whistle blown on them (Dixon-Woods, Yeung & Bosk, 2011). Research has provided greater understanding of the ways in which healthcare professionals can respond when faced with instances of unsafe and/or poor quality care, without blowing the whistle (e.g. Tarrant et al., 2017). Such approaches are appealing to both individuals and policymakers, as they hold the possibility of more palatable alternatives to whistleblowing, based on culture change within healthcare. However, as Tarrant et al (2017) highlight, these approaches are not always effective, as staff may choose to go only so far in trying to address problems. Whistleblowing remains a crucial 'last resort' – Vandekerckhove & Phillips (2017) found whistleblowing tends to occur only after other avenues for raising concerns have been exhausted. There is thus a need for understanding the whistleblowing process in a healthcare context.

The obvious corollary to the need for staff to be willing to raise concerns is that organizations need to respond positively to these concerns, learn from any mistakes and put effective policies in place to prevent them from happening again. Unfortunately, there are many high profile examples in healthcare where serious concerns raised by front-line staff were dealt with inadequately. Writing in the context of the UK NHS, but making a point of universal relevance, Francis lamented a culture "which deters staff from raising serious and sensitive concerns and which not infrequently has negative consequences for those brave enough to raise them" (2015, p1). Many healthcare professionals believe they will be victimized, ostracized or bullied if they raise concerns (Medical Protection Society, 2012), leading some, particularly junior staff , to remain silent in the face of poor care or wrongdoing (Delk, 2013): "The junior needs a reference and a recommendation; nurses want to keep their jobs. This is a powerful motive for keeping quiet" (Kennedy Report, 2001). Disquiet about speaking up is perhaps unsurprising. Local discursive practices (e.g. on the nature of success, failure, risk and performance) and local operational contingencies (e.g. resource constraints, service rivalries, competition and stakeholder pressure) will have a powerful influence on the willingness of employees to raise concerns and the ability and willingness of employers to respond appropriately.

In this article we review empirical research on whistleblowing in healthcare. We begin with a description of the methodology used to undertake the review, then present a thematic narrative analysis of the identified literature, focusing on factors that influence whistleblowing, and on organizational responses to whistleblowing. We explore the policy and practice implications of the evidence gathered, before turning to a consideration of the research agenda needed to enhance our understanding of healthcare whistleblowing.

METHOD

The evidence base offered by the healthcare whistleblowing literature is insufficient to warrant a meta-analysis, as the literature includes widely dispersed and divergently-framed research, so we undertook a narrative systematic review. Our goal was to identify all empirical studies relating to whistleblowing in healthcare. We used a systematic literature review protocol to identify the relevant articles. We began by collating papers from the bibliographies of three recent literature reviews on speaking up or raising concerns in healthcare (Milligan et al. 2016; Okuyama et al., 2014; Kelly & Jones, 2013). We then undertook keyword searching of the mainstream whistleblowing literature (using the terms

whistleblowing, "whistle blowing", and "whistle-blowing") using SCOPUS and EBSCO databases (see Figure 1). Further healthcare papers were added via 'snowballing' (cf. Contandriopoulos, Lemire, Denis & Tremblay, 2010) which produced an initial list of 741 records. We reviewed this list and removed duplicates, papers not based on empirical research, or not relevant to healthcare. This left a much shorter list of 33 papers, which we reviewed to see whether they cited (or had been cited by) studies not previously identified by the review process. This led us to add a further 22 papers, giving a total of 55 studies for review. We then reviewed each paper to identify its key findings. To structure our analysis of the selected papers we drew upon the model proposed by Near and Miceli (1985), who suggest the whistleblowing process can be conceptualized into five 'stages', from recognizing an event or situation as problematic; through decisions to take action (or not); the actions taken (internally or externally); the organizational responses to these actions; and, finally, the whistleblower's assessment of those responses (and, potentially, future actions by the whistleblower). The stage model thus implicitly captures a continuing cycle of response, interpretation and action. Mapping the selected papers onto this model shows research is concentrated mainly on the decision making stage (see Appendix 1).

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FINDINGS

We found surprisingly little overlap between the mainstream and healthcare whistleblowing literatures. Our search of the mainstream whistleblowing literature identified over 350 articles published since 1983, only 15 were related to healthcare of which just six reported original empirical research. Healthcare whistleblowing research began in the late 1990s and developed separately from the mainstream field, rarely drawing upon its theoretical and empirical insights. This may because the mainstream field has focused largely on fraud and corruption. There is clearly a qualitative difference between whistleblowing on financial wrongdoing and whistleblowing on clinical matters. Although fraud and corruption can be hard to identify and even harder to prove, in principle it can be legally determined whether or not they have occurred. By contrast, there is greater scope for debate (or dispute) within healthcare about what is 'safe' and what counts as good quality of care. In a similar vein, the extent to which whistleblowers are heroes or villains is also contested.

Factors Affecting Whistleblowing

Whistleblowing is a complex phenomenon (Grube, et al., 2010; Firtko & Jackson, 2005; Ion et al., 2015), influenced by a broad range of factors. Ohnishi et al. (2008) note the huge personal challenge of blowing the whistle, and the complexity of social, ethical, and personal forces at work in these situations. Whistleblowing is not generally done lightly, and indeed may be viewed as a supererogatory act (Edwards, 1996). In this section we explore the factors identified as influencing the whistleblowing process in healthcare settings, which can be grouped into three categories – individual and role characteristics, culture and climate, and leadership and management.

Individual and role characteristics

Many studies highlight the importance of nurses' self-image and perceived duty as patient advocates (Ahern & McDonald, 2002; Bickhoff et al., 2016; Black, 2011; Jackson et al., 2010b; Firtko & Jackson, 2005). This advocacy role has been recognized as being a crucial part of a nurse's training (Stevanin et al., 2015; Law & Chan, 2015; Tella et al., 2012), and

perceived as fundamental to helping nurses recognize when care is poor. Peternelj-Taylor (2003) suggests it is naïve for nurses to think organizations will respond to reports of wrongdoing in an ethical matter; consistent with their 'nurse as patient advocate' ideals they need resilience, confidence and moral courage to be able to speak out about wrongdoing in the healthcare sector (Bickhoff et al., 2016; Ion et al., 2016; Monrouxe et al., 2014). However Schwappach & Gehring, (2014a) suggest nurses are concerned about *how* to raise concerns, rather than *whether* to raise them, opening up the possibility that with the right processes more staff would be willing to speak up.

Studies highlight differences in the willingness to speak up between individuals in different roles and positions within healthcare organizations. In critical situations, nurses rarely challenged potentially dangerous decisions made by those in more powerful positions (St Pierre et al., 2012). Clinical staff in management roles appear more willing to speak up when confronted with poor or unsafe care (Moore & McAuliffe, 2009; Schwappach & Gehring, 2014b), which may be associated with demographic characteristics such as age, tenure, seniority, and experience providing them with greater confidence in their assessment of what is unacceptable, ability to communicate their concerns effectively etc. This is consistent with findings in the mainstream literature on the impact of such demographic factors, though Throckmorton & Etchegaray (2007) found error reporting was more likely to come from nurses who were operationally closer to the patient, and *less* well established in their roles.

Culture and climate

Hooks et al. (1994) suggest organizational culture has a greater influence on the decision to blow the whistle than all other factors. Exploring these issues in healthcare, Hutchinson & Jackson (2015) report many nurses experienced a contrast between the espoused mission of the organization articulated by senior management, and the actual culture/climate encountered in the workplace. Jones & Kelly (2014) highlight how formal procedural approaches to encouraging open reporting of concerns gave way to "[a] process of socialization and habituation in the workplace", meaning organizational culture has a far stronger influence than organizational procedures in determining whether staff feel it is safe and useful to report concerns about the quality of care. Prang & Jelsness-Jorgensen (2014) found organizational culture was perceived as a barrier to reporting concerns. St Pierre et al. (2012) found that a reluctance to challenge decisions believed to be dangerous was justified with reference to a lack of knowledge of whistleblowing procedures and a perceived inability to challenge superiors, which they suggest points towards a culture that suppresses voice and erodes the confidence of nursing staff in their own judgement. Occupational sub-cultures are also significant; Kingston et al. (2004) nursing culture encourages compliance with formal rules and protocols, whereas medical culture encourages dealing with incidents informally and 'off-the-record'. Ahern & McDonald (2002) found that nurses who blew the whistle on wrongdoing had a belief system that privileged their role as 'patient advocate', whereas those who did not report were more likely to believe they were as responsible to their colleagues and their employer as they were to the patient.

Placement students may be aware of unsafe clinical practices (Killam et al., 2012; 2013), having been trained to identify good and poor practice, and not yet being socialized into a particular organizational culture (Bradbury-Jones et al., 2010), or having the influence of the workplace environment cloud their judgement of what constitutes unsafe care (Tella et al., 2015). Despite this they may be unlikely to raise concerns – Ion et al. (2016) suggests a 'blame culture' exists within student nursing, while Bradbury-Jones et al. (2011) note fear of failing their placement often deters healthcare students from speaking up about poor quality

care, and they lack the experience and confidence necessary to raise concerns with their superiors (Kent et al., 2015). Training and education can address this, by increasing confidence and willingness to report and challenge poor practice (Bradbury-Jones et al., 2010). Bellafontaine (2009) notes that a strong student-mentor relationship and supportive university representatives are key to giving student nurses the personal confidence and information necessary to facilitate speaking up about concerns around patient safety. Law & Chan (2015) emphasize the value of mentoring nurses in order to enhance their understanding of what constitutes good (and poor) quality care and to raise their confidence in reporting concerns. Johnstone & Kanitsaki (2006, p.374) suggest nurses and others need to 'learn from practice errors and to use the lessons learned to help prevent future errors from occurring", and urge educators to present raising concerns in a positive light.

The financial context will have an important influence on climate. McCann et al. (2015) highlight the impact of financial austerity measures on whistleblowing, and more specifically on voice: given the difficulties of meeting more challenging targets with fewer resources, staff often resort to 'under-the-radar' tactics to deliver the quality of care they feel meets their professional standards, while avoiding the potential risks associated with 'speaking up'. Similarly, pressure to meet *business* targets begins to undermine nurses' confidence in their judgement on what is an acceptable level of care, and they modify their behaviours in response (Hyde, 2016; Leary & Diers, 2013). When financial constraints throw job security into sharper relief, staff are less likely to blow the whistle when doing so brings them to the attention of management, which may result in retaliatory action (McDonald & Ahern, 2000).

The culture and climate of an organization will influence (and be influenced by) the development and application of clear whistleblowing policies and procedures. These are generally perceived to increase the likelihood of internal reporting of wrongdoing (e.g. Seifert et al., 2010), but in healthcare the situation may be more ambiguous. Klaas et al. (2012) suggest formal whistleblowing policies and processes are likely to make whistleblowing appear to be a strategy of last resort. Entrenched behavioural patterns within healthcare organizations are often at odds with the officially espoused organizational approach (Hutchinson & Jackson, 2015), and formal procedural approaches can be 'neutralized' by organizational cultures that opposed 'voice' (Jones & Kelly, 2014). Interestingly, Newton et al. (2012) found nurses often took independent action to address poor care rather than pursue official channels of compliant. McCann et al (2015) observed a similar phenomenon, where in response to more challenging performance targets amid a reduction in resources, both frontline and mid-level management employees resorted to "a form of "street-level bureaucracy" – a situation in which traditional professional norms are reasserted informally in ways that often transgress prescribed performance systems" (p.773).

For healthcare organizations the cultures of specific occupations and professions can also be an importance influence on employee behaviour. The existence of clear professional standards and guidelines has been found to be an important factor in supporting whistleblowing in healthcare in a number of empirical studies (Firth-Cozens et al., 2003; Ion et al., 2015, Jackson et al., 2010a; Kingston et al., 2004; Orbe & King, 2000). National culture too may be an important influence (King, 2000). There has been a great deal of work on the relevance of national culture to whistleblowing (e.g. Park et al., 2008), and given the multi-national nature of the healthcare workforce in many developed countries it will be important for healthcare employers to take into account that staff coming from other countries may have different beliefs about if and how one should raise concerns. Ohnishi et al. (2008) note the significant impact of national culture in their research with psychiatric

nurses in Japan, and Cheng et al. (2015) comparing British and Chinese healthcare students noted that "individuals from collectivist cultures are less likely to be whistle-blowers, and less accepting of whistleblowing behaviour, than individuals from individualistic cultures" (p.15). Tella et al. (2015) found UK nursing students considered themselves better prepared for reporting on problems in relation to patient safety than their Finnish counterparts, and Tabak et al (1997) note that knowledge of the concept of whistleblowing was relatively underdeveloped in Israel compared to the UK, albeit the same moral imperative to care for patients existed in both countries.

Leadership & Management

In the mainstream literature a number of studies highlight the importance of leadership in promoting ethical behaviour, including whistleblowing (Culiberg & Mihelic, 2017), and they are important in healthcare too. Goldberg (2007) notes that negative or even hostile reactions to whistleblowing result in a loss of "*moral leadership*" from healthcare organizations (p.10). In most countries the public sector is an important player in the healthcare system, and Hutchinson & Jackson (2015) suggests the very nature of the public sector predisposes organizations to favour an authoritarian leadership style in which bullying and intimidation can thrive and leads to a punitive culture that discourages employees from whistleblowing. Mannion et al. (2016) explored the relationship between hospital board governance and patient safety in the NHS. They found a significant relationship between particular (self-reported) board competencies and whistleblowing related questions in the annual NHS staff survey, notably an association between board competencies and staff willingness to report errors and incidents as well as staff perceptions that their organization would take positive action if they did report. This draws attention to the wider governance context as well as the influence of local management and leadership in supporting the reporting of front-line concerns.

There is a sharp contrast between the positive perceptions of senior executives regarding the ease of reporting wrongdoing and subsequent action, compared to the actual difficulties reported by nurses (Cleary & Doyle, 2016; Dean 2014). Many studies find nurses lack confidence in the reporting systems, which acts as a barrier to reporting poor care (Attree, 2007; Black, 2011; Ion et al., 2015). Jackson et al. (2010a) report that healthcare managers were often perceived to have not dealt with complaints appropriately, and suggest a more responsive and inclusive style of management would improve standards of care (cf. Blenkinsopp & Snowden, 2016). Jackson & Raftos (1997) highlight nurses' perceptions of barriers and obstacles put in place by management that discourage the reporting of concerns internally. Such defensive behaviour among managers can drive some nurses to report externally (though probably more often simply to remain silent). The perception that management will fail to respond positively to concerns is frequently cited as a key reason why healthcare workers do not to speak up when faced with unsafe care (Attree, 2007; Black, 2011; Firth-Cozens et al., 2003; Jackson & Raftos, 1997; Kingston et al., 2004). Milligan et al (2016), drawing on research by Espin & Meikle (2014), note that some of the unintended barriers created by senior managers could be overcome by creating a more clearly defined "*reporting ladder*" (p.27) that facilitates the recognition of a clear path through which concerns could be raised in organizations.

Responses to Whistleblowing

An organization's response to whistleblowers (whether positive and negative) has great bearing on the entire whistleblowing process. Indeed, the *lack* of response (i.e. no subsequent change in practice, or addressing of wrongdoing) is widely cited as a key reason for a

decision not to report (Jackson & Raftos, 1997; Kingston et al. 2004; Moore & McAuliffe, 2009 & 2012). While this could be seen as an attempt to justify lack of action by non-reporting observers worried about the risks associated with whistleblowing (cf. 'cues for inaction', Blenkinsopp & Edwards, 2008), one would expect that seeing positive response from the organization would support further reporting of wrongdoing (McDonald & Ahern, 1999). Fear of retaliation by the organization emerges as a significant barrier to speaking up (Attree, 2007; Delk, 2013; Bradbury-Jones, et al. 2011), yet there has been a dearth of research exploring what proportion of whistleblowing actually results in retaliation versus positive responses to the raising of concerns.

Whistleblowers also report the potential for reprisals from peers as a major factor in their decision-making process, with McDonald & Ahern (2000) reporting 'unofficial' (i.e. not initiated by the organization) reprisals on whistleblowers from colleagues taking the form of pressure to resign, social rejection, being treated as a traitor, and having their career progression halted. Some whistleblowers experience "negative social outcomes, alienation and withdrawal of peer support" (Attree, 2007, p.397), and report bullying and exclusion from social groups (Peters et al., 2011; Bickhoff et al., 2016). Jackson et al. (2014) suggest nurses' desire to fit in leads them to conform to group norms, including norms on whether or not to report wrongdoing, so the development of group norms in favour of reporting might increase whistleblowing propensity. Law & Chan (2015) highlights the importance of whether peers naturally support colleagues who report wrongdoing, and consider the use of peers as mentors in these situations.

It is perhaps not surprising then that whistleblowers (both internal and external) often suffer deterioration in their relationships with their peers, irrespective of whether the concerns reported are genuine and legitimate (McDonald & Ahern, 2000; Beckstead, 2005; Delk, 2013). The formal process of investigating a concern is often traumatic for both complainants and the subjects of complaints, as well as bystanders (Attree, 2007; Jackson et al., 2010a & 2010b; McDonald & Ahern, 1999 & 2000; Moore & McAuliffe, 2010; Peters et al., 2011; Prang & Jelsness-Jorgensen, 2014). Jackson et al (2014a) interviewed both whistleblowers and targets of whistleblowing, and found that "whistle-blowing had a profound and overwhelmingly negative effect on working relationships" (p.37), with collegial and inter-professional relationships damaged, and those involved suffered bullying and exclusion. Bystanders were not immune to the impact of poorly managed whistleblowing, and can suffer from a decline in peer relationships (Jackson et al., 2014a).

DISCUSSION

We began this review anticipating that studies of whistleblowing in healthcare would be a sub-set of the general whistleblowing literature. In fact these studies are almost entirely separate from the general literature, yet do not themselves constitute a recognisably coherent body of work. They are dispersed across a very broad range of journals (the 55 studies reviewed here were published in 42 different journals), and there is only limited evidence of studies building upon previous research. The field is dominated by the UK (29% of papers published) and Australia (27%). Just 9.5% of the papers published originated in the USA, which is surprising given the size and influence of US healthcare, and in marked contrast to the mainstream whistleblowing literature, where US scholars have played a major role. The dominance of British and Australian research is a limiting factor in terms of gaining insights into ways in which different healthcare systems approach the issue. A further limitation is

that the healthcare literature uncovered relates primarily to whistleblowing by nurses (52.5%) and student nurses (28.8%), who together account for over 80% of participants in the studies.

Implications for policy and practice

Despite these limitations there are key messages for policy and practice which come out of the literature. First, we need to pay greater attention to workers' sense of security when it comes to blowing the whistle. We know whistleblowers are more likely to be in positions of relative security (e.g. through role, tenure, position in the hierarchy, experience etc.), but many healthcare workers are in innately insecure positions (e.g. locums, agency workers, students, trainees etc.), and those in ostensibly secure positions are still anxious about the possible consequences of raising concerns (Medical Protection Society, 2012). If we are to encourage a wider range of employees to raise concerns we need to consider how they can be made to feel more secure (cf. Yanchus et al., 2014). In debates about whistleblowing in healthcare we observe an assumption that staff (especially clinical professionals) should be willing to go on the record with their concerns. By contrast many other industry sectors operate with expectations that workers may be very wary of putting their concerns on the record, and will only do so if there are mechanisms for raising concerns that are protective of them, which may include anonymity. Whilst healthcare organizations can and should consider how to move towards a culture in which open discussion, feedback and the raising of concerns are encouraged and supported, we also need an acknowledgement that many whistleblowers are 'speaking truth unto power', and an inconvenient truth at that, and thus are taking a risk for which they need to feel there is some degree of support and protection.

Second, there is evidence that healthcare workers' ability to identify poor care and willingness to speak up about it is compromised by organisational factors which cloud their judgement, as they attempt to juggle the interests of various stakeholders. By contrast workers who view themselves as having a primary responsibility to the patient above all other stakeholders appear more likely to raise concerns (Ahern & McDonald, 2002). We might draw an analogy with health and safety – organisations with strong safety records tend to emphasise a safety first approach, making clear that other considerations (e.g. production targets and deadlines) will not be allowed to overrule safety concerns. A similar 'patients first' message in healthcare organisations would seem uncontroversial, but in many cases staff are not confident this is a primary organisational value in all situations. It seems clear that leadership sets the tone. There is a need to encourage staff to treat their obligations to the patient as primary. Healthcare professionals respond to a range of stakeholders in undertaking their duties, and can experience conflict in attempting to reconcile their differing demands. Healthcare organizations can reinforce the message that in the final analysis the patient must come first, and staff will be supported for acting in the interests of the patient, even if this causes conflict with colleagues, short-term reputational damage to the organization etc.

Finally, the studies point to a need for training, especially as part of induction. There are several aspects to this. Perhaps surprisingly, there appears to be a need for training which clarifies ethical expectations (Park & Blenkinsopp, 2013). Simple information giving on policies and procedures is also required; staff are not routinely involved in raising concerns, and when they encounter a problematic situation they may be unfamiliar with the processes involved. Skills development on how to challenge colleagues constructively, how to raise concerns in a manner likely to have a positive impact etc. would be useful. The training needs to cover both rank and file staff (who are in a position to observe problems) and more senior staff (who are likely to be the recipients of whistleblowing).

Many prescriptions for change emphasise the importance of culture change, without acknowledging how difficult this can be to achieve. The changes we describe above can contribute to a gradual culture change, but will also have a significant immediate impact.

Directions for future research

The studies vary in terms of three dimensions – the occupational group(s) from which participants are drawn, the national healthcare system in which the study is undertaken, and the stage(s) of the whistleblowing process examined. It is striking how similar many of the studies are on these three dimensions – involving nurses or student nurses, in the UK (or Australia), and examining the factors involved in deciding whether to blow the whistle. The current literature is thus skewed in terms of occupations and locations. The mainstream literature on whistleblowing clearly shows that though many of the issues surrounding whistleblowing are universal, there is also potential for considerable variation, and we need research across a greater range of locations and healthcare professions if we are to gain insights that can inform the development of policy and practice relevant to all healthcare organizations. Although there are commonalities within healthcare, there are also considerable variations between settings. The bulk of research has been undertaken in hospital settings, so there is a need for work in other contexts with their own specific features e.g. mental health, nursing homes, primary care. As healthcare becomes more global in scope there is a need to explore the interaction of occupational, organisational and national cultures, all of which influence whistleblowing.

Given the limited number of studies from the USA there is an obvious need for further research in this location, but (following the idea of the dog that did not bark) it is also worth considering whether the lack of attention from scholars may reflect differences in the US context. There is certainly no lack of whistleblowing cases, but they tend to be focused on fraud and corruption rather than issues of care quality and patient safety[1]. Exploring the issue with US scholars in healthcare management we encountered two possible explanations. First, the US healthcare system has potentially more external stakeholders, meaning there is greater scrutiny. Second, and related to this, these external stakeholders may be more 'enthusiastic' recipients of whistleblowing reports; insurance companies in particular want to ensure that they are paying for safe, quality care. In short, it may be the US system has more eyes looking for potential problems, and more ears willing to listen to concerns. This possible explanation warrants further investigation, as it offers potentially crucial insights for the healthcare systems of other countries.

The idea that whistleblowers frequently experience retaliation is well-established in the public mind, partly because highly publicized but isolated incidents of mistreatment of whistleblowers may have a disproportionate impact on the level of apprehension experienced among employees. This underlines the need for a clearer picture of what healthcare professionals (and the public) understand by the terms such as whistleblowing, speaking up or raising concerns, and a clearer sense of what might happen as a consequence. Clearer procedures make a difference, but staff need also to be confident that they work and things will change. Some cases cannot be discussed because of confidentiality issues, but in others it ought to be possible to create anonymised 'case studies' to demonstrate how the process works and that management will act.

[1] The US website Healthcare Finance News keeps an annual 'running list' of the biggest healthcare frauds. For 2017 the list ran to 70 separate cases involving sums up to $1.3 billion, resulting in fines and prison sentences of various lengths.

Healthcare is more likely to encounter situations of outsider whistleblowing (Culiberg & Mihelic, 2017), where concerns are raised by individuals not directly employed by the organization. Whereas problems within an organization like a bank or a car manufacturer might be hidden from view, in healthcare a whole range of people (patients, visitors, social workers, suppliers, clinicians from other organizations, students etc.) engage with the organization in ways that might allow them to notice problems. Much whistleblowing research, and whistleblower protection law, envisages the whistleblower as an employee of the organization. For healthcare there is a pressing need to gain greater insights into the issues surrounding outsider whistleblowing.

CONCLUSION

We have identified a number of areas in which further research is urgently needed, and outlined proposals for actions that could be taken to make it more likely that staff will speak up. Healthcare is slowly beginning to recognize that whistleblowing is not a problem, rather it is part of the solution to problems with the safety and quality of care, though the present review highlights that we still have a long way to go. Previous research has focused on the decision to blow the whistle and not enough on organizational response, yet the latter ultimately determines whether the issues affecting patients are addressed. Mainstream whistleblowing research has begun to focus on this more in recent years (Vandekerckhove, Brown & Tsahuridu, 2014). There needs to be more attention paid to encouraging a positive response to whistleblowing. Although much of the research focus has been on how whistleblowing in the public interest can be encouraged and supported, there is less emphasis on the response of managers and organizations to whistleblowing. In part this is a process of reframing, helping managers to understand that concerns raised by staff, just like complaints made by patients, are a valuable source of information from which the organization can learn and improve.

We noted earlier a marked separation between healthcare whistleblowing research and the rest of the field. This separation is both unnecessary and unhelpful for both – healthcare is failing to gain valuable insights from a large body of research on other sectors and professions, and the main field is missing an opportunity to explore nuances of whistleblowing in some of the most complex and contested research sites available. In short, we need to encourage mainstream whistleblowing researchers to expand their scope to include healthcare, as the best of way of ensuring the development of an evidence base which can inform the pressing debates about how to encourage and support healthcare workers to raise concerns.

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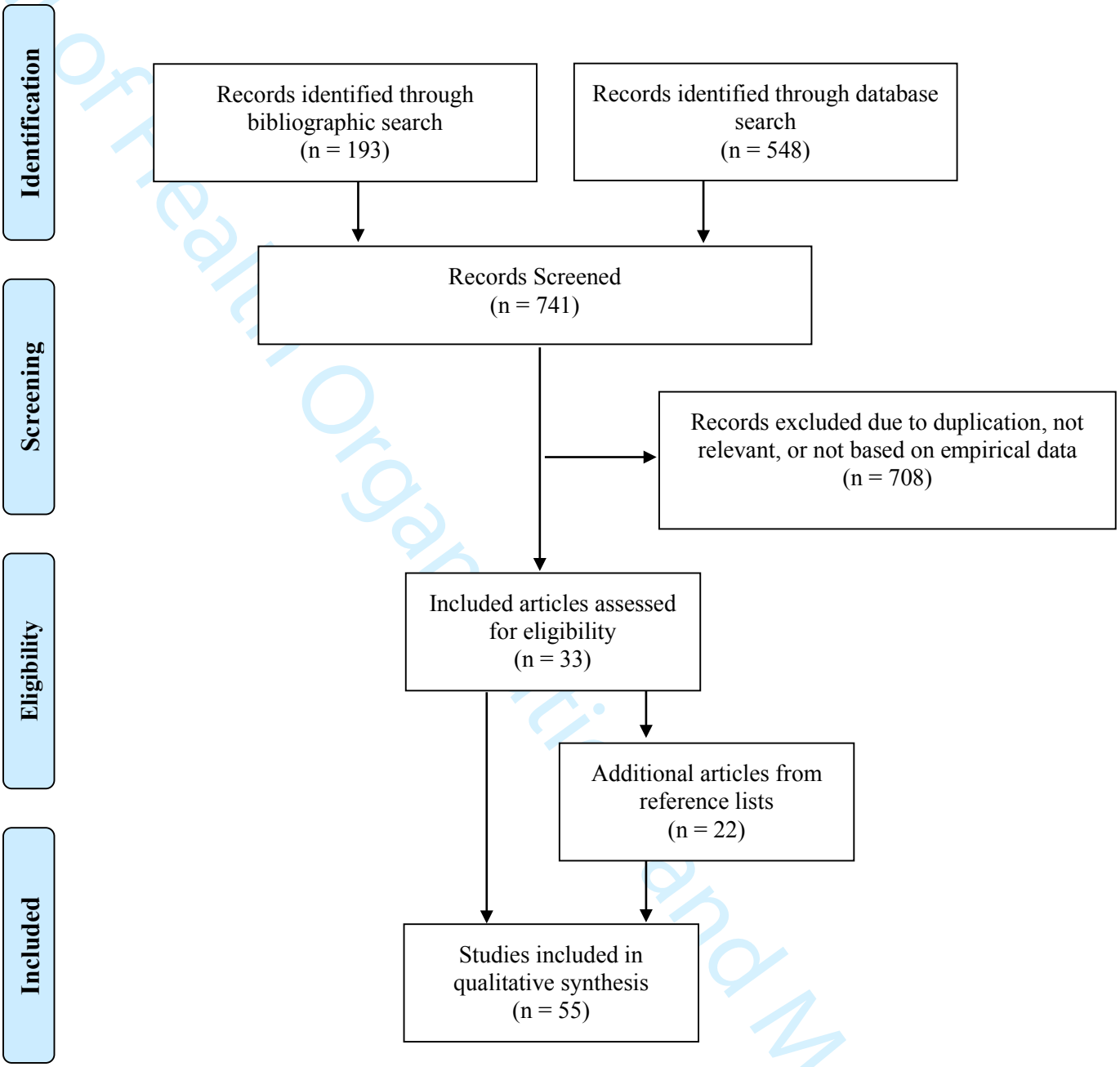
<<<< INSERT APPENDIX 1 HERE >>>>

Figure 1: PRISMA Flow Diagram



Appendix 1: Mapping healthcare related studies onto a stage model of whistleblowing

Stage 1	Stage 2	Stage 3	Stage 4	Stage 5
Potential whistleblower recognises event as problematic	Decides on action to take	Takes action (or not) to report internally or externally	Organisation (or other stakeholders) responds to whistleblowers actions	Whistleblower assesses organisational response and decides on what (if anything) to do next.
Ahern & McDonald (2002)				
	Attree (2007)			
Beckstead (2005)				
	Bellafontaine (2009)			
		Bickhoff et al. (2016)		
		Black (2011)		
	Bradbury-Jones et al (2010)			
		Bradbury-Jones et al (2011)		
	Espin & Meikle (2014)			
	Firth-Cozens et al (2003)			Firth-Cozens et al (2003)
Fledderjohnann & Johnson (2012)				
Gould & Drey (2013)			Gould & Drey (2013)	
			Greaves & McGlone (2012)	
	Grube et al (2010)			
	Ion et al. (2015)		Ion et al. (2015)	
	Ion et al. (2016)			
				Jackson & Raftos (1997)
			Jackson et al. (2010a)	
	Jackson et al. (2010b)			
			Jackson et al. (2014a)	
		Jones & Kelly (2014)		
		Jones et al (2016)		
Kent et al. (2015)				
Killam et al. (2012)				
	Killam et al. (2013)			
	Kingston et al. (2004)		Kingston et al. (2004)	
Ko & Yu (2017)				
Law & Chan (2015)				

	Levett-Jones & Lathlean (2009)			
	Lewis & Vandekerckhove (2015)			
Loewenbrück et al. (2016)				
		McCann et al (2015)		
		McDonald & Ahern (1999)		
			McDonald & Ahern (2000)	
	Mansbach & Bachner (2010)			
	Mansbach et al. (2012)			
Monrouxe et al. (2014)				
Monrouxe et al. (2015)				
Moore & McAuliffe (2010)				Moore & McAuliffe (2010)
Moore & McAuliffe (2012)				Moore & McAuliffe (2012)
		Newton et al. (2012)		
		Ohnishi et al. (2008)		
		Orbe & King (2000)		
		Peternelj-Taylor (2003)		
				Peters et al. (2011)
	Prang & Jelsness-Jorgensen (2014)			
	Schwappach & Gehring (2014a)			
	Schwappach & Gehring (2014b)			
Stevanin et al (2015)				
	St Pierre et al. (2012)			
	Tabak et al. (1997)			
		Tarrant, et al (2017)		
Tella et al. (2015a)				
Tella et al. (2015b)				
	Throckmorton & Etchegaray (2007)			