Medical students, sensitive examinations and patient consent: a qualitative review
Phillipa J Malpas, Warwick Bagg, Jill Yielder, Alan F Merry

ABSTRACT
AIM: We set out to explore the question, what ethical challenges do medical students identify when asked to perform or observe a sensitive examination, given a historical background relevant to this context.

METHOD: Thematic analysis of 21 Ethics Reports from 9 female and 12 male students.

RESULTS: Overall 14 students undertook a sensitive examination without the patient’s consent; three did not carry out a sensitive examination because of a lack of consent; and two students (or their senior colleagues) gained the patient’s written consent for the student to undertake the examination. One patient refused the student’s request for consent to perform a digital rectal examination; and in the final case, verbal consent was given by the patient for the student to observe a bimanual examination only. Three interrelated core themes arose from thematic analysis of the research question: systemic constraints on getting consent; internal conflicts of interest; and, power and hierarchy.

CONCLUSIONS: A number of senior medical students at our institution disclosed observing or performing sensitive examinations on patients without the patients’ knowledge or consent.

As part of their medical education, students training to become doctors are expected to carry out sensitive examinations (of female breasts and pelvis, female and male rectums and male genitalia) on patients after they have received appropriate education involving training with artificial manikins, peers or consenting gynaecological teaching associates (GTAs). At the University of Auckland’s Faculty of Medical and Health Sciences, students learn the skills for these sensitive examinations in years 4 and 5 of a six-year medical programme.

Our guidelines require that patients give informed written consent for any sensitive examination performed by a medical student, and their verbal consent for students to observe a sensitive examination. Thus, in conjunction with learning the technical aspects of these examinations, students must also learn how to communicate with patients about what the examination will entail to enable patients to understand the information provided and make an informed choice about whether or not to agree to the examination. Given the deeply personal nature of sensitive examinations, it is unsurprising that such practices can pose ethical challenges for medical students and that some patients decline to consent to these examinations. Nevertheless, when asked, many patients agree to have medical students either observe sensitive examinations or perform them.

There is evidence, however, that best practice is not always followed in this context. In an exploratory study of British medical students in one medical school, Coldicott et al found that a “quarter of examinations in anaesthetised or sedated patients seem to not have adequate consent from patients”. In a recent perspective article, the author, a fourth-year medical student disclosed his “concern and shame” at having performed sensitive examinations on anaesthetised women without their consent.
In New Zealand, two historical incidents are relevant to this discussion. The first was the Cervical Cancer Inquiry (1988), which (among other things) cast a clear and critical light on the practices prevalent at that time in which (often multiple) supervised students were expected to undertake internal examinations on anaesthetised women without their consent. District Court Judge Silva Cartwright left no doubt that these practices were unacceptable. Her recommendations included the following: “No more than two students (present with the patients' consent) may participate in a vaginal examination on an individual patient”.

The second was the implementation of the Health and Disability Commissioner Act in 1994. The Act was passed to realise the recommendations of the Cervical Cancer Inquiry by establishing an independent Commissioner, a complaints' process, and a code of patients' rights. The Code of Rights (1996) establishes the rights of consumers and the obligations and duties of providers to comply with the Code. Medical students who become involved in the treatment of patients are considered to be providers of medical treatment and care under the Code, even when that involvement is limited to observation. The first nine rights of the Code are all relevant, and with the exception of Right 4, deal one way or another with consent, respect, dignity, support, communication and freedom from exploitation. Right 9 explicitly states that, "The rights in this Code extend to those occasions when a consumer is participating in, or it is proposed that a consumer participate in, teaching or research". Notably, Right 6(2) of the Code states, “Every consumer has the right to the information that a reasonable consumer, in that consumer’s circumstances, would expect to receive, including notification of any proposed participation in teaching or research, including whether the research requires and has received ethical approval; and any other information required by legal, professional, ethical and other relevant standards”. Right 10 is the right to complain.

In practice, the Code of Rights outlines the legal requirements in New Zealand for interactions with patients and makes clear that these requirements extend to students and (by implication) those supervising students. It is relevant that the Code is consistent with contemporary ethical frameworks for such interactions in the New Zealand context. Furthermore, the Medical Council of New Zealand explicitly states that, “examining the patient intimately without his or her consent” and/or “conducting an intimate examination of a patient in the presence of students or other parties without the patient consenting to the presence of the students” is considered sexual impropriety.

From this background, we were interested in examining written, self-reported disclosures of senior University of Auckland medical students' experiences of sensitive examinations within the clinical environment. Although research has explored the incidence of students undertaking sensitive examinations in their undergraduate career, we believe our study is the first to examine the ethical challenges identified by medical students in the context of sensitive examinations in the clinical environment. The research question we set out to explore was, what ethical challenges do medical students identify when asked to perform or observe a sensitive examination? In light of our findings we then discuss what it might take to change a system, and suggest some possibilities.

Method

As part of their ethics learning, it is a requirement for all MBChB year 5 students to submit an Ethics Report (ER) for summative assessment. Students are asked to critically reflect on the ethical dimension of a clinical case or situation they have been involved in over the past two years, discuss how this ethical issue played out in the case discussed and demonstrate what they learnt from this case/situation.

In brief, students are required to submit a confidential report to one of the authors (PJM) in which they summarise a clinical case or situation that they have been involved in, identify a core ethical issue, discuss its relevance and reflect on what they learnt from it. Students are required not to disclose any information that would identify patients, health professionals, family members or medical locations. Ethics committee approval was given by the University of Auckland Human Participants' Ethics Committee (UAHPEC) to use the ERs in teaching and/or research, and students...
are given the option to consent to such use. Where permission was given for reports to be used for research purposes, they were de-identified prior to analysis.

In 2016, 218 ERs were submitted for assessment. Sixty-nine discussed consent issues across a broad range of clinical attachments. Twenty-five reports discussed the ethical dimensions of consent within the context of sensitive examinations. Of those, three students did not give consent for their reports to be used in teaching and/or research. Of the remaining 22 ERs, one report was dismissed from analysis because it discussed sensitive examinations generally and did not reflect on a case the student had been involved in (as required for summative assessment).

Theoretical thematic analysis17 and initial coding of the remaining 21 ERs (from 9 female and 12 male students) was undertaken by two researchers with external moderation undertaken by a third researcher to ensure validity and congruence. This entailed independent, multiple readings of the ERs with the intention to establish coherent patterns occurring in the data set, resulting in the development of themes.17 Underpinning theoretical analysis was constant referral back to the research question, what ethical challenges do medical students identify when asked to perform or observe a sensitive examination? Thus the analysis was theory-driven because we approached the data with this specific question in mind, as opposed to looking widely at all (possible) themes arising from the data. Minor differences in interpretation were resolved by consensus. All authors were involved in writing the paper.

Results

The 21 ERs analysed in this study indicated that 14 students undertook a sensitive examination without the patient's consent; three did not carry out a sensitive examination because of a lack of consent; and two students (or their senior colleagues) gained the patient's written consent for the student to undertake the examination. One patient refused the student's request for consent to perform a digital rectal examination; and in the final case, verbal consent was given by the patient for the student to observe a bimanual examination only.

Students discussed a broad range of practices, including examples where clinicians or students initiated a consent process in which the patient was informed of the student's role in carrying out or observing an examination. As a result some patients were asked for their permission and subsequently gave their written consent. In contrast, students also discussed cases where they had been told to perform a sensitive examination but were uncertain whether consent had been given, or were certain that written consent had not been obtained. When students raised concerns about the lack of written consent, in some situations these were resolved appropriately (either consent was obtained or the student did not do the exam) but in other situations students' concerns were verbally dismissed and senior clinicians insisted the student undertake the examination. In some cases students reported feeling unable to raise their concerns about consent with supervising clinicians. In such circumstances students reported significant personal distress and identified a number of ethical challenges.

Thematic analysis of the 21 ERs resulted in three inter-related core themes arising from the research question:
1. Systemic constraints on getting consent
2. Internal conflicts of interest
3. Power and hierarchy

Systemic constraints on getting consent

The structure of the healthcare system and its processes contributed to the challenges facing students in their interactions with patients, specifically with regard to consent. When consent to intimate examinations had not been sought, time pressures were noted by many students who discussed the busyness of the clinical environment, theatre lists changing quickly leaving insufficient time to meet patients beforehand, and students being ‘volunteered’ by seniors to assist another team in surgery after the patient was anaesthetised (and before student involvement could be discussed with the patient).
“I felt compelled to not waste further theatre time or challenge the consultant” (male medical student in general surgery setting). (All quotes are reported verbatim with original spelling and punctuation.)

“... I soon came to realise, time was very valuable and that sometimes, things such as consent often went out the window in order to maximise time and get through the theatre list” (female medical student in general surgery setting).

Students also reported that in some circumstances, systems did not seem to be in place to support or facilitate appropriate consent processes for sensitive exams. Students reported feeling conflicted by instructions from senior staff about what was required for gaining a patient’s consent resulting in confusion and awkwardness. For instance, when one student queried whether they needed consent to undertake a sensitive examination the consultant brushed off this question saying, “oh it’s fine, don’t worry about it” (male medical student in O&G setting).

Another student wrote about his discomfort when the supervising clinician commented that informing the particular patient of the procedure “would take forever to explain to someone that is uneducated.” When he queried whether the clinician could ask for consent for him to be present, “this was not done either with the excuse that the patient would not know what that [consent] was and would say yes anyway” (male medical student in O&G setting).

As discussed below, students identified two potential sources of restraint when seeking to respond to systemic constraints on getting consent: internal conflicts of interest and limitations arising from their position in the medical hierarchy.

Internal conflicts of interest

Many students reported feeling conflicted when offered a valuable learning opportunity to conduct a sensitive exam, leading to concerns about speaking up and querying whether appropriate written consent had been given. One student discussed his experience during a clinic consultation when ‘beckoned’ by the consultant to put on gloves and perform a digital rectal examination:

“It appeared the consultant had no intention of asking for consent or explaining to the patient what I was going to do. I was extremely conflicted at this point. I therefore decided to ask the patient if it was alright with him before performing the examination, The patient replied in a confused tone, ‘I thought I had already had one done’ and that he ‘would rather not’. This was enough for me to not go ahead with the examination” (male medical student in general surgery setting).

Some students specifically acknowledged in their ERs that performing or observing a sensitive examination without appropriate consent violated ethical codes of practice and national guidelines and/or were also acutely aware of their responsibilities towards their patients.

In some situations the supervisor who instructed a student to undertake an examination was formally assessing the student’s skills and performance. In such circumstances concerns were raised that speaking up about the need for consent may adversely affect student evaluations.

“The other medical student and myself discussed the situation afterwards. We discussed how we were drawn over what was the best thing to do—to be the patient’s advocate and refuse to perform the sensitive examination due to lack of patient consent, or to please the consultant as he was instructing us and standing over us and at the end of the day his views on us determined our end of rotation grade” (female medical student in ED setting).

A further struggle was identified by some students when seeking to be respectful to seniors and to be seen as ‘good students’ who are diligent and appreciative about the valuable opportunities given to them. Consequently failing to comply with a senior’s instructions, or questioning such instructions could result in students being seen as difficult or challenging, particularly when they perceived they were not encouraged or supported to speak up and query situations that made them (or their patients) uncomfortable.

“Thinking back to what happened, I think I did the PR (rectal examination) exam for a few reasons. I was just complying with what
the team told me to do, partially because I wanted to be an effective team member who is eager to learn new things every day, but another part of me wanted to have a good reflection to the team” (female medical student in general surgery setting).

Power and hierarchy

Students’ junior status within the medical hierarchy also had implications for how they responded to systemic constraints on getting consent and their internal conflicts of interest.

“The position of a medical student in clinical training is pretty much at the absolute bottom of the pecking order and whose situation is inherently difficult as a supernumerary entity in a working environment” (male medical student general surgery setting).

Many acknowledged that senior colleagues are role models from whom they learn, and who are often involved in assessing the students’ clinical performance. Evidence of students’ powerlessness was expressed as feeling unable to voice concerns or question seniors about the consent process due to the power imbalance they perceived.

“As a student, it is always difficult to question our supervising consultants... I should have been able to stand up to him with more conviction and to more strongly assert my opinion that he should also perform the examination” (female medical student in GP setting).

Students were acutely mindful of the perceived consequences of undertaking or refusing to carry out a non-consensual exam when asked by a senior colleague. These included the potential for adverse impacts on one’s future career path, being shamed in front of peers and others, annoying the senior clinician, and of being ‘caught’ undertaking an exam without consent and (possibly) facing disciplinary measures.

“I was terrified that my registrar or consultant could destroy my future career prospects with a bad reference and so actively avoided doing anything to jeopardise this. My registrar was particularly intimidating on this run and I think this was probably a strong contributing factor. I have often wondered if the more junior registrar performing the surgery didn’t speak up or intervene for this same reason” (male medical student in general surgery setting).

Discussion

The ethical challenges facing medical students who expect, and are expected as part of their medical education, to perform or observe sensitive examinations on patients are complex and multifaceted. They encompass students’ loyalties both to their role model seniors, peers, and the patients they interact with, alongside the internal conflicts that can arise from the informal lessons learned from the hidden curriculum.18–21

The ethical challenges, actions and behaviours reported in our study are unlikely to be unique to our institution.22,23 Research focusing on professionalism dilemmas faced by medical students undertaken with three medical schools (in England, Wales and Australia) found 71 out of 833 narratives’ comprised students being present during, or asked to perform, intimate examinations or procedures without valid consent.24 The authors concluded that, “students experience a myriad of contradictory formal and informal learning experiences around professionalism which they struggle to make sense of in terms of what these experiences mean for them and for the healthcare professionals and patients with which they learn”.25

Students are not alone in acknowledging a conflict in speaking up. When medical oncologist, Ranjana Srivastava asked colleagues to reflect on her experience of not speaking up to a senior colleague about her concerns for a patient’s safety, “each recalls sometimes harbouring misgivings about another doctor’s treatment of a patient but feeling unable or reluctant to comment, even when a patient’s life might be threatened”.26

The contradictory formal and informal learning experiences faced by medical students pose challenges for medical educators.27 For instance, in our university, many of the clinicians teaching the students are employed by our associated hospitals (of which there are at least eight) and general practices. A good number have honorary appointments to the University, but many do not. No data were collected on which clinical placements students were in when asked to conduct sensitive exams, so there is no indication of whether there is a difference in the attitudes and behaviours of clinical academics employed by or
affiliated to the University and clinicians with no such contractual link to our institution. Furthermore, the absence of a direct employer-employee relationship reduces, to some extent, the University’s ability to manage these teachers’ behaviours.

Increasing education and pressure on students to do the right thing is unlikely to be effective because of the compelling nature of these themes. Furthermore, the responsibility for obtaining consent should not be placed solely on students’ shoulders. Hence any solution needs to address systemic constraints and changing the behaviour of senior supervisory staff. The following discussion aims to promote a change of practice to minimise students being asked to undertake exams without appropriate written consent, and to promote their ability to query any such requests.

What would it take to change a system?

A number of suggestions have been proposed in the literature. Rees and Morouxe\textsuperscript{12} recognise that medical students are “simultaneously confronted with strong societal norms about what constitutes ethical practice in relation to sensitive examinations and “a weak ethical climate within the clinical workplace” where they are asked to perform or observe sensitive examinations without the patient’s consent. They argue that medical students must know what the (medical) school’s policy is in relation to sensitive examinations in the clinical environment before they enter the clinical environment, and “be introduced to the social psychology literature in issues of obedience and conformity”. They also argue for strong ethical leadership and role modelling.

Coldicott et al\textsuperscript{13} carried out a two-phase study in which they examined whether “guidelines on intimate examinations were being met”, and undertook a retrospective study asking medical students to “recollect the number of intimate examinations that had been done throughout their undergraduate career”. They also asked whether consent had been obtained for the examination. They recommended that “medical schools throughout the UK might carry out a careful examination of current guidelines and their implementation in practice”.

Without trying to specify the exact list of things that might be done, and acknowledging that these suggestions are not drawn from the academic literature, our recommendations include:

**Pragmatic changes at the systemic level**

1. **Consent.** Implementing a new consent pathway for all patients entering a hospital or medical setting that includes students as part of the clinical team. As an example, this might involve a generic consent form that informs the patient that the setting is a teaching institution, and specifically includes the involvement of medical and other allied health students in patients’ treatment and care (as observers and participants) under supervision. Incorporation of a specific section on this form that provides for signed patient consent for medical student involvement in observing and/or performing sensitive examinations is recommended, as is already established in obstetrics and gynaecology teaching. This section may also include detail about how many students will be involved in observing and/or performing the sensitive examination. Some district health boards (DHBs) use the preoperative surgical consent form for consent for student involvement in theatre. This form could specifically provide provision for consent for sensitive examinations when relevant. A further possibility would involve the appointment of a designated senior member of each healthcare team to ensure appropriate consent has been given by the patient for a student to observe or undertake any sensitive examination. When this person is not present (for instance, in the operating room, on a ward round or in a clinic) students should not be permitted to observe or participate in sensitive examinations. The primary responsibility of the patients’ clinician to approach patients and obtain this consent should be emphasised (without losing sight of the fact that students are also responsible to ensure that this has been done). Further, the consent status in relation to students (where present) could be incorporated into the Surgical Safety Checklist, and any other relevant checklists.

2. **Information.** In conjunction with a new consent pathway there should be more information provided to patients and their families (attending a teaching hospital or general practice) about the likelihood of medical and other allied health students being
involved in their treatment and care under supervision. Specific information about sensitive examination procedures should be provided to patients, including what the involvement of student’s (observation or participation) entails when relevant. Means include posters within the treatment setting and in pamphlets sent to patients with their appointment details. Such information should stress patient rights under the code and give a strong message of both the treatment providers’ and the University’s support for these rights. An explicit process for complaint should be outlined. This is already done in our hospitals, but perhaps increased prominence could be given to the posters and more emphasis placed on the information sheets.

Cultural change within the profession

3. Leadership. Increasing the emphasis on the importance of ethical leadership within the supervisory environment is critical. Ethical leadership encompasses supporting, facilitating and encouraging ethical behaviour by example and/or the spoken or written word, and in refusing to tolerate unprofessional or unethical conduct. Such leadership comes from medical leaders, senior staff and professional associations. The position of medical students within the clinical hierarchy means that their influence at the cultural level to effect change is limited, despite their professional obligations to act in an ethical manner towards patients. The internal conflicts experienced by our students strongly suggest that they take their professional obligations seriously.

4. Discipline. Processes already exist for disciplinary responses to serious breaches of ethical practice. Although discipline should be a last resort, it does have a place as part of the declarative response to serious breaches of ethical practice.

Finally, further research should be undertaken to improve our knowledge of the prevalence and type of sensitive examinations that are observed or performed without consent, including the medical settings in which such examinations took place. Ideally such research should also include an evaluation of the effectiveness of measures, such as those proposed above, in changing the prevalence of such exams over time.

The issue of consent for sensitive examinations is at the heart of patient-centred care. It is disappointing that a number of senior medical students at our institution disclosed observing or performing sensitive examinations on patients without the patients’ knowledge or consent, despite formal training in performing sensitive examinations, lectures discussing consent and national guidelines, the overarching historical context of consent violations in medical practice and a patient’s code of rights that explicitly recognises the patient’s right to be informed and treated with respect. However, as our study has shown, when such practices are viewed through the eyes of medical students, the challenges facing them and their patients illuminate the need for systemic and pragmatic changes in order to promote good ethical practice.

In writing about the problem of professionalism and how the challenges that confront academic medical centres need to change, it has been suggested that “the solution generally requires changes in the individual and in the shared mental models, values and beliefs of the institution. Learning that leads to a new way of thinking and a subsequent change in behaviour almost invariably requires a period of uncomfortable adjustment for all involved.” As a result of a consultative process about the issues discussed in this paper, the chief medical officers of DHBs have already requested that narrative examples of the consent issues that students have described be provided to them, for the purpose of reflective learning. The power of the narrative should not be underestimated in effecting change.

Conclusion

A number of senior medical students at our institution disclosed observing or performing sensitive examinations on patients without the patients’ knowledge or consent. We welcome further discussion about means of implementing and evaluating systemic changes to address the challenges encountered by students requested to perform intimate exams.
Competing interests:
Dr Merry chairs the Health Quality and Safety Commission and is Head of the School of Medicine.

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Author information:
Phillipa J Malpas, Assoc Prof in Clinical Medical Ethics, Department of Psychological Medicine, Faculty of Medical and Health Sciences, University of Auckland, Auckland; Warwick Bagg, Professor of Medicine, Head of the Medical Programme, Faculty of Medical and Health Sciences Administration, University of Auckland, Auckland; Endocrinologist, Greenlane Clinical Centre, ADHB; Jill Yielder, Senior Lecturer, Medical Programme Directorate, Faculty of Medical and Health Sciences, University of Auckland, Auckland; Alan F Merry, Head of School, School of Medicine, University of Auckland, Auckland; Specialist Anaesthetist, Auckland City Hospital, Auckland District Health Board, Auckland.

Corresponding author:
Phillipa J Malpas, Assoc Prof in Clinical Medical Ethics, Department of Psychological Medicine, Faculty of Medical and Health Sciences, University of Auckland, Auckland.
p.malpas@auckland.ac.nz

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