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A qualitative analysis of medical students' attitudes to abortion education in UK medical schools

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1 **A qualitative analysis of medical students' attitudes to abortion education in** 2 **UK medical schools**

3
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5

6 **Abstract**

7 **Background** Despite abortion being a common part of reproductive healthcare, UK
8 undergraduate medical school abortion education varies widely. We therefore aimed to
9 explore medical students' views on their undergraduate abortion education, including
10 whether it prepared them to be a competent practitioner.
11

12 **Methods** We conducted in-depth, semi-structured interviews with 19 students from five UK
13 medical schools, all of whom had received abortion teaching. The qualitative research
14 followed a quantitative survey of UK undergraduate abortion education; the five medical
15 schools were purposively sampled to encompass a wide variety of teaching approaches.
16 Interviews were transcribed and data were analysed using an inductive, thematic approach.
17

18 **Results** Dedicated abortion teaching was highlighted as necessary and valuable, as abortion
19 care is so commonly accessed. Participants felt that abortion education should prepare
20 students to be competent practitioners, with inclusion of clinical placements and an
21 emphasis on non-stigmatising care. Most interviewees felt that the perceived sensitive
22 nature of abortion should act as an incentive to comprehensive teaching. It was suggested
23 that teaching should be inclusive for all, including those with a conscientious objection to
24 abortion.
25

26 **Conclusion** The medical students interviewed viewed comprehensive abortion education as
27 an important aspect of their undergraduate curriculum. Conversely to the accompanying
28 quantitative survey of educators, participants believed that the perceived sensitivity of
29 abortion increases the importance of effective teaching that prepares them to provide
30 competent, respectful care when they qualify. It is incumbent on medical schools to provide
31 the comprehensive education that students need, and the Royal College of Obstetricians
32 and Gynaecologists recommend.
33

34 **Key messages**

- 35 - Participants felt that comprehensive undergraduate abortion education, including
36 clinical placements, is essential to prepare them to provide competent, respectful
37 abortion-related care when they qualify.
- 38 - Participants suggested that the perceived sensitive nature of abortion should act as
39 an incentive to providing effective teaching, rather than a barrier.
- 40 - An inclusive approach to undergraduate abortion education is a necessary to engage
41 and prepare everyone, including those with a conscientious objection, for future
42 practice.
43
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45

46 **Main body of paper**

47 Introduction

48

49 An estimated 1 in 3 UK women will have an abortion within their reproductive lifetime.[1]
50 Many clinical specialities provide abortion-related care, including obstetrics and
51 gynaecology (O&G), sexual health, general practice and emergency medicine, making it an
52 essential component of undergraduate medical education.

53

54 Several organisations provide some form of guidance on abortion teaching. The national
55 undergraduate curriculum, produced by the Royal College of Obstetricians and
56 Gynaecologists (RCOG),[2] emphasises the importance of development of abortion care-
57 related knowledge, attitudes and skills. The guidance states that students should not be able
58 to opt out of abortion education, emphasising that all should understand abortion-related
59 complications and be able to provide emergency care once qualified. The National Institute
60 of Clinical Excellence (NICE) abortion care guidance,[3] recommend that students should
61 experience provision of abortion services during their training. Additionally, the Institute for
62 Medical Ethics (IME)[4] recommends that undergraduates are able to outline the legal,
63 professional and ethical issues regarding abortion. Although each organisation provides
64 recommendations, none give specific advice on practical aspects of teaching, such as
65 learning outcomes, teaching methods and how much time should be allocated to teaching,
66 allowing wide variations in the quantity and quality of abortion teaching in UK medical
67 schools.[5] Furthermore, legal complexities and ethical concerns can make teaching
68 abortion to medical students challenging.

69

70 Research has found that the majority of UK medical students support the right to choose an
71 abortion (are pro-choice) and support the inclusion of abortion teaching in their
72 curriculum[5–7]. A survey of University College London medical students reported 83% of
73 students identified as pro-choice, and that, regardless of their opinion on the right to
74 choose, 96% of students rated abortion teaching as important.[6] An earlier survey of 733
75 medical students reported that 45% of medical students believe that doctors should have
76 the right to opt out of providing any procedure (including, but not confined to abortion) on
77 moral grounds once qualified.[8]

78

79 There has not been a published qualitative study of UK medical students' opinions on the
80 importance of abortion education, their teaching, and what effective teaching might look
81 like. This study provides further in-depth understanding of medical students' opinions on
82 abortion teaching, in order to support the development of effective and well-received
83 curricula.

84

85 The aims of this research were to explore UK medical students' views on:

- 86 - Whether undergraduate abortion education is necessary and valuable.
- 87 - What makes undergraduate abortion education effective.
- 88 - How well their abortion education prepared them to be competent practitioners.

89

90 Methods

91

92 This qualitative research followed a quantitative survey of UK medical school curriculum
93 leads on abortion education, with both components forming two arms of a mixed methods

94 study. The quantitative survey was conducted prior to this research, and results of the
95 quantitative survey will be published separately. Analysis of the survey responses enabled
96 us to conduct purposive sampling of five different medical schools. Sampling was based on
97 the amount of curriculum time dedicated to abortion teaching and provision of clinical
98 teaching and placements. Selected schools represented a spectrum of both criteria, from <1
99 hour of teaching and limited/no clinical teaching/placements through to >8 hours of
100 teaching time with clinical exposure for all students. Sampling in this way captured a variety
101 of experiences of abortion education among the medical students interviewed.

102

103 A range of sampling methods were used within the selected medical schools for participant
104 recruitment; some were directly contacted via teaching leads, others were recruited by
105 snowball sampling or via social media. Full details of the study, and a consent form, were
106 emailed prior to enrolment. The qualitative, semi-structured interviews included discussion
107 of how abortion teaching was delivered, whether it was compulsory, whether they
108 experienced clinical care, the impact of teaching on their future practice, and how their
109 abortion teaching could be improved. Participants were not specifically asked their views on
110 abortion, although this became clear in several interviews.

111

112 Interviews were conducted by the second author, lasted between 30 and 90 minutes and
113 were audio recorded with participants' permission. Transcription was conducted initially by
114 the interviewer, then re-transcribed for quality control by the first author. Pseudonyms
115 were used, with identifying details removed during transcription. NVivo 11 was used to code
116 the data and the transcripts were analysed thematically, based on Braun and Clarke's six
117 steps.[9] Themes were identified across the interviews, with iterative, inductive codes
118 gathered into a coding framework. The initial themes identified by the first author were
119 reviewed and refined by the research team.

120

121 Ethical approval (4415/004) was granted by UCL research ethics committee in December
122 2018.

123

124 **Results**

125 Between two and six students were recruited from each university; 19 students in total
126 were interviewed. Interviewees had completed their abortion teaching, and ranged from
127 the penultimate year of medical school to shortly post-graduation. Data was not specifically
128 collected on gender, age of participants, or future career interests.

129

130 Four overarching and interrelated themes were identified:

- 131 1. Value of compulsory, comprehensive abortion teaching.
- 132 2. Preparation for competent practice.
- 133 3. Accommodating diverse views.
- 134 4. Sensitivity as a barrier or incentive.

135

136 Despite very different experiences, these themes emerged from across the dataset. They
137 were not necessarily experientially driven; some followed reflection on their experiences
138 and what interviewees thought their teaching lacked.

139

140 **Value of compulsory, comprehensive abortion teaching**

141

142 Participants were asked about the frequency of abortion among UK women. Although
143 answers ranged from 1 in 3 to 1 in 100, subsequent discussion primarily centred on views
144 about the importance of compulsory and informative undergraduate abortion education.
145 Competing priorities within the curriculum, such as ectopic pregnancy, were identified as
146 being given more dedicated time, despite being much less common:

147

148 *The likelihood of a woman wanting an abortion is hundreds if not thousands of times*
149 *more likely than a woman having an ectopic pregnancy, and yet we have to learn*
150 *how to manage ectopic pregnancy... But... I'm going to see so many people wanting*
151 *abortions, and it's definitely, definitely, definitely not something that I'm equipped to*
152 *... deal with.*

153

- Laura, University C

154

155

156 Several participants assumed that abortion was less common and were surprised when
157 informed of the rate,[1] feeling that this “*compounds the fact there should be more*
158 *teaching*” (Subo, University A). Making teaching sessions compulsory, emphasising the
159 common nature of abortion, and inclusion in summative assessments were proposed as
160 useful ways to encourage attendance and engagement in teaching. One student reported
161 that “*if that was a common stat that we knew, it would make more sense to students as to*
162 *why it's such an important topic*” (Angelina, University E).

163

164 **Preparation for competent practice**

165

166 Many participants thought that, as they would most likely encounter people who request an
167 abortion, their teaching should include “*what abortion entails*”, “*what the procedures are*”,
168 “*sitting in on patient consultations*” and “*consulting skills*”, otherwise they would not be
169 prepared to be a “*competent practitioner in abortion*” (Caroline, University A). Several
170 students felt their teaching had not included these necessary aspects and did not feel
171 prepared for future practice:

172

173 *I have a basic understanding of the different options...but to be honest, I wouldn't*
174 *have a clue where abortion gets done, how you organise it. I don't even know how*
175 *you refer for it*

176

- Stephen, University D

177

178 Students suggested teaching strategies to prepare them for future abortion-related
179 consultations, with attending an abortion service the most proposed. One participant, who
180 had observed surgical abortions, explained that because of this clinical exposure, “*it's not*
181 *just something that I've read about and imagined; I actually know how it happens, like the*
182 *process... I think it's one of those things that's really helpful to be able to take the patient*
183 *through... that would be useful if I was ever talking to someone about it in the future*” (Esme,
184 University A). However, it was acknowledged that patient privacy should be prioritised, as
185 “*it could be... more traumatic having another person sat there*” (Laura, University C).

186

187 The use of interactive teaching methods, including role plays, were discussed as a way to
188 engage students, especially when clinic-based opportunities are limited:

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It could have been a simulated session where you had to talk sensitively about a young person's unplanned pregnancy... there might be some people...that will really struggle with that, or realise they're a conscientious objector and have never had to face that situation and deal with it. I think it's quite a sensitive issue and it's probably best to practice that before we're faced with it in the real world

- Ava, University A

Although students did not expect abortion teaching to prepare them fully to provide abortion care, they viewed it as *"a very good foothold for you to be able to build on as you go through your career"* (Gerald, University B).

Most interviewees felt their abortion education had not adequately prepared them to be competent practitioners. Adequate curriculum time was highlighted as an important enabling factor in delivering effective abortion education.

Accommodating diverse views

Conscientious objection was included in several participants' teaching and was generally well-received as it had enabled discussion among those with diverse attitudes towards abortion. One participant explained that *"pro-life"* students usually *"have a different belief to the mainstream"*, which can isolate them. However, because of non-judgemental teaching and inclusion of conscientious objection, a *"course mate [who] is quite staunchly 'pro-life'"* felt able to *"sit through [the teaching] and feel like they had been respected"*. (Gerald, University B).

At one university, the opportunity to engage in discussion with both a doctor with a conscientious objection and someone who had had an abortion was appreciated, with one participant commenting that *"people were very glad to have both sides, actually"* (Gina, University B). Conversely, one student remarked that when open communication between students holding differing views is not facilitated, there can be *"unspoken animosity between groups"* with diverse views. (Ava, University A)

Sensitivity as a barrier or incentive

Most felt that the perceived sensitive nature of abortion *"doesn't mean that people shouldn't be equipped to deal with it"* (Anna, University A). Furthermore, several students felt that abortion education should be provided specifically because it is a stigmatised topic:

[not teaching abortion] has a negative impact on people's awareness of abortion, on the way that we deal with patients who are seeking abortions, and I think if we were all just a lot more open about these things and if we did gain experience at medical school then the veil would be lifted

- Caroline, University A

Comparisons were drawn between other areas of medicine that are deemed sensitive, with one participant stating that *"End of life care is difficult ... euthanasia and discussions about assisted suicide are difficult, but I think they're all things that people should understand from a medical point of view"* (Rani, University B).

238

239 Participants identified the need for the impact of abortion-related stigma to be specifically
240 included within teaching. For example, one student stressed the importance of including
241 discussions about how “*societal stigma impacts [people] making their decision*” (Caroline,
242 University A). They felt that ensuring they’re prepared to provide abortion care
243 “*appropriately*” and “*non-judgementally*” should be a key aspect of teaching, “*without*
244 *stigmatising [people] or making them feel guilty or anything*” (Angelina, University E).

245

246

247 **Discussion:**

248

249 Our findings confirm the results of previous research indicating that medical students
250 support the inclusion of abortion teaching in their curriculum, view abortion care as an
251 essential part of reproductive healthcare and wish to have more training on it at
252 undergraduate level.[5,6,10–12]

253

254 Previous research has also found that students’ attitudes towards abortion differed
255 according to religious and educational exposure,[6,13] and this diversity must be considered
256 when delivering education. In line with this, our interviewees recognised the importance of
257 teaching on conscientious objection and of facilitating communication between students
258 holding differing views.

259

260 Interviewees provided useful information on why good-quality abortion teaching is
261 important and how content can be engaging. However, a number of global studies have
262 outlined key barriers to providing comprehensive abortion teaching, including a lack of
263 curriculum time, minimal clinical learning opportunities, a lack of appropriately trained
264 educators with the will to teach.[12,14]

265

266 The majority of these studies also highlight the sensitivity of abortion as a barrier to
267 delivering teaching. Strikingly, our Interviewees strongly felt that the perceived sensitivity of
268 abortion should motivate educators to provide comprehensive abortion teaching.

269

270 This view is supported by previous research, which has shown that negative attitudes
271 among healthcare professionals can exacerbate abortion-related stigma, and argued that
272 more work is required to normalise abortion amongst healthcare professionals.[15] In our
273 study, students recognised that abortion is a stigmatised topic, and felt that their teaching
274 should prepare them to provide non-judgemental care. Engaging with inclusive teaching
275 that presents abortion care as a routine aspect of sexual and reproductive healthcare could
276 help destigmatise abortion. There are good-quality open-access educational resources on
277 abortion that educators could utilise to support the provision of comprehensive and
278 inclusive undergraduate teaching created by Doctors for Choice UK,[16] Medical Students
279 for Choice,[17] Innovating Education[18] and the RCOG’s Making Abortion Safe
280 programme[19] .

281

282 It is not only medical students that recognise the importance of comprehensive abortion
283 education. The RCOG specifies that when students qualify, they should know about abortion
284 methods, indications, contraindications/complications, be able to take a history related to

285 unplanned pregnancy and be competent to provide emergency care[2]. Furthermore, global
286 evidence demonstrates that comprehensive undergraduate abortion education improves
287 access to safe abortion care and decreases morbidity and mortality related to unsafe
288 abortion.[14] This should be sufficient impetus for undergraduate curriculum leads to
289 overcome the well-documented barriers and find the necessary time and resources to
290 provide students with the good-quality education on abortion they want and deserve.

291
292

293 **Limitations and implications for future research:**

294 The qualitative nature of this study enabled analysis of complex attitudes. Although the
295 opinions expressed cannot be statistically generalised to all UK medical students, they do
296 indicate several issues around abortion in the medical curriculum from the perspective of
297 medical students. Most participants expressed pro-choice opinions, and this may not be
298 representative of medical students as a whole. Future studies would be improved by
299 collecting information from medical students who identify as pro-life or are unsure about
300 their views on abortion and from nursing and midwifery students, who will make up a large
301 proportion of the abortion workforce.

302

303 The recruitment process may have introduced selection bias; although less concerning for
304 qualitative research, those interviewed are likely to be more engaged in their abortion
305 education and may hold stronger opinions than other students. No demographic
306 information was collected for participants; understanding of gendered differences in
307 attitudes toward abortion teaching would be of interest.

308

309 **Conclusion:**

310 The medical students interviewed viewed comprehensive abortion education, including
311 clinical placements, as an essential aspect of their undergraduate curriculum. Students
312 believe that the perceived sensitive nature of abortion increases the importance of high-
313 quality teaching that prepares them to provide competent, respectful care when they
314 qualify. It is incumbent on medical schools to provide the comprehensive education that
315 students need and organisations such as the Royal College of Obstetricians and
316 Gynaecologists recommend.

317

318 Footnotes:

319

320 **Conflicts of interest:** There are no declared conflicts of interest

321

322 **Funding:** No sources of funding provided.

323

324 **Patient and public involvement**

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

327

328 **Contributorship statement:** JK conceived of the study. JK, CH and CR planned the study. CH
329 led the ethics application, with support from JK and CR. LH trained PG to conduct interviews.
330 PG conducted the interviews and performed initial transcription. CH re-transcribed the
331 interviews and conducted a thematic analysis on the transcribed results. LH and JK reviewed

332 and further defined themes. CH wrote up and submitted the study for publication. CH and
333 JK are responsible for the overall content as guarantors.

334

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