

# Abortion Education in UK Medical Schools: a survey of medical educators

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**MeSH Terms:** abortion, induced; abortion, therapeutic; health education; reproductive health; surveys and questionnaires

**Word Count: 2489**

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## Abstract

### Aim

The 2019 NICE guidance on abortion care emphasised the importance of teaching the topic at undergraduate and postgraduate level. This study aims to investigate the current provision of undergraduate abortion education in UK medical schools.

### Methods

Relevant medical ethics and clinical leads from the 33 established UK medical schools were invited to complete surveys on the ethico-legal or clinical aspects, respectively, of their institution's abortion teaching. The surveys explored how abortion is currently taught, assessed the respondent's opinion on current barriers to comprehensive teaching, and their desire for further guidance on undergraduate abortion teaching.

### Results

76% (25/33) of medical schools responded to one or both surveys. The number of hours spent on ethico-legal teaching ranged from under one hour to over 8 hours, with most clinical teaching lasting under 2 hours. Barriers to teaching were reported by 68% (21/31) of respondents, the most common being, difficulty accessing clinical placements, lack of curriculum time, and the perception of abortion as a sensitive topic. 74% (23/31) of respondents would welcome additional guidance on teaching abortion to medical undergraduates.

### Conclusion

Education on abortion, particularly clinical education, varies widely among UK medical schools. Most educators experience barriers to providing comprehensive abortion teaching and would welcome up-to-date guidance on teaching both the clinical and ethico-legal aspects of abortion to medical students. It is essential that medical schools address the barriers to teaching, to ensure all medical students have the knowledge, skills and attitudes to provide competent and respectful abortion-related care once qualified.

### Key messages:

- **What is already known on this topic:** There is little published research on undergraduate medical education on abortion in the UK, despite the Royal College of Obstetricians and Gynaecologists, and many medical organisations globally, emphasising the importance of teaching medical students about abortion.
- **What this study adds:** This study provides evidence that current provision of abortion education varies widely across UK medical schools, particularly on the clinical aspects of

abortion care. Medical educators currently experience multiple barriers to providing comprehensive abortion teaching, and would welcome additional guidance on teaching the topic.

- **How this study might affect research, practice or policy:** This study demonstrates the need for further research into what UK nurses and midwives, and healthcare students globally, are taught about abortion. It calls upon clinical educators to address the barriers currently preventing provision of comprehensive abortion education, and signposts to evidence-based resources to help them achieve this.

## Introduction

One in three women in the UK will have an abortion before the age of 45<sup>1</sup>. Despite it being so common, the procedure has a complex legal history in all four UK nations.

The 1967 Abortion Act governs abortion provision in England, Wales and Scotland<sup>2</sup>, and imposes a time limit of 24 weeks' gestation in most circumstances. This time limit does not apply when there is a risk to the life of the pregnant person or of serious, permanent harm to their health, or when the pregnancy is affected by a severe fetal anomaly. Abortions performed outside the scope of this Act are criminalised by the Offences Against the Person Act 1861 in England and Wales<sup>3</sup>, and by common law in Scotland<sup>4</sup>. In Northern Ireland, the Offences Against the Person Act 1861 criminalised abortion, with no exemptions, until 21<sup>st</sup> October 2019, when abortion was decriminalised by the Northern Ireland (Executive Formation) Act<sup>5</sup>. Given the common nature of abortion, and its legal, ethical, and emotional complexity, it is essential that future doctors receive comprehensive education on abortion care.

The importance of abortion education has been emphasised by several medical organisations. The Royal College of Obstetricians and Gynaecologists (RCOG) include abortion care in their national undergraduate curriculum;<sup>6</sup> students are expected to understand clinically relevant aspects of abortion law, and appreciate different cultural, religious and moral attitudes towards abortion. The RCOG also specifies clinical learning outcomes for undergraduates, including being able to take an abortion-related history and knowledge of methods and complications. The Institute for Medical Ethics recommends students receive teaching on legal, ethical and professional issues regarding abortion. While not specific to abortion, the General Medical Council's (GMC) *Outcomes for Graduates* states that students should 'recognise the potential impact of their attitudes, values, beliefs, perceptions and personal biases on individuals and groups'<sup>7</sup>. However, none of this guidance gives advice on how to achieve the recommended learning outcomes.

There has been limited research on the provision of undergraduate abortion education. One study examined ethico-legal teaching on beginning of life issues at UK medical schools, including abortion, and found that teaching varied between institutions<sup>8</sup>. Existing UK-based studies have addressed student attitudes to abortion, finding that the majority consider themselves pro-choice (agree with the right to choose an abortion)<sup>9,10</sup>. Another paper addressed UK medical students' attitudes towards conscientious objection, and found that 45% felt a doctor should be able to opt out of performing any medical procedure to which they have a religious, cultural or social objection<sup>11</sup>. Two recent studies evaluated abortion teaching at individual medical schools (University College London<sup>10</sup> and Glasgow<sup>12</sup>). However, no published research has covered both ethico-legal and clinical aspects of abortion teaching across the UK. Our study aimed to address this by assessing current teaching on abortion across UK medical schools, evaluating four main areas:

- 1) The extent to which abortion features in medical school curricula.
- 2) The content of abortion teaching, methods of delivery, and assessment of learning.
- 3) The barriers to including comprehensive abortion teaching in undergraduate curricula.
- 4) Educators' desire for further guidance on abortion teaching.



## Methods

This cross-sectional survey formed the quantitative element of a mixed methods study. The target population was ethico-legal and relevant clinical curriculum leads (obstetrics and gynaecology, sexual health, and women's health leads) at the 33 established medical schools (publicly funded, with full GMC accreditation) in the UK, as of February 2019<sup>13</sup>.

This study follows the Consensus-Based Checklist for Reporting of Online Surveys (CROSS)<sup>14</sup> (included as Appendix 1).

Two online surveys were developed for the study by a team of doctors, medical educators and medical students. One survey covered ethico-legal aspects of abortion teaching, the other clinical aspects (Appendices 2 and 3). Both surveys collected primarily quantitative data using multiple-choice questions: 10 questions in the ethico-legal survey and 11 in the clinical survey. Some questions had an 'other' option and a text box to provide further information. The surveys were similar in structure, with different answer options in the question about course content, and an additional question in the clinical survey on exposure to abortion care. Survey topics included time spent on teaching abortion, teaching methods, content, assessment, barriers to teaching, and desire for further guidance on teaching abortion.

The research team were aware that medical educators may not have time to complete a lengthy survey. The surveys were therefore piloted for length and useability by the medical educators in the team (who taught in the relevant curriculum areas). The final versions took 10–15 minutes to complete, and were felt to strike a balance between obtaining necessary information, and maximising time-efficiency.

Curriculum leads were identified through each medical schools' website. If this information was not available, an appropriate person (e.g. the medical education lead) was contacted to request it. We were able to obtain contact details for the ethico-legal lead and at least one relevant clinical lead at every medical school. They were sent information about the study, a participant information sheet, and a link to the relevant survey via email in February 2019. Non-responders were followed up via email in March and April 2019. Participants were asked to record their medical school at the beginning of the survey and were informed that this information would not be shared publicly. This allowed for a record of responses to be kept, and identification of duplicate responses, although this did not occur.

The survey was hosted using REDCap – a secure online platform provided by University College London. Responses were automatically stored in the REDCap system. Four members of the research team had access to this data with unique logins, preventing unauthorised access. The results were downloaded from RedCap in April 2019 and SPSS statistics software was used to generate percentages from the data. One team member carried out this step, to prevent data being stored on multiple devices. Microsoft Excel was then used to create graphs based on this data.

The results of this study were used to inform the development of the qualitative element of the study, for which 19 medical students from five UK medical schools were interviewed about their abortion teaching (Horan et. al., 2021).

Ethical approval was obtained from the UCL Research Ethics Committee in December 2018 (number 4415/004).

## Results

25 of 33 medical schools responded to at least one survey (ethico-legal or clinical). Of these, six responded to both surveys. 40% (13/32) of clinical surveys were completed, and 55% (18/33) of ethico-legal surveys were completed. The majority of ethico-legal teaching on abortion occurred in Ethics and Law modules (89%, 16/18) and the majority of clinical teaching occurred in Obstetrics and Gynaecology modules (85%, 11/13).

### Extent of Teaching: Time, Method and Assessment

All ethico-legal survey respondents stated that their medical school provided compulsory education on ethical and legal aspects of abortion care. 85% (11/13) of clinical respondents indicated that their medical school provided compulsory education on clinical aspects of abortion care. One medical school provided optional clinical education, and one respondent stated that they did not provide any clinical education as the procedure was illegal in their location (Northern Ireland) at that time.

The number of hours spent on abortion teaching varied widely between institutions (figure 1).

Figure 1

Lectures were the most popular method for delivering abortion teaching, utilised by 78% (14/18) of ethico-legal respondents and 69% (9/13) of clinical respondents. Small group teaching was the next most popular method, utilised by 78% (14/18) of ethico-legal respondents, and 63% (8/13) of clinical respondents. 11% (2/13) of ethico-legal respondents and 38% (5/13) of clinical respondents utilised e-learning for teaching on abortion.

Student learning on ethico-legal aspects of abortion was assessed at 89% (16/18) of medical schools. The most popular methods of delivering assessment were multiple-choice question (including single best answers and situational judgement tests) (69%, 11/16) and written questions (56%, 9/16). Some medical schools also assessed ethico-legal aspects of abortion in objective structured clinical examination (or equivalent) stations. Only 31% (4/13) of clinical leads indicated that abortion was included in clinical assessments. Of those, all utilised multiple-choice questions (100%, 4/4) and one also utilised written questions (25%, 1/4).

### Content of teaching

All respondents to the ethico-legal survey indicated that their institution's teaching covered current UK law on abortion, and doctors' right to conscientiously object to participating in abortion care. Several other topics were covered by a proportion of institutions (figure 2). Topics covered in clinical teaching were inconsistent among medical schools; no single topic was covered by all schools (Figure 3).



Figure 2

Figure 3

### Barriers to comprehensive teaching

56% of ethico-legal curriculum leads felt they experienced barriers to delivering abortion teaching. The two barriers they identified were lack of curriculum time and lack of qualified or willing staff to deliver teaching. 85% (11/13) of clinical survey respondents reported experiencing barriers to teaching (figure 4). Notably, 45% (5/11) of clinical respondents felt that abortion being a sensitive topic acted as a barrier to teaching; furthermore, 18% (2/11) had ethical concerns about teaching abortion. Lack of curriculum time was emphasised in the free text comments e.g. '[abortion is] an important topic that would require more teaching time', and 'there is always a lack of curriculum time'.

Figure 4

### Desire for further teaching resources

72% (13/18) of ethico-legal curriculum leads, and 77% (10/13) of clinical leads indicated that they would welcome further guidance on undergraduate abortion education. The preferred organisations for providing guidance were the RCOG (48%, 11/23), the Faculty of Sexual and Reproductive Health (39%, 9/23), and the Institute for Medical Ethics (39%, 9/23).

## Discussion

This survey captured data from a cross-section of UK medical schools, providing an overview of how abortion is taught in undergraduate curricula. Teaching varies widely, particularly clinical teaching. Worryingly, this is likely to produce significantly different abortion-related knowledge among graduates from different institutions. For example, not all students receive teaching on the complications of abortion, despite this being listed in the RCOG undergraduate learning outcomes<sup>6</sup>. This is vital knowledge for all graduates, regardless of their views on abortion, as all doctors are obliged to care for patients in an emergency. Furthermore, clinical content is infrequently assessed, which may affect student learning. Students often establish the importance of a topic based on its value in assessments: if it's not assessed, it's deemed to be less important<sup>15</sup>. This may also have negative implications for future service provision, as medical student exposure to a subject influences their career choices in later years<sup>16</sup>.

Most UK medical schools do not make use of role play or visiting speakers when teaching abortion. Incorporating both of these could improve the quality of teaching: role play encourages students to engage with the subject matter, becoming active, rather than passive, learners<sup>17</sup>. Research on narrative in medical education has shown that stories tap into several key learning processes, and promote understanding, memory, and empathy<sup>18 19</sup>. Furthermore, role play and visiting speakers

have been successfully incorporated into medical school abortion teaching, with strongly positive feedback from students<sup>10</sup>.

Variations in teaching time and mode of delivery may be partially explained by differing curriculum structures at each medical school. However, educators identified multiple barriers to providing abortion teaching, which may contribute to the variation. The most frequently reported barriers were a lack of curriculum time and difficulty accessing clinical placements. However, in the qualitative arm of the study, students highlighted adequate teaching time and clinical placements as essential for them to feel adequately prepared for future practice (Horan et. al., 2021). Therefore, addressing these barriers is critical to ensuring adequate knowledge, skills and confidence among future graduates. Some UK medical schools<sup>10</sup> have successfully established links with local NHS and independent sector abortion providers, ensuring their students have the opportunity to experience clinical abortion care; this could be emulated across UK medical schools. Furthermore, the knowledge that students desire comprehensive abortion teaching could act as an advocacy tool when petitioning for additional curriculum time.

Nearly half of clinical respondents described the sensitivity of abortion as a barrier to teaching, and some cited ethical concerns about teaching abortion. It was unclear how these barriers intersected with those mentioned above; for example, if the perceived sensitivity of abortion meant that educators felt less able to request adequate curriculum time. Notably, educators' view of sensitivity as a barrier to teaching contrasted with the findings of the qualitative arm of the study, in which students felt that the 'sensitivity' of abortion was a reason to cover it thoroughly (Horan et. al, 2021). Sensitivity should therefore be a motivator, not a barrier, to providing comprehensive abortion teaching, and curriculum leads should be supported to provide this.

Most survey respondents would welcome up-to-date guidance on undergraduate abortion education. This could complement existing guidelines and help address the above barriers. Staff who previously felt ill-equipped to deliver teaching may feel more confident if given access to clear guidance, coupled with adaptable educational resources, such as clear, achievable learning outcomes, sample lesson plans, downloadable slides, and eLearning packages. Educators could utilise guidelines when petitioning for adequate curriculum time and the inclusion of clinical placements, role-play, and visiting speakers in their medical school's curriculum. Inclusive resources that emphasise abortion as a routine part of sexual and reproductive healthcare could also help counteract abortion-related stigma among staff, students and their future patients.

Some resources are already available for educators to access via organisations such as Doctors for Choice UK<sup>20</sup>, Innovating Education<sup>21</sup>, Medical Students for Choice<sup>22</sup> and the RCOG's Making Abortion Safe programme<sup>23</sup>

## Limitations and Implications for Further Research

This study was designed to capture quantitative data on abortion education from the perspective of medical educators; its scope was therefore limited to this purpose. However, the qualitative arm of the study aimed to address this and provide a more holistic picture of abortion education. Although the response rate was good, 24% of schools did not reply to either section of the survey. This may have introduced self-selection bias: for example, those that did respond may be more interested in abortion as a topic or feel that their abortion teaching is high-quality. Furthermore, there may have been social desirability bias, whereby those who responded to the surveys gave answers they thought were 'correct'. The surveys were designed to limit this by keeping responses anonymous.

Due to the COVID19 pandemic, the provision of medical education has changed considerably since this study was carried out. With a large proportion of teaching now delivered online, the need for high-quality e-learning resources has become evident<sup>24</sup>. Development and implementation of these online resources should therefore be considered a priority.

## Conclusion

Provision of education on abortion varies widely among UK medical schools. Barriers to abortion teaching are experienced by most educators, and the majority would welcome additional guidance on teaching abortion to undergraduates. Open-access educational resources on abortion are available and, if utilised, may help address some of the barriers cited by educators. This, in turn, could improve the quality of abortion teaching in UK medical schools, equipping future doctors with the knowledge, attitudes and skills to treat people seeking abortions with confidence and respect.

## Footnotes

### Language Note

The surveys developed for this paper used the word 'women' to refer to people who have abortions. However, the authors have since come to recognise the importance of using gender-inclusive language, as not all people who have abortions will identify as women. Gender-additive and gender-neutral language have therefore been used throughout this paper, except when quoting directly from the survey, to accurately reflect the questions asked of survey participants.

### Patient and Public Involvement Statement

Patients and/or the public were not involved in the design, or conduct, or reporting, or dissemination plans of this research.

### Funding

There was no funding received at any stage of this study, nor was this research commissioned by an external body.

### Conflict of Interest

None of the authors of this study have any conflicts of interest to declare

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