Attitudes and experiences with termination of pregnancy among Irish obstetrics & gynaecology trainees in the context of recent legal change: A survey study

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A B S T R A C T

Objective: This study examines Irish obstetrics and gynaecology trainees’ experiences with and opinions of termination of pregnancy (ToP) after legal change.

Study design: We invited obstetrics & gynaecology non-consultant hospital doctors (NCHDs) to participate in a web-based survey through a professional e-mail listserv. We conducted descriptive statistical analyses of responses using Stata SE Version 16.

Results: A total of 102/202 (50.5%) trainees responded to the survey. Of these, 61.8% believed that ToP should be allowed on request up to 12 weeks and in limited circumstances thereafter (in line with current law), and 19.6% believe ToP should be allowed on request even after 12 weeks. Knowledge about the abortion law was high (70.6% achieved a perfect knowledge score). Since the new law came into effect, 61.8% of trainees reported participation in abortion care, though only 25.5% had performed surgical procedures. More than 75% of respondents would like to receive more training in all clinical skills related to ToP. In the future, 67.6% of respondents would be willing to provide ToP in all circumstances allowed by law.

Conclusion: Irish obstetrics & gynaecology NCHDs are generally supportive of the legislation. Few trainees have performed surgical abortions, and most would like to receive additional clinical training related to ToP.

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Introduction

On May 25th, 2018, a popular referendum repealed the Eighth Amendment to the Irish Constitution, which had “acknowledged the right to life of the unborn with due regard to the equal right to life of the mother” and had banned abortion under all but the most extreme circumstances [1]. In December of the same year, the Regulation of Termination of Pregnancy Bill was signed into law, legalising abortion upon request up to 12 weeks of pregnancy, and after 12 weeks (until fetal viability) if a woman’s life or health is at risk, or if there is a fetal abnormality likely to lead to death within 28 days of birth [2]. Provision of services started on 1st January 2019, 11 days after the Bill was signed into law.

Termination of pregnancy (ToP) is provided free of charge through the public health system, and the care model emphasizes community-based provision of early medical abortion (EMA) by general practitioners (GPs). After 9 weeks and 6 days or if community-based care is contraindicated, medical or surgical ToP is provided in hospital maternity wards by obstetrician-gynaecologists together with midwives, as was recommended by the Institute of Obstetricians & Gynaecologists’ clinical guideline document [3,4].

In Ireland as in other countries, women’s access to timely and comprehensive abortion services within the public healthcare system depends on the successful implementation of the much-awaited legislation. This requires, among other things, healthcare providers who are willing and competent to provide ToP [5,6]. Early reports indicate that fewer than 20% of Irish GPs have signed up to provide EMA, and that only 53% (10 out of the 19) of maternity units are providing ToP services. Although the community-based service appears to be meeting the needs of many, geographic inequities in
access to care persist, and referral pathways into secondary care are not well established [3].

Understanding provider-level barriers to abortion provision is key to improving access both in the community and in hospitals. Non-consultant hospital doctors (NCHDs) are physicians who are training to become consultants in a particular specialty. Obstetrics & gynaecology NCHDs provide much of the clinical care in maternity hospitals and represent the future of the Irish obstetrics and gynaecology profession. A survey of obstetric NCHDs conducted in 2015, prior to the Repeal of the Eighth Amendment, revealed that many of them had been actively involved in the provision of pre- and post-abortion care, and that most were theoretically supportive of increasing access to ToP in Ireland [7]. Since then, the landscape of abortion care in Ireland has radically changed, and it is important to understand the role that NCHDs are playing in this new service.

The objective of this study is to describe Irish obstetrics & gynaecology NCHDs' opinions of and experiences with termination of pregnancy two years after the service was first introduced. We also examine training received and assess the remaining training needs in a population that is key to guaranteeing future access to abortion in Ireland.

Materials & methods

We conducted a cross-sectional web-based survey of obstetric NCHDs in the Republic of Ireland. We invited all 202 NCHD members of the Junior Obstetrics and Gynaecology Society (JOGS) to participate in the survey, using the group's e-mail listserv. We chose to survey trainees through the JOGS listserv because this society's members include NCHDs in official training posts (scheme) and those who are in non-training or stand-alone posts (non-scheme). As such, it is more representative of the overall population of Irish NCHDs. Of note, we estimate that there were approximately 275 obstetrics & gynaecology NCHDs in Ireland in 2020 [8], including scheme and non-scheme trainees, and the JOGS listserv at the time when our survey was administered included 202 (73.5% of all trainees).

The survey was hosted on REDCap electronic data collection tools at the Albert Einstein College of Medicine (Bronx, NY) [9,10]. Here, we report methods and results according to the guidelines set forth in the Checklist for Reporting Results of Internet E-Surveys (CHERRIES), where applicable, as this survey was administered by e-mail rather than as a survey posted on a website [11].

We designed the survey based on our own experience as clinician-educators, abortion providers and researchers. Where possible, we adapted questions that had been used in previous questionnaires. For example, we adapted some of the demographic questions and categories, as well as the question on attitudes towards termination of pregnancy, from the 2015 survey of obstetrics NCHDs [7].

The survey included 62 items presented on 8 screens. It asked about respondents’ demographic information; about their knowledge of the new abortion law; about their opinion towards abortion; about training received and future training desired for abortion-related clinical skills; about their experience providing ToP care in this 2-year period; and about their willingness to provide ToP in the future. We also included some open-ended questions to further explore reasons for willingness to provide ToP.

We asked about clinical skills considered to be important to providing abortion care in the hospital setting: early pregnancy ultrasound, medical abortion (first and second trimester), manual vacuum aspiration, suction dilation and curettage (D&C), and dilation and evacuation (D&E). To measure knowledge of the abortion law, we designed 5 hypothetical clinical scenarios and one question about conscientious objection. The clinical scenarios asked whether for a patient at a particular gestational age and in particular circumstances ToP would be considered legal or illegal in Ireland. We considered participants who responded correctly to all 6 questions to have a perfect “knowledge score”. We piloted the survey with ten Irish and American obstetrics & gynaecology trainees prior to administering it.

We sent the survey invitation to the JOGS listserv in November of 2020, with two reminders after the initial invitation. The e-mail invitation included a link to the survey. Participation in this study was voluntary. The first survey screen was an informed consent document which participants agreed to prior to beginning the survey. Survey respondents received a 15 Euro Amazon Gift Card as a participation incentive. The survey responses were anonymous, but participants who wished to receive the incentive provided an e-mail address in a separate survey not linked to their responses.

We considered survey responses to be complete and included them in the analysis if data on willingness to provide ToP in the future was available. We used STATA SE Version 16 Software (StataCorp 2021) to conduct descriptive statistical analyses of response data. We conducted content analysis of the open-ended questions. To do so, we categorized responses into several groups and counted the number of responses for each group.

The Albert Einstein College of Medicine’s Institutional Review Board approved this study on 14th January 2020 (IRB# 2019–10977). The Society of Family Planning (grant # SPPR20–03, PI Bianca Stifani) funded this study. The grant application process included external peer review for scientific quality but no patient or public involvement panel. The funder did not play any role in conducting the research or writing the paper.

Results

We received a total of 102/202 completed survey responses (50.5% response rate). Approximately 60% (n = 62) of respondents were female. Most (69.6%, n = 71) were of Irish nationality. More than one third (37.3%, n = 38) identified as atheist or agnostic, and a similar proportion identified as Catholic (36.3%, n = 37). More than half felt that religion did not influence their everyday life at all (58.8%, n = 60), or that it did so in few areas (23.5%, n = 24). Almost all worked in either tertiary (55.9%, n = 57) or secondary (40.2%, n = 41) maternity units. (Table 1).

Table 2 shows abortion knowledge and experiences. Most respondents (70.6%, n = 72) had a perfect abortion knowledge score. One quarter (23.5%, n = 24) reported having been involved in abortion care outside of Ireland, and three quarters (76.5%, n = 78) worked in units that are currently providing ToP. More than 60% of these NCHDs have participated in ToP care since the service was introduced (61.8%, n = 63), but only 25.5% (n = 26) have provided surgical ToP.

Table 3 shows NCHDs’ beliefs about termination of pregnancy. The most common response aligns with current Irish law – 58.8% (n = 60) believe ToP should be allowed on request up to 12 weeks and in limited circumstance after 12 weeks. Approximately 20% (n = 20) believe that ToP should be available upon request even after 12 weeks, and another 20% (n = 19) believe the law should be more restrictive.

When asked about their willingness to provide ToP in the future, most respondents (67.6%, n = 69) said they would be willing to do so in all circumstances allowed by the law, while 14.7% (n = 15) would be willing to do so in some but not all circumstances allowed (Table 4). Approximately 1/3 of respondents indicated more comfort providing medical versus surgical ToP (30.4%, n = 31). Table 5 shows a selection of open-ended responses we received to the question “Why do you feel differently about medical and surgical ToP?” The themes raised by these responses are that surgical ToP feels more real and requires more active participation from the provider, while medical abortion feels more detached. Also, some expressed...
concerns about higher rates of surgical complications with surgical procedures.

Table 6 shows the training received, perceived comfort level, and desire for future training on clinical skills related to termination of pregnancy. The only skill for which a significant proportion of NCHDs had received substantial training (52%, n = 53) is early pregnancy ultrasound. The majority of trainees (78–84%) would like to receive more training in all the skills listed in the survey.

Approximately half of respondents (46.1%, n = 47) reported prior participation in values clarification workshops and having received information about conscientious objection (48%, n = 49). In the future, 65.7% (n = 67) would like to participate in more such workshops, and 75.5% (n = 77) would like more information about conscientious objection (Table 7).

| Gender | n (%) |
|--------|-------|
| Male   | 38 (37.3) |
| Female | 62 (60.8) |
| Other / nonbinary | 2 (2.0) |

| Age | n (%) |
|-----|-------|
| 24 or younger | 3 (2.9) |
| 25–29 | 21 (20.6) |
| 30–34 | 38 (37.3) |
| 35–39 | 35 (34.3) |
| 40 or older | 5 (4.9) |

Table 1

Demographic and post characterisics of 102 Irish non-consultant hospital doctors who responded to a web-based survey about termination of pregnancy.

Table 2

Knowledge of the Irish abortion law and experience with termination of pregnancy among 102 Irish non-consultant hospital doctors who responded to a web-based survey.

Table 3

Beliefs about termination of pregnancy among 102 Irish non-consultant hospital doctors who responded to a web-based survey.

Table 4

Willingness to provide termination of pregnancy among 102 Irish non-consultant hospital doctors who responded to a web-based survey.

Discussion

This study shows that obstetrics & gynaecology trainees in the Republic of Ireland are mostly in agreement with the recent legal
why do you feel differently about medical and surgical toP? n

surgical abortion requires more active participation than medical 10

“to perform a surgical abortion feels like I am the one sort of like ending its life directly and while I understand it’s a woman’s choice and I know it’s the best choice that she has made for herself, it’s not something I am comfortable with as opposed to prescribing medical management…”

“However right or wrong this opinion lands, I feel medical top is aiding a woman whereas surgical top requires me to be the sole actor ending a pregnancy.”

“Medical I wouldn’t give second thought after consultation and decision made by patient. Surgical I am more involved in; will not impact my decision to perform procedure, but am likely to think about it briefly before/after”

Visceral/distressing reaction to surgical abortion for the provider 6

“Difficult to explain. Surgical TOP seems violent in comparison to medical.”

“Medical feels more distanced. A bit easier than surgical.”

“I feel [surgical Top] transfers some of the distress and responsibility from the woman to the clinician.”

“Direct visualisation of TOP.”

“I find the idea of a D&E quite upsetting.”

Concern about surgical complications 2

“Operative difficulties and risks involved with surgery such as uterine perforation.”

“Greater risk of complications. Need for feticide in some instances. Greater impact emotionally in performing procedure.”

Other concerns 3

Table 5
Content analysis for open-ended responses to the question “Why do you feel differently about medical and surgical ToP?”, among Irish non-consultant hospital doctors who responded to a web-based survey.

| Why do you feel differently about medical and surgical ToP? | n |
|----------------------------------------------------------|---|
| Surgical abortion requires more active participation than medical | 10 |

Table 6
Training received, comfort level, and future training desired in clinical skills related to termination of pregnancy among 102 Irish non-consultant hospital doctors who responded to a web-based survey.

| Training received | n (%) | Comfort level | n (%) | Desire for more training | n (%) |
|-------------------|-------|---------------|-------|--------------------------|-------|
| Early pregnancy ultrasound |       |               |       |                          |       |
| No training       | 7 (6.9)| Completely uncomfortable | 4 (3.9)| Yes | 83 (81.4) |
| Limited training | 41 (40.2)| Somewhat uncomfortable | 11 (10.8)| No | 18 (17.6) |
| Substantial training | 53 (52.0)| Somewhat comfortable | 50 (48.0)| Unsure | 1 (1.0) |
|                  |       | Completely comfortable | 36 (35.3) |       |       |
| First-trimester medical abortion with mifepristone & misoprostol | | | | | |
| No training | 21 (20.6)| Completely uncomfortable | 12 (11.8)| Yes | 82 (80.4) |
| Limited training | 49 (48.0)| Somewhat uncomfortable | 23 (22.5)| No | 19 (18.6) |
| Substantial training | 31 (30.4)| Somewhat comfortable | 48 (47.1)| Unsure | 1 (1.0) |
|                  |       | Completely comfortable | 19 (18.6) |       |       |
| Second trimester medical abortion | | | | | |
| No training | 37 (36.3)| Completely uncomfortable | 16 (15.7)| Yes | 83 (81.4) |
| Limited training | 44 (43.1)| Somewhat uncomfortable | 39 (38.2)| No | 16 (15.7) |
| Substantial training | 20 (19.6)| Somewhat comfortable | 36 (35.3)| Unsure | 3 (2.9) |
|                  |       | Completely comfortable | 10 (9.8) |       |       |
| Manual Vacuum Aspiration | | | | | |
| No training | 52 (51.0)| Completely uncomfortable | 43 (42.2)| Yes | 86 (84.3) |
| Limited training | 42 (41.2)| Somewhat uncomfortable | 37 (36.3)| No | 13 (12.7) |
| Substantial training | 6 (5.9)| Somewhat comfortable | 15 (14.7)| Unsure | 3 (2.9) |
|                  |       | Completely comfortable | 7 (6.9) |       |       |
| Suction Dilation & Curettage | | | | | |
| No training | 32 (31.4)| Completely uncomfortable | 29 (28.4)| Yes | 80 (78.4) |
| Limited training | 42 (41.2)| Somewhat uncomfortable | 26 (25.5)| No | 19 (18.6) |
| Substantial training | 28 (27.5)| Somewhat comfortable | 32 (31.4)| Unsure | 3 (2.9) |
|                  |       | Completely comfortable | 15 (14.7) |       |       |
| Dilation & Evacuation | | | | | |
| No training | 72 (70.6)| Completely uncomfortable | 70 (68.6)| Yes | 81 (79.4) |
| Limited training | 22 (21.6)| Somewhat uncomfortable | 19 (18.6)| No | 17 (16.7) |
| Substantial training | 7 (6.9)| Somewhat comfortable | 8 (7.8)| Unsure | 4 (3.9) |
|                  |       | Completely comfortable | 5 (4.9) |       |       |
change which partially decriminalized abortion, and more than 2/3 of them are willing to provide abortion care in the future. These findings are important because NCHDs are the future of the Irish physician workforce, and their willingness to provide care is important in guaranteeing access to secondary care when it is needed for termination of pregnancy.

In light of previous evidence [7], this study confirms that many NCHDs have some exposure to patients seeking abortion, and that most are supportive of expanding access to this service. Approximately 2/3 of NCHDs have beliefs about abortion that align with the legislation, and 2/3 are willing to provide TOP services. These rates are reflective of those of the general population in Ireland, as 66.4% voted in favour of the referendum to Repeal the Eighth Amendment [12]. This study adds to the literature because it shows that in this new landscape of legalized abortion in Ireland, NCHDs are willing to participate in the implementation of the service. Further, we highlight specific training needs that can be addressed with targeted interventions, thus increasing confidence in important clinical skills.

One interesting finding from this study is that 30% of respondents reported they feel differently and would be more willing to provide medical as opposed to surgical abortion. Some of this may correspond to respondents reporting they feel differently and would be more willing to participate in the implementation of abortion services in Portugal, we found that some of this may correspond to respondents reporting they feel differently and would be more willing to perform surgical abortion, as indicated by the erroneous statements about the greater number of objectors, and therefore prioritized medical abortion. This study adds to the literature because it shows that in this new landscape of legalized abortion in Ireland, NCHDs are willing to participate in the implementation of the service. Further, we highlight specific training needs that can be addressed with targeted interventions, thus increasing confidence in important clinical skills.

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development of the questionnaire. BPM and GC recruited survey respondents using the professional listserv of the Junior Obstetrics & Gynaecology Society. KA and BMS managed the ethical review and participant incentives. BMS analysed the data and wrote the first draft of the manuscript. All authors contributed to and approved the final version of the manuscript.

Declaration of Competing Interest

None of the authors have any conflicts of interests to disclose.

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Appendix A. Supporting information

Supplementary data associated with this article can be found in the online version at doi:10.1016/j.eurox.2021.100137.

References

[1] Eighth Amendment of the Constitution Act, 1983. Republic of Ireland.
[2] Oireachtas. Health (Regulation of Termination of Pregnancy) Act 2018. Available from: https://www.oireachtas.ie/en/bills/bill/2018/105/Tab-bill-text.
[3] Mullally A, Horgan T, Thompson M, Conlon C, Dempsey B, Higgins MF. Working in the shadows, under the spotlight - reflections on lessons learnt in the Republic of Ireland after the first 18 months of more liberal abortion care. Contraception 2020;102(5):305–7. https://doi.org/10.1016/j.contraception.2020.07.003
[4] Institute of Obstetricians & Gynaecologists. Interim Clinical Guidance: termination of pregnancy under 12 weeks. 2018 Dec. Available from: https://rcpi-live-cdn.s3.amazonaws.com/wp-content/uploads/2018/12/FINAL-INTERIM-CLINICAL-GUIDANCE-TOP-12WEEKS.pdf.
[5] Chawkin W, Stifani BM, Bridgman-Packer D, Greenberg JMS, Favier M. Implementing and expanding safe abortion care: an international comparative case study of six countries. Int J Gynecol Obstet 2018;143(Suppl.4):3–11. https://doi.org/10.1002/ijgo.12671
[6] Stifani BM, Couto M, Lopez Gomez A. From harm reduction to legalization: the Uruguayan model for safe abortion. Int J Gynecol Obstet 2018;143(Suppl.4):45–51. https://doi.org/10.1002/ijgo.12677
[7] Aitken K, Patek P, Murphy ME. The opinions and experiences of Irish Obstetric and gynaecology trainee doctors in relation to abortion services in Ireland. J Med Ethics 2017;43(11):778–83. https://doi.org/10.1136/jmedethics-2015-102866
[8] Health Services Executive. Medical Workforce Report 2020–2021. Available from: file:///Users/biancastifani/Documents/IRELAND/NCHDs/Manuscript/EJOGRB/NDTP%20Workforce%20Report%202020–21.pdf.
[9] Harris PA, Taylor R, Thielke R, Payne J, Gonzalez N, Conde JC. Research electronic data capture (REDCap): A metadata-driven methodology and workflow process for providing translational research informatics support. J Biomed Inform 2009;42(2):377–81. https://doi.org/10.1016/j.jbimed.2008.08.010
[10] Harris PA, Taylor R, Minor BL, Elliott V, Fernandez M, O’Neal L, et al. The REDCap consortium: building an international community of software partners. J Biomed Inform 2019;95:103208 https://doi.org/10.1016/j.jbimed.2019.103208
[11] Eysenbach G. Improving the quality of web surveys: The Checklist for Reporting Results of Internet E-Surveys (CHERRIES). J Med Internet Res 2004;6(3):e34. https://www.jmir.org/2004/3/e34/.
[12] The Irish Times. Ireland’s abortion referendum result in five charts. 2018 May 26. Available from: https://www.irishtimes.com/news/social-affairs/ireland-s-abor tion-referendum-result-in-five-charts-1.3508845.
[13] Upadhyay UD, Desai S, Zidhar V, Weitz TA, Grossman D, Anderson P, et al. Incidence of emergency department visits and complications after abortion. Obstet Gynecol 2015;125(1):175–83. https://doi.org/10.1097/AOG.0000000000000603. https://www.greenjournal/dor.
[14] Stifani BM, Vilar D, Vicente L. “Referendum on Sunday, working group on Monday”: a success story of implementing abortion services after legalization in Portugal. Int J Gynecol Obstet 2018;143(Suppl.4):31–7. https://doi.org/10.1002/ijgo.12675.
[15] Bloomer F, Kavanagh J, Morgan L, McLaughlin L, Roberts R, Savage W, et al. Abortion provision in Northern Ireland: the views of health professionals working in obstetrics and gynaecology units. BMJ Sex Reprod Health 2021;2020–200959. https://doi.org/10.1136/bmjsex-2020-200959.
[16] Freedman L. Willing and Unable. Vanderbilt University Press; 2010.
[17] Freedman L, Landy U, Darney P, Steinauer J. Obstacles to the integration of abortion into obstetrics and gynecology practice. Perspect Sex Reprod Health 2010;42:146–51. https://doi.org/10.1363/4214610
[18] Allen RH, Raker C, Steinauer J, Eastwood KJ, Kacmar JE, Boardman LA. Future abortion provision among US graduating obstetrics and gynecology residents. Contraception 2010;81:351–6. https://doi.org/10.1016/j.contraception.2010.01.001
[19] Steinauer J, Landy U, Filippone H, Laube D, Darney PD, Jackson RA. Predictors of abortion provision among practicing obstetrician-gynecologists: a national survey. Am J Obstet Gynecol 2008;198(3):e1–6. https://doi.org/10.1016/j.ajog.2007.06.002
[20] Shanahan MA, Metheny WP, Star J, Peirpert JF. Induced abortion. Physician training and practice patterns. J Reprod Med 1999;44:428–32.