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"Supporting nursing, midwifery and allied health professional students to raise concerns with the quality of care: a review of the research literature"

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# Abstract

Background

This article reports aspects of a systematic literature review commissioned by the UK Council of Deans of Health. The review collated and analysed UK and international literature on pre-registration healthcare students raising concerns with poor quality care. The research found in that review is summarised here. Objective

To review research on healthcare students raising concerns with regard to the quality of practice published from 2009 to the present.

Data sources

In addition to grey literature and Google Scholar a search was completed of the CINAHL, Medline, ERIC, BEI, ASSIA, PsychInfo, British Nursing Index, Education Research Complete databases.

Review method

Sandelowski and Barroso's (2007) method of metasynthesis was used to screen and analyse the research literature. The review covered students from nursing, midwifery, health visiting, paramedic science, operating department practice, physiotherapy, chiropody, podiatry, speech and language therapy, orthoptist, occupational therapy, orthotist, prosthetist, radiography, dietitian, and music and art therapy. Results

Twenty three research studies were analysed. Most of the research relates to nursing students with physiotherapy being the next most studied group. Students often express a desire to report concerns, but factors such as the potential negative impact on assessment of their practice hinders reporting. There was a lack of evidence on how, when and to whom students should report. The most commonly used research approach found utilised vignettes asking students to anticipate how they would report.

Conclusions

Raising a concern with the quality of practice carries an emotional burden for the student as it may lead to sanctions from staff. Further research is required into the experiences of students to further understand the mechanisms that would enhance reporting and support them in the reporting process.

Key words

Student, concerns, whistleblowing, whistle-blowing, quality, reporting, safeguarding, patient safety, poor care, competence, speaking up/out.

#### Introduction

This article concerns a systematic literature review commissioned by the Council of Deans of Health on evidence relating to students of nursing, midwifery and the allied health professions reporting concerns about the quality of practice (Milligan et al. 2016). A wider narrative review of literature and legislation and policy was completed as part of that full review, but this article focuses on the empirical research that was found. Students in the UK and other countries undertake placements in a range of clinical and other practice-based learning environments, observing and participating in a diverse range of care and treatment interventions. They will inevitably encounter differing levels of quality and sometimes the care and treatment they experience may fall below the standards they believe should apply.

## Background

A number of significant initiatives have recently been made internationally to shift healthcare towards a more positive safety culture. Although the notion of safety culture remains problematic in terms of definition and implementation, 'the way things are done around here', probably the simplest explanation of what safety culture means (Reason, 2008), has changed and there is a considered and sustained drive to enhance the quality and safety of healthcare provision. The ability and readiness of staff and students to raise concerns about the quality of care is now seen as central to improvements in safety culture. The duty of candour (GMC/NMC, 2015) and the 'Speaking up' document that was developed in the UK as part of the Francis inquiry (2015) into the poor standards found at the Mid Staffordshire trust in England make it clear that students, like other members of healthcare staff, have a duty to report concerns about practice.

Publication of the World Health Organisation ' Patient Safety Curriculum Guide' (2011) demonstrates the international commitment to raising standards in healthcare. The NHS Constitution for England (Department of Health, 2015) sets out the principles, values and rights of patients and staff with regard to raising concerns in the NHS. It makes a number of pledges the most notable of which can be found in section 4b, 'Staff – your responsibilities'. It is stated that staff should aim "...to provide all patients with safe care, and to do all you can to protect patients from harm" (p.14). Further to this it is stated that staff have a responsibility: 'to raise any genuine concern you may have about a risk, malpractice or wrongdoing at work (such as risk to patient safety, fraud or breaches of patient confidentiality), which may affect patients, the public, other staff \* or the organization itself, at the earliest opportunity' (p.15). A footnote in the document, indicated by the \* in this quote, is added in which it is made clear that the range of NHS staff the document applies to includes students.

#### Aim

The aim of the commissioned review for the Council (Milligan et al. 2016) was to systematically gather and synthesise the evidence around raising concerns with regard to poor quality care by students on pre-registration healthcare programmes. The aim of this article is to report the 23 research articles that were gathered and analysed as part of the Council review.

# The approach taken to the review

A systematic literature review was defined as a clearly formulated, systematic and explicit strategy to identify, select, and critically appraise and analyse data from the empirical studies reviewed (Kiteley and Stogdon, 2014). To ensure that a broad range of material was reviewed aspects of narrative review methodology were also employed. It is the research recovered during the systematic search process that is reviewed here.

## The search - key words

Student, concerns, whistleblowing, whistle-blowing, quality, reporting, safeguarding, patient safety, poor care, competence, speaking up/out.

These were searched within the context of 'healthcare student' and the disciplines of nursing, midwifery, health visiting, paramedic, operating department practitioner, physiotherapist, chiropody, podiatry, speech and language therapist, orthoptist, occupational therapist, orthotist, prosthetist, radiographer, dietitian, and music and art therapist. As commissioned by the Council of Deans of Health the review excluded social workers, medical practitioners and biomedical scientists, practitioner psychologists, clinical scientists, pharmacists and hearing aid dispensers. Studies were included in the review that contained a mix of students from both the included and excluded student groups.

# The search databases and inclusion criteria

The databases searched were CINAHL, Medline, ERIC, BEI, ASSIA, PsychInfo, British Nursing Index, Education Research Complete. A search for grey literature was completed alongside a search of Google Scholar. As contracted, the search covered UK and international material published from 2009 onwards. The search found a total of 1750 items, of which 576 were duplicates. Removal of additional duplicates within the process of review of title and abstract analysis of the remaining material led to 83 full texts being analysed of which, after further screening, 52 were included in the original report. It is the 23 research studies (See table 1) that were part of that final figure that are focused upon in this article. Detail can be found on the results of the search strategy in table 2.

#### Analysis

The research team met to determine the relationship between the research process, the selected method of metasynthesis, and distribution of the research material for review. An adapted form of Sandelowski and Barroso's (2007) method of metasynthesis was adopted as it is a widely recognised framework that has recently been evaluated with regard to studies drawn from the field of health sciences (Ludvigsen et al. 2015). This method of qualitative research synthesis required the team to translate findings from the primary studies into thematic statements in order to build a comprehensive description of events, relationships or conditions. Given the mixture of research studies (qualitative, quantitative and grey literature) the research team utilised Kline's (2015) 'time to think' model of human interaction during meetings to promote parity and a reflexive approach to the synthesis of the literature. This also gave the team the opportunity to compare and analyse the research that was quantitative in nature. The lead author co-ordinated the review and metasynthesis of the selected

research material and all the studies were double reviewed prior to analysis across the team.

# Findings

Through the findings of the broader review completed for the Council the team was able to reach a consensus with regard to four key themes emerging from the literature. Those four themes are repeated here to present the research literature:

- Empowerment and student voice
- Patient safety and speaking-up
- Reporting poor practice
- Bullying and harassment

# **Empowerment and student voice**

Two articles reported a longitudinal study utilising semi-structured interviews and focus group discussions that analysed issues around the empowerment of students in clinical practice (Bradbury-Jones et al. 2010; 2011). Thirteen students joined the study in year one of a pre-registration nursing course, with one leaving early in the second year. The research utilised hermeneutic phenomenology with annual semi-structured interviews and focus group discussions. The second article (Bradbury-Jones et al. 2011) referred to the work of Hirschman (circa 1970) who developed a model to explain the loyalty behaviour of customers and employees. Unhappy customers tend to 'exit' rather than 'voice' their concerns. In an employment setting an employee may choose to seek alternative employment in preference to raising a concern. The Bradbury Jones et al. findings suggested that in situations where nursing students feel they need to speak up they will 'exit', which usually means not saying anything, or they will 'voice' their concern. The authors add that students will often use a 'negotiating voice' to raise a concern in a way that is less likely to lead to conflict with staff. Strategies such as 'finding the appropriate moment' were mentioned by some students. They suggest that the 'negotiating voice' is a compromise; a bridge between the 'exit' position of not saying anything (students on placements usually have to finish the placement so cannot simply leave) and the difficult position of 'voicing' the concern.

Ferns and Meerabeau (2009) sent a questionnaire to 156 third year student nurses exploring experiences of verbal abuse. They sought to explore reporting behaviours with regard to incidents of verbal abuse from patients, visitors and staff. A response rate of 73% was achieved with 51 students reporting they had suffered verbal abuse. Thirty two of the students had reported the incident and 19 had not. Not all reported incidents resulted in a positive response from staff and feedback to students concerning the outcome of their report was sometimes lacking. Students were less likely to report the incident if it involved staff members and was witnessed by a senior colleague. The students perceived that they lacked power and a voice within the nursing hierarchy. The researchers concluded that under-reporting by students is significant and that students need more feedback following making a report of abuse.

#### Patient safety and speaking up

Another mixed methods study explored student nurses' perceptions of patient safety in both clinical and educational settings (Stevanin et al. 2015). The work was completed in two Italian Universities with bachelor of nursing students. The Health Professional Education in Patient Safety Survey (H-PEPSSIta) was administered, based on 23 items comprising six factors designed to measure self-reported patient safety knowledge and competence. The study reported students' perception regarding their patient safety preparedness over the duration of the degree course, and the amount of 'close calls' and/or adverse events witnessed. The analysis and interpretation of the fifth objective of the tool ('recognizing, responding to and disclosing adverse events and close calls') was limited. It was evident that reporting fell during the second year and rose to its highest levels in the final year. The work lacked any clear analysis of the reporting of incidents that might have been considered something other than a patient safety incident. There was no substantial analysis of how students disclosed the adverse events/patient safety incidents they encountered.

An article by Bressan et al. (2016) summarised findings of what appears to be the same study, explaining how the questionnaire (H-PEPSS) translated into Italian, was validated. The sample size is quoted as 574 but 573 is cited in the Stevanin et al. (2015) article. The authors concluded that the H-PEPSS is a valid instrument capable of evaluating nursing students' self-perception of patient safety knowledge. Little detail is given on the data retrieved, beyond the task of validating the tool, but, a link is established between patient safety and raising concerns.

A qualitative study utilising interpretive phenomenology was completed by Bellefontaine (2009). It explored what influences student nurses' ability to report potentially unsafe practice. Six second and third year students completed semi-structured interviews that included 5 open questions, one of which asked the student to recount the factors that affect the ability to report potentially unsafe practice. Content analysis of the interviews identified four main themes: the student-mentor relationship; actual or potential support provided by the practice area and/or university; the student's own confidence level and knowledge base; and fear of failing the placement. Although a small study, it highlights the potential importance of mentorship in supporting students to raise concerns.

Killam et al. (2012) report a study with first year Canadian Baccalaureate nursing students and their viewpoints on compromised clinical safety. In total 94 students enrolled in the study, a convenience sample from first year classes. The inclusion criteria were official program enrolment, submission of a completed Q-sort and written consent to use the Q-sort in subsequent statistical analyses. A Q-sort is a method used to ascertain viewpoints on a topic. Sixty eight students consented to the use of their completed Q-sorts for further analysis. In response to the Q-sort question, "In a clinical setting, it is most unsafe when..." the following four discrete viewpoints and a consensus viewpoint were identified: an overwhelming sense of inner discomfort; practising contrary to conventions; lacking in professional integrity; and disharmonizing relations. These categories are reiterated in a later article (Killam et al. 2013).

Another Canadian study used practice related patient safety incident scenarios designed by the authors to test whether students could see an incident within them. The researchers analysed what the students' interpretation of the incident was and if, and how, the student would report the perceived incident (Espin and Meikle, 2014). Ten students took part in the study reading 5 scenarios. Only one scenario generated agreement in all students that an incident had occurred. Three themes emerged from the analysis of the post scenario interpretation interview: scope of practice; professional roles; and presence or absence of harm.

The work lacks detail on methodology but is potentially useful for two reasons; as an educational strategy it may help students to identify patient safety incidents, and secondly the authors mention a 'reporting ladder'. This is a way of describing the process through which students can raise concerns. If they do not get a response, or are unhappy with the response to the report, they can move up to the next step in the reporting ladder.

## **Reporting poor practice**

A qualitative study completed in the UK by lon et al. (2015) utilised semi-structured interviews with 13 pre-registration nursing students who were asked to explore perceptions, values and what they felt was important in raising concerns about practice. The study focused on the role of educational institutions and development of strategies to support students. It concluded that raising concerns is difficult; some students feel morally compelled to, yet many are aware of the potentially negative consequences and implications for themselves as students. Some students saw such events as an inevitable background to their pre-registration journey.

Rees et al. (2014) conducted an on-line survey of nursing students' most memorable professional dilemmas. It involved 294 nursing students from 15 UK nursing schools. A questionnaire was used based upon previous research undertaken by the same authors with medical students (Monrouxe and Rees, 2012). Almost 80% of the students reported acting in the face of a dilemma although there was little detail on how the report was made, who it was reported to, or the outcomes. Students did talk of the possible sanctions they could face if they raised a concern. Primary outcomes from the narrative analysis related to: patient care dilemmas instigated by healthcare professionals and workers; student abuse; patient care dilemmas instigated by students and patient consent dilemmas. It concluded that nursing students should be given a 'safe space' by educational providers in which to narrate the dilemmas seen.

Monrouxe et al. (2015) report the results of a related on-line UK questionnaire that sought to understand the prevalence of healthcare students witnessing or participating in something that they thought was unethical (professional dilemma). In total 2397 medical students and 1399 healthcare students participated. Of the latter, 756 were nursing, 268 pharmacy, 201 physiotherapy and 174 dentistry students. Only 10% of all the respondents reported having experienced no professional dilemmas over the last year. The remainder reported witnessing or participating in breaches of patient dignity or safety and the majority also reported being the victim of workplace abuse. 47.5% female and 36.2% male healthcare students reported witnessing clinicians breaching patient dignity or safety. In terms of instigating such breaches, 28.8% of female and 27.5% of male healthcare students reported that they had done this. Observing the undertaking of an examination/procedure without valid consent was reported by 17.3% female and 13.6% male respondents. In terms of reporting this observation 19.1% female and 12.4% of male healthcare students said they had done so.

The concept of 'habituation' was used to describe the finding that the respondents seemed to become less distressed with increasing exposure to dilemmas. This applied to the medical students, along with more distress with increased exposure to dilemmas that could not be justified. Only this latter finding was stated as applying to healthcare students. It was noted that a large number of respondents suffered considerable long-term emotional distress after witnessing a professional dilemma and that women were more likely to claim distress as an impact on self.

Another UK study by Rees et al. (2015) researched workplace abuse narratives as recounted by 69 students: 29 dentistry, 15 physiotherapy, 13 nursing and

12 pharmacy students. Narrative style interviews with the participants were completed to elicit personal professional dilemmas. Seventy nine abuse narratives were reported, but that abuse had typically been directed at the student not the patient. Of the 44 students who reported acting in the face of abuse, only 10 reported the perpetrator. The students' failure to challenge was associated with the negative impact it might have on the relationship with the perpetrator and the poor assessment results that might follow for the student. The interviews required students to recount personal incident narratives. Two hundred and twenty six of these were analysed and the classifications deduced were: student abuse (predominantly verbal); patient safety; dignity breaches; and dilemmas around challenging others and whistle-blowing. This study was also reported in Monrouxe et al. (2014).

A mixed methods qualitative study on student nurse belongingness in clinical placements was completed by Levett-Jones and Lathlean (2009). Eighteen nursing students were recruited and the data was collected through semi-structured interviews. Thematic data analysis showed that while students were expected to comply with recognised standards and codes of practice, they also felt a need to comply with unacceptable nursing practice as they were reluctant to endanger their sense of belonging to the group. Whilst compliance could at times lead to guilt and regret, it was often seen as the lesser of two evils from the students' perspective – it was often better to comply than to be rejected or risk ostracism.

The study by Mansbach et al. (2010) involved 112 physical therapy students in Israel. Two case study vignettes were reviewed by the students who then completed a 5 point Likert scale response questionnaire. The vignettes were designed to present a dilemma involving loyalty to the patient or to colleagues and management. A high response rate was achieved, with students being more likely to 'blow the whistle' internally rather than externally. The manager's behaviour was rated more serious than the colleague who did not report the patient fall. Mansbach et al. note a trend towards retraction of the report by the student as the event is escalated.

Another study focused on physiotherapy students (Mansbach et al. 2012) and three questions: Are physiotherapists and physiotherapy students willing to take action to prevent misconduct in order to protect a patient's interests? Are they willing to report the misconduct either within or outside the organisation and thirdly, are they willing to report a colleague or manager's wrong doing? The study was completed with 126 undergraduate students and 101 certified physiotherapists in Israel. The participants were presented with two vignettes – one describing a colleague's misconduct and the other describing a manager's misconduct. The certified physiotherapists perceived a colleague's misconduct as being more serious than the students did, and were more willing to intervene internally. The students were more prepared to take such action externally. The students perceived the manager's misconduct as being more serious than the qualified staff did, and also reported a greater readiness to intervene externally.

Further research with nursing students was reported by Mansbach et al. (2013). Eighty two nursing students in Israel completed a questionnaire containing two vignettes and were asked to decide whether to whistle-blow. Nursing students' age, gender, marital status and country of origin were not significantly correlated with assessments of the severity of misconduct and the decision to whistle-blow either internally or externally. Both vignettes were rated as serious by the students with the scores for the behaviour of management rated more serious than that for a colleague. The likelihood of participants whistle-blowing to people within the organisation was higher than that of approaching external organisations, significantly so. As with other research here that deals with rating of self-

expectation rather than actual reporting patterns, it is difficult to judge what the students might actually do in real situations. Mansbach et al. (2013) recommend the inclusion of whistle-blowing and the related law and ethical issues into the curriculum. This study appears to replicate earlier work by Mansbach and Buchner (2010).

Another study was undertaken by Mansbach et al. (2014), again in Israel, using the same vignette methods to compare qualified nursing staff and student willingness to blow the whistle to protect patients' interests. Eight two undergraduate students and 83 experienced nurses took part by reading two vignettes. The students then completed a multiple-choice questionnaire. Nursing students perceived the severity of misconduct to be lower when compared to the qualified staff evaluation of the vignette, but the students were more willing to report, both internally and externally.

# **Bullying and harassment**

Research related to the bullying and harassment of students was included in the review as such behaviours may be directed at students who raise concerns with the quality of practice. A doctoral dissertation by Geller (2013) explored the concepts of Bullying, Harassment and Horizontal Violence (BHHV) in nursing students in the USA. The experience of BHHV was measured using a tool called the BEHAVE survey. A total of 32 students completed the BEHAVE tool with 72% of them reporting experiencing bullying-like behaviour and 46.8% of those incidents originated from a nurse. The tool examined reporting behaviour and found 34.8% of students had reported the behaviour of concern.

Another doctoral dissertation by Schaefer (2014) in the USA sought to analyse whether educating senior nursing students to recognise negative behaviour determines if they would report or abstain from reporting negative behaviour in clinical settings. The study compared two student groups, one of whom had the intervention of a one-hour training programme on negative behaviour. Both groups viewed the same video vignettes. Significant differences were found in identifying nonverbal abuse, prompting the suggestion that education should focus students on covert forms of negative behaviour.

Another issue that might lead students to raise concerns is sexual harassment. As noted by Cogin and Fish (2009) in an Australian mixed method study, the incidence of reported sexual harassment is high in the nursing population. Detail was lacking on the methodology utilised in the study that consisted of an analysis of 538 questionnaires and 23 in-depth interviews. One hundred and seventy one of the 251 students responders reported being subject to sexual coercion, unwanted sexual attention or gender harassment. Results between the two data collection methods used were sometimes contradictory, with the interviews suggesting that medical staff were the main perpetrators of harassment and the questionnaire results finding it was patients. There was no clear conclusion with regard to how students should report such harassment or how management and organisations might facilitate and support such reporting.

#### Discussion

There was a lack of evidence within the research on when, how and to whom students should report. The barriers to reporting included a lack of clarity with regard to definition of the concepts 'raising concerns' and 'whistle-blowing'. Some research findings indicated that students were aware that raising concerns might adversely affect their progress in placement and might even be reflected in lower assessment grades as given by the practice staff assessing them (see

for example Bellafontaine, 2009).

As most of the research related to nursing students, with physiotherapy being the next most studied group, little is known about the place of disciplines other than these in reporting concerns. With physiotherapy the bulk of the research relates to one group of authors (Mansbach et al. 2010; 2012; 2013; 2014) and is reliant upon methods that asked students to anticipate what they would do rather than what happened in practice. Mansbach et al. recommended in their early work that future research focus on the experience of students, only to go on to repeat scenario based studies. No research was found on the impact of clinically linked academic staff, sometimes referred to as clinical educators, clinical teachers or practice educators, in supporting students who raise concerns. Similarly no research was found that directly evaluated the impact of education institution based academic staff supporting students reporting concerns.

Some of the research reviewed attempted to analyse a range of student attributes, including for example the impact of gender and age on reporting. In the case of the Cogin and Fish (2009) this related to student nurses encountering sexual harassment, which was more common in female participants. In Monrouxe et al. (2014; 2015) male participants were likely to classify themselves as experiencing no distress when confronted with dilemmas in the practice environment. The authors also noted that a process of 'habituation' can occur where students become less distressed with exposure to experiences that are of poor quality but aid learning, and 'disturbance' where they are exposed to dilemmas that could not be justified. A point in relation to the latter is the possible rise in attrition from the course if 'disturbance' is encountered too often by students.

In terms of enablers to reporting, an important recent positive move outside of the research reviewed here has been the breaking down of the historical delineation between qualified staff and students in terms of guidance, policy and procedure on raising concern. As clarified in the 'Speaking up' document (Francis, 2015), UK healthcare students will be included in the wider definition of worker simplifying the situation in that structures and mechanisms for reporting concerns will be amalgamated; students will look to the guidance and policy used by qualified staff.

#### Limitations of the review and ethical issues

The review as commissioned was not required to analyse material from the wider sociological literature on whistle-blowing, social work or medicine. Future reviews in this area of healthcare education and practice might find useful material in those fields. Some further literature relevant to students raising concerns may be found in the discourse around 'moral distress' in students, but this phrase was not used in this review. A review of literature prior to 2009 might yield other research and allow further comparisons in terms of how far the agenda has moved and where it may go next. No significant ethical issues were encountered in terms of the conduct of research reviewed, although the use of students' assignments to identify poor healthcare practice, arguably a form of surveillance, did seem to warrant further consideration.

#### **Recommendations for future research**

A concept analysis should be undertaken to further clarify and classify the elements within the concept of raising concerns. Qualitative research is required into the lived experiences of healthcare students who have reported concerns on the quality of care. Related to this, further analysis of bullying and horizontal, sometimes referred to as lateral, violence in the context of students raising concerns appears warranted. Such behaviours will reduce student reporting levels.

Educational institutions will have raising concerns policies and guidance for students, but a comparison of these across the UK could be completed to ascertain and share best practice.

# Conclusion

The 23 research studies found in the literature review completed for the Council of Deans have been reported here. Students, to repeat the analogy drawn in the Francis report (2013), bring a fresh pair of eyes to practice environments and this can allow them to see, sometimes more clearly than permanent staff, the limitations and strengths of the care and treatment being delivered. They may not always evaluate the quality of care accurately, perhaps due to a lack of knowledge and experience, but as transitory members of staff they will bring a different and potentially useful perspective. As this analysis of the available research shows the place and contribution of healthcare students in raising concerns needs further investigation, both in relation to the students themselves and the systems in which they will undertake practice placements. That new research can be used to further enhance the place of students in reporting concerns with the quality of practice and enable staff, both clinical and educational, to more effectively support them. [4522 + abstract]

#### References

Bellefontaine, N., 2009. Exploring whether student nurses report poor practice they have witnessed on placements. Nursing Times. 105(35) 28-31.

Bradbury-Jones, C., Sambrook, S., Irvine, F., 2010. Empowerment of nursing students in clinical practice: spheres of influence. Journal of Advanced Nursing. 66(9) pp.2061-2070.

Bradbury-Jones, C., Sambrook, S., Irvine, F., 2011. Nursing students and the issue of voice: a qualitative study. Nurse Education Today. 31 628-632.

Bressan, V., Stevanin, S., Bulfone, G., Zanini, A., Dante, A., Palese, A., 2016. Measuring patient safety knowledge and competences as perceived by nursing students: An Italian validation study. Nurse Education in Practice, 16(1) 206-216.

Cogin, J., Fish, A., 2009. Sexual harassment – a touchy subject for nurses. Journal of Health, Organization and Management. 23(4) 442-462.

Espin, S., and Meikle, D., 2014 Fourth-year nursing student perceptions of incidents and incident reporting. Journal of Nursing Education. 53(4) 238-243.

Ferns, T., and Meerabeau, E., 2009. Reporting behaviours of nursing students who have experienced verbal abuse. Journal of Advanced Nursing. 65(12) 2678-2688.

Francis, R., 2013. Report of the Mid Staffordshire NHS Foundation trust Public Inquiry. London: The Stationary Office.

Francis, R., 2015. Freedom to speak up: an independent review into creating an open and honest reporting culture in the NHS. http://webarchive.nationalarchives.gov.uk/20150218150343/https://freedomtospeakup.org.uk/wp-content/uploads/2014/07/F2SU\_web.pdf (Accessed on 23-11-15).

Geller, N. F., 2013. Examining bullying, harassment, and horizontal violence (BHHV) in student nurses (Unpublished doctoral dissertation). Available from EBSCOhost; psyh. (2014-99160-595).

General Medical Council/Nursing and Midwifery Council 2015. Openness and honesty when things go wrong: the professional duty of candour. London: GMC/NMC.

Gould, D., and Drey, N., 2013. Student nurses' experiences of infection prevention and control during clinical placements. American Journal of Infection Control. 41 760-763.

Gould, D., 2014. Student life – nailing hand hygiene. Nursing Standard. 28(22) 66.

Ion, R., Smith, K., Nimmo, S., Rice, A. M., McMillan, L., 2015. Factors influencing student nurse decisions to report poor practice witnessed while on placement. Nurse Education Today. 35(7) 900-905.

Kent, L., Anderson, G., Ciocca, R., Shanks, L., Enlow, M., 2015. Effects of a senior practicum course on nursing students' confidence in speaking up for patient safety. Journal of Nursing Education. 54(3 suppl) S12-5.

Killam, L., Montgomery, P., Raymond, J., Mossey, S., Timmermans, K., Binette, J., 2012. Unsafe clinical practices as perceived by final year baccalaureate nursing students: Q methodology. BMC Nursing. 11(26) doi:http://dx.doi.org/10.1186/1472-6955-11-26.

Killam, L., Mossey, S., Montgomery, P., Timmermans, K., 2013. First year nursing students' viewpoints about compromised clinical safety. Nurse Education Today. 33(5) 475-480.

Kiteley, R., Stogdon, C., 2014. Literature reviews in social work. London: Sage.

Levett-Jones, T., Lathlean, J., 2009. 'Don't rock the boat': nursing students' experiences of conformity and compliance. Nurse Education today. 29 342-349.

Ludvigsen, M., Hall, E., Meyer, G., Fegran, L., Aagaard, H., Unhrenfeldt, L., 2015. Using Sandelowski and Barroso's metasynthesis method in advancing qualitative evidence, Qualitative Health Research. Pp.1-10 http://www.ncbi.nlm.nih.gov/pubmed/25794523 (Accessed 25<sup>th</sup> June, 2015).

Mansbach, A., Bachner, Y., Melzer, I., 2010. Physical therapy students' willingness to report misconduct to protect the patient's interests. Journal of Medical Ethics. 36 802-805.

Mansbach, A., Bachner, Y., 2010. Internal or external whistleblowing: nurses' willingness to report wrongdoing. Nursing Ethics. 17(4) 483-490.

Mansbach, A., Melzer, I., Bachner, Y., 2012. Blowing the whistle to protect a patient: A comparison between physiotherapy students and physiotherapists. Physiotherapy. 98(4) 307-312.

Mansbach, A., Ziedenberg, H., Bachner, Y., 2013. Nursing students' willingness to blow the whistle. Nurse Education Today. 33(1) 69-72.

Mansbach, A., Kushnir, T., Ziedenberg, H., Bachner, Y., 2014. Reporting misconduct of a coworker to protect a patient: A comparison between experienced nurses and nursing students. The scientific world journal. 2014, Article ID 413926-413926. Doi:10.1155/2014/413926.

Milligan, F., Wareing, M., Preston-Shoot, M., Pappas, Y., Randhawa, G., Bhandol, J., 2016. Supporting nursing, midwifery and allied health professional students to raise concerns with the quality of care: a systematic review". London: Council of Deans of Health

Monrouxe, L., Rees, C., Endacott, R., Ternan, E., 2014. Even now it makes me angry: Health care students professionalism dilemma narratives. Medical Education, 48(5), 502-517. Doi:10.1111/medu.12377.

Monrouxe, L., Rees, C., Dennis, I., Wells, S., 2015. Professionalism dilemmas, moral distress and the healthcare student: Insights from two online UKwide questionnaire studies. BMJ Open, 5(5), e007518-e007518. Doi:10.1136/bmjopen-2014-007518.

Reason, J., 2008. The human contribution: unsafe acts, accidents and heroic recoveries. Farnham: Ashgate.

Rees, C., Monrouxe, L., McDonald, L., 2014. 'My mentor kicked a dying woman's bed...' Analysing UK nursing students' 'most memorable' professional dilemmas. Journal of Advanced Nursing. 71(1) 169-180.

Rees, C., Monrouxe, L., Ternan, E., Endacott, R., 2015. Workplace abuse narratives from dentistry, nursing, pharmacy and physiotherapy students: a multi-school qualitative study. European Journal of Dental Education. 19 95-106.

Sandelowski, M., Barroso, M., 2007. Handbook for synthesizing qualitative research. New York: Springer.

Schaefer, F., 2014. Educating senior baccalaureate nursing students to recognize and report negative behavior in the clinical setting (Unpublished

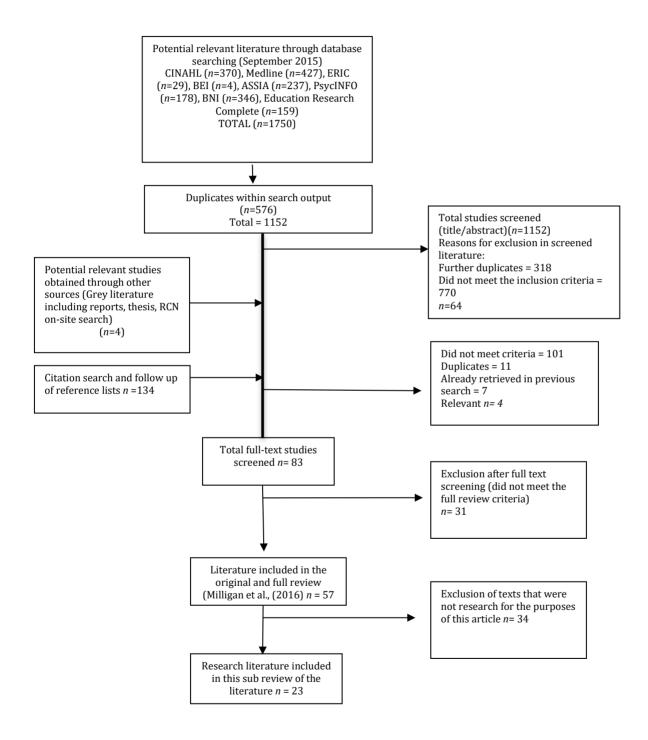
doctoral dissertation). Available From EBSCOhost; rzh. (2013006873).

Stevanin, S., Bressan, V., Bulfone, G., Zanini, A., Dante, A., Palese, A., 2015. Knowledge and competence with patient safety as perceived by nursing students: the findings of a cross-sectional study. Nurse Education Today. 35 962-934.

End.

#### Figure 1 – The search strategy flow diagram. Adapted from Milligan et al., (2016)

AB (whistleblow\* OR "raising concerns" OR patient safety OR safeguarding OR "poor care" OR reporting OR "speaking up" OR "speak up") AND AB student\* AND AB ( nurs\* OR midwi\* OR perioperative OR physiotherap\* OR podiatr\* OR paramedic\* OR "allied health" OR NHS )



Author – year	Aim	Student group and country	Design	Sample size	Results/Key findings
1/Bellafontaine, (2009)	To explore what influences student nurses ability to report potentially unsafe practice.	Nursing, UK	Qualitative, interpretive phenomenology. Semi- structured interviews asking students to recount factors that affect their reporting.	N=6	The students talked of fear of blame and not always reporting incidents they had seen. Four themes were identified: the student-mentor relationship, actual or potential support for the report from the practice area and University, the students confidence and knowledge levels, and fear of failing the placement.
2/ Bradbury- Jones, (2010; 2011)	Empowerment of students and student voice in being able to comment on the clinical practice experienced.	Nursing, UK	A three year longitudinal study utilising annual semi-structured interviews and focus group discussions. Data analysed using hermeneutic phenomenology.	N=13 One student left the study at the end of the first year (n=12)	Based on work by Albert Hirschman who constructed an exit, voice and loyalty model in research on employee loyalty. The findings suggests that students either have a voice' or 'exit' with regard to raising concerns. There is a bridge between these, but the exit option means students do not have to raise their concern. Exit meant not raising the concern with staff. Students were more likely to find a voice later in the course and would find an appropriate moment to raise the concern to lessen the personal impact in terms of their progress on the course.
3/ Bressen, (2016). See also Stevanin et al. (2015)	To validate the reliability and validity of the Health Professional Education in Patient Safety Survey(H-PEPSS).	Nursing, Italy	A quantitative validation study of the tool using a cross sectional design.	N=574	The questionnaire measures student's awareness and understanding of patient safety. It is concluded that the H-PEPSS tool, as translated, is valid and capable of measuring and supporting students understanding of patient safety. The authors suggest the tool can be used to enhance the curriculum and its delivery in relation to patient safety. Students may then be more likely to raise concerns. Some of the more direct questions on speaking up were omitted from the tool by the revising panel.
4/ Cogin and Fish, (2009)	To examine the prevalence of sexual harassment in nursing and factors that contribute to such behaviour.	Nursing, Australia	Mixed methods with a postal questionnaire (538) and in-depth interviews (23)	n=538	The study concluded that the prevalence of sexual harassment in nursing is high and patients are the most likely perpetrator. A conceptual framework highlighting the contextual factors linked to sexual harassment is presented. Female students reported sexual harassment at much higher rates than male students. It was not clear how and to whom sexual harassment might be reported by the student.
5/ Espin and Meikle, (2014)	Fourth year nursing students perception of events potentially harmful to patients and the reporting of those incidents.	Nursing, Canada	A descriptive qualitative study utilising 5 different scenarios from practice. Participants read the scenario and then verbally responded with	N=10	Four of the clinical scenarios were designed to be interpreted as incidents and one was a near miss. Three themes emerged from the analysis of the interview and student responses: scope of practice; professional roles; and presence or absence of harm. As an educational strategy the method may help students to identify patient safety incidents. The authors make mention of a 'reporting ladder', a way of describing the process through which students can raise concerns. If

# Table 1 – Data extraction table and summary of the 23 research studies reviewed

			regard to their interpretation.		they do not get a response, or are unhappy with the response to the report, they can move up to the next step on the ladder.
6/ Ferns and Meerabeau, (2009)	To explore the reporting behaviours of students who experienced verbal abuse.	Nursing, UK	A researcher generated descriptive questionnaire survey.	N=144	Fifty one students reported suffering verbal abuse. Thirty-two of those students (62.7%) stated that they had reported the incident, with four incidents resulted in formal documentation. The most frequent feelings reported by respondents were embarrassment and feeling sorry for the abuser. It was concluded that both higher education institutions and healthcare providers should consider establishing processes for formal reporting and documentation of incidents of verbal abuse.
7/ Geller, (2013)	To examine the experience of bullying, horizontal violence and harassment in the final year of study.	Nursing, USA	A quantitative survey of bullying, harassment and horizontal violence using the BEHAVE survey tool.	N=32	The BEHAVE survey tool was generated from two other tools previously used in this field of study. 72% of the students reported experiencing bullying like behaviour and 46.8% of those incidents originated from a nurse. The tool examined reporting behaviour and 34.8% of students stated they had reported the behaviour of concern, 5 to another student and clinical instructor, with the other 3 being to faculty staff and a preceptor in one case.
8/ Gould and Drey, (2013)	To explore students experience of infection control in placements.	Nursing, UK	Quantitative 19 question on-line survey using a Likert scale and one open question.	N=488	All participants reported witnessing lack of compliance with infection control requirements with 75% witnessing failure to cleanse hands between patients. Two of the respondents had raised concerns about infection control breaches with the ward manager. In both cases they subsequently received poor ward reports.
9/ Ion et al. (2015)	To analyse factors influencing student nurse decisions to report poor practice.	Nursing, UK	Qualitative study using semi-structured interviews.	N=13	In the theme 'I had no choice', students felt obliged to report. This was linked to personal ethical drivers influencing reporting decisions. 'Consequences for self', related to the student considering the personal and professional consequences, including the impact on their placement grade. 'Living with ambiguity' related to situations that were not clear-cut for the student, or they put off reporting, sometimes looking to other staff for guidance. Students expressed feeling guilty in such situations realising reporting could be deterred. In the 'being prepared' theme students stated the professional requirement to report was clear but support might be lacking, including from the University. There was evidence of acclimatisation found, a term used to explain situations in which reactions to poor care and bullying can become dull over time, and students might adopt similar practice as a way of coping.
10/ Kent et al. (2015)	Effects of a course and placement on speaking-up.	Nursing students, USA	Quantitative pre-test, post test design utilising the Health Professional Education in Patient Safety Survey (H- PEPSS)	n=63	The students completed the H-PEPSS and then completed a short course on raising concerns/challenging authority figures. This was followed by a clinical placement and then the survey was completed again. No significant relationships were found with regard to age, gender or ethnicity on the expressed possibility of raising concerns. An increase in confidence in speaking up was found in the post-test (p=> 0.001).

11/ Killam et al. (2012)	To explore first year students viewpoints on what constitutes unsafe practice.	Nursing, Canada.	Q-methodology,using a blend of quantitative and qualitative elements.	n=94	This data set is part of a larger study aimed at identifying priorities for safe clinical practice described by nursing students across four years of a baccalaureate program (see also Killam, 2013). Participants ranked statements representative of multiple understandings of a topic of interest, called a concourse. The concourse was developed from an integrated literature review. Four viewpoints were identified (1) overwhelming sense of inner discomfort; (2) practicing contrary to conventions; (3) lacking in professional integrity; and (4) disharmonizing relations. These relate to when practice is most unsafe. There was no substantial linkage of these issues to how the student might raise a concern with the safety of practice.
12/ Killam et al. (2013)	To explore first year nursing students understanding of safe clinical practice.	Nursing, Canada.	Q-methodology, using a blend of quantitative and qualitative elements.	n=68	As with Killam 2012, a concourse was developed from an integrated literature review. Four discrete viewpoints were identified by the students with regard to viewpoints on un-safe clinical situations: (1) overwhelming sense of inner discomfort; (2) practicing contrary to conventions; (3) lacking in professional integrity; and (4) disharmonizing relations. There was no substantial linkage of these issues as to when and how the student might raise a concern with the safety of practice, but the study does shed light on the ability of students to identify unsafe practice.
13/ Levett- Jones and Lathlean, (2009)	To present selected findings on the relationship between belongingness, conformity and compliance in student clinical practice	Nursing, UK and Australia	Case study utilising sequential qualitative data collection – interviews with thematic analysis.	n=18	Of the sample 12 students were from Australia and 6 from the UK. The students' placement experiences spanned a continuum from those who reported a high degree of belongingness to provoking intense feelings of alienation. Students who felt insecure, isolated or ostracised were more willing to conform and less likely to question practices with which they felt uncomfortable. It is noted that students with such feelings are unlikely to report concerns with practice. Conversely, when students felt sure of their acceptance and place in the clinical environment, they were less likely to comply with the directives of registered nurses if they felt that to do so might put patients at risk.
14/ Mansbach et al. (2010)	To analyse the dilemma of whistle- blowing in terms of self-reported willingness to report misconduct; either internally or externally.	Physiotherapy, Israel	Questionnaire with multiple-choice questions and two practice vignettes.	n=112	The study suggested that physiotherapy students regard acts detrimental to patients as serious and that students were willing to act, particularly if the misconduct was perpetrated by a manager. Whistle- blowing internally was more likely to be considered by students than blowing the whistle externally. This study appears to have generated the two later studies [see below].
15/ Mansbach et al. (2012)	To explore whether practitioners and students were willing to take	Physiotherapy, Israel	Questionnaire study analysing responses to two vignettes - being loyal to a colleague and	n=227	The concept of whistleblowing was utilised within the study. Both groups saw acts that were detrimental to patients as serious and were willing to act. Some differences were seen, with the students seeing managers misconduct as being a more serious concern, whereas the qualified staff

16/ Mansbach et al. (2013)	action to prevent misconduct by a colleague or manager to protect a patient. To explore the willingness of nursing students to take action to report misconduct of a colleague or manager.	Nursing, Israel	being loyal to management. Questionnaire with multiple-choice questions and two vignettes.	123 physiotherapy students 101 Physio- therapists n=82	saw the colleagues behaviour as more serious. The students showed a greater tendency towards both internal and external whistleblowing and the authors attributed this to a lack of understanding of the possible consequences of such reporting. Acts detrimental to patients were regarded as serious with participants scoring highly with regard to their willingness to act and change a situation. The results suggested that participants were wary of exposing a colleague externally (rather than blowing the whistle internally) in terms of the consequences for a wrong-doer. The authors recommend that ethical education [containing topics such as whistle-blowing] should be provided to ensure students are aware how best to raised concerns.
17/ Mansbach (2014)	To compare experienced nurses to nursing students with regard to willingness to blow the whistle to protect the patient.	Nursing, Israel	Questionnaire with multiple-choice questions and two vignettes.	n=165 83 nurses 82 nursing students	Both experienced nurses and nursing students regarded acts detrimental to patients as serious. Although nursing students regarded the severity of misconduct significantly lower to experienced nurses, students were reported as having a greater readiness to blow the whistle, both internally and externally.
18/ Monrouxe et al. (2014). See also Rees et al. (2015)	To analyse narratives of dilemmas, the types of dilemma encountered and how they are narrated by students.	Dental, pharmacy, nursing and physiotherapy, UK	A qualitative cross sectional design utilising narrative interviewing in discipline specific groups or individual interviews.	n=69, 29 dentistry 13 nursing 12 pharmacy 15 physio'	A total of 226 personal narratives were analysed. The researchers sought to understand and compare between disciplines the events that were recounted as dilemmas and the amount of emotional work created for the student. Nine themes emerged and a sub-theme of 'challenging and whistleblowing'. In this sub-theme some students had recounted both failing to challenge behaviour they saw as problematic and successfully challenging both peers and senior staff. Some students had noted that reporting might simply lead to nothing happening or them being marked down in assessments.
19/ Monrouxe et al. (2015)	To identify the most common types of professionalism dilemmas and analyse these in terms of gender and reported levels of moral distress.	Medical and healthcare students (nursing, pharmacy, physiotherapy and dentistry), UK	Two cross sectional online questionnaires.	n= 3796 2397 medical 1399 health- care students	Overall 10% of all the respondents reported having experienced no professional dilemmas over the last year. The most common dilemmas were student abuse and patient dignity and safety dilemmas. Participants reported witnessing or participating in breaches of patient dignity or safety and the majority also reported being the victim of workplace abuse. 47.5% female and 36.2% male healthcare students reported having witnessed clinicians breaching patient dignity or safety. In terms of instigating such breaches, 28.8% of female and 27.5% of male healthcare students reported that they themselves had done this. Observing the undertaking of an examination/procedure without valid consent was reported by 17.3% of female and 13.6% of male respondents. 19.1% of female and 12.4% of male healthcare students

					reported instigating this. The study does not focus on whether the incidents encountered were reported.
20/ Rees et al. (2014)	To analyse nursing students' written narratives of the 'most memorable' professionalism dilemmas they have encountered in practice.	Nursing, UK	An online survey of narratives provided by students from 15 UK nursing schools which were subject to a thematic and discourse analysis.	n=294	A number of themes were: patient care dilemmas instigated by healthcare personnel, student abuse (poor behaviour towards students), patient care dilemmas instigated by students, and consent dilemmas. Examples of students reporting incidents are discussed with 79.3% saying they had done this, but detail on how and to whom is lacking. Students need to have a safe forum in the formal curriculum to construct emotionally coherent narratives of professionalism dilemmas to help them cope with previous and future dilemmas. Nurse educators should role-model the sharing of professional dilemmas with students.
21/ Rees et al. (2015). See also Monrouxe et al. (2014)	To explore the types of workplace abuse students of healthcare encounter.	Healthcare, UK	Qualitative. Three individual narrative interviews and 11 group interviews. All were transcribed and subject to Framework analysis.	n=69 29 dentistry 15 physio' 13 nursing 12 pharmacy.	There were many similarities between the different student groups. Seventy nine abuse narratives were reported. Although narrators described individual, relational, work and organisational factors contributing to abuse, they mostly cited factors relating to perpetrators. Participants stated that they acted in the face of their abuse in 55.7% of cases but no detail is given on how or to whom reports were made. Students who did nothing in the face of abuse typically cited the perpetrator-recipient relationship as the main contributory factor.
22/ Schaefer, (2014)	To determine if senior baccalaureate nursing students were able to recognise overt and covert forms of negative behaviour.	Nursing, USA	A mixed method post- test only interventional study. A comparison was made between two groups; one received the intervention of a one- hour training programme on recognising and reporting negative behaviour.	n=71	Through a series of 6 video vignettes simulating clinical experiences students were asked to identify various types of negative behaviour. The study focused upon recognising negative behaviour from staff and the reporting of the behaviours. In terms of experiencing negative behaviour, 52 students (73.2%) stated they had, but only 21 students had reported it. The authors claim the low reporting rate found is a problem as the behaviours are more likely to persist whilst reporting remains low. All the students said they would report the negative behaviours seen in the vignettes. No statistically significant differences were found between the two groups.
23/ Stevanin et al. (2015). See also Bressen et al. (2016)	To describe the knowledge and competence of students with regard to patient safety through the use of the H- PEPSSIta survey	Nursing, Italy	A cross-sectional design using qualitative and quantitative data including 23 open-ended questions to measure self-reported patient safety knowledge and competence.	n=573	Students indicated that 46.9% of placement areas visited were perceived as unsafe and 28.8% of students witnessed an adverse event. Only brief mention is made of the reporting of the patient safety incidents encountered by students. Through the responses given in the study students were recounting the types of incidents seen. Observing and reporting illegal or immoral activity did not appear within the tool used. It was concluded that patient safety knowledge in the sample was high.