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Patient Opinions about Medical Student Involvement in Obstetrics and Gynaecology

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Abstract

Aim

The aim of this study is to assess patient attitudes towards medical student involvement in their Obstetric and Gynaecologic care in an Irish health care setting.

Methods

This was an observational study performed at Our Lady of Lourdes Hospital in Drogheda, Ireland that used self-administered surveys to assess patient level of comfort with students either observing or performing clinical skills in the inpatient and outpatient setting. These included observing or performing history taking, abdominal exam, vaginal exam, vaginal delivery, and observing caesarean section.

Results

A majority of the women surveyed would allow students to observe all clinical skills. Only 38 (18%) women would not allow a student to perform a vaginal exam, 53 (25%) would not allow a student to perform a vaginal delivery. Increased age appears to be a greater determinant of higher comfortability than parity.

Conclusion

Obstetrics-gynaecology patients in an Irish health care setting are willing to involve medical students in their care. The majority of the patients involved in this study were comfortable with student involvement, whether in an observational or hands-on capacity.

Introduction

To acquire the knowledge and develop the practical skills required to become a doctor, it is imperative that medical students have patient contact and hands-on clinical experience. For a large portion of medical school, the hospital is the classroom. However, it is important to consider how patients feel about medical student involvement; both to ensure patients feel comfortable and satisfied with their care, and to ensure medical students have adequate clinical exposure. This balance is particularly difficult to maintain in the specialty of Obstetrics and Gynaecology, which is sensitive by nature. A patient's level of comfort and willingness, or a physician's assumption of what a patient may allow, is often the deciding factor in whether or not a student will have a learning experience.

To date, multiple studies have been conducted to assess how patients in Obstetrics and Gynaecology feel about the presence of medical students in various clinical scenarios. In general, it appears that a majority of patients have positive attitudes towards medical students.[1, 2, 3] An American study demonstrated that patients are willing to allow medical students to be involved in their care, with a minority of patients (less than 25%) preferring to see the physician alone.[1] One study conducted in Saudi Arabia found that patients were most comfortable when students were only participating in limited clinical roles, such as history taking.[2] The same study found that the patients' comfort levels were higher with female students compared to male students.[2] Student gender was also found to be a factor in patient satisfaction in a New Zealand study, which also found that patients under the age of 40, and those receiving in-patient care, also had higher levels of satisfication.[3]

Given the lack of data available in Ireland, the purpose of this current study is to further our understanding of the attitudes of women in an Irish health care setting have towards medical students.

Methods

This was an observational study conducted at Our Lady of Lourdes Hospital (OLOH) in Drogheda, Ireland in 2020, a maternity teaching hospital with a per annum average of 3000+ births, 1400+ gynaecological admissions and 1300+ gynaecological procedures. Ethical approval for the project was obtained from the hospital research ethics committee. Questionnaires were printed and distributed to patients in both the outpatient and inpatient setting of Obstetrics and Gynaecology including the labour ward, antenatal inpatient ward, antenatal clinic, gynaecology inpatient ward, gynaecology clinic, and early pregnancy assessment unit. The questionnaire was optional, self-administered, and entirely anonymous. Consent was obtained for all patients who completed the survey. The objective of the questionnaire was to assess how comfortable Obstetrics and Gynaecology patients are with medical students being involved in their care. Basic demographics including age, reason for admission, and parity were also recorded. The survey is available as a supplementary file.

In total 230 questionnaires were collected over the course of two months from December 2019 to January 2020. Of those, 16 questionnaires were excluded due to missing age or more than three incomplete responses to rating their level of comfort. In total, 214 were satisfactorily completed. The data from these questionnaires was then recorded and the percentage of patients that selected each response to the different clinical settings was calculated. One-way ANOVA testing was used to analyse whether age or parity had a statistically significant impact on patient responses ($P<0.05$).

Results

Analysis of the 214 surveys collected in this study demonstrate that the majority of patients are comfortable with students observing a physician during all clinical scenarios presented in the questionnaire: history taking, abdominal exam, vaginal exam, vaginal delivery, and caesarean section (Figure 1). With respect to students performing tasks themselves, the majority of patients were comfortable with students taking a history and performing an abdominal exam (Figure 2). Only 18% of patients reported that they would not allow a student to perform a vaginal exam, and 25% reported that they would not allow a student to perform a vaginal delivery.

When looking at patient demographics, it appears that patient age and parity had varying impacts on how comfortable they felt with students.

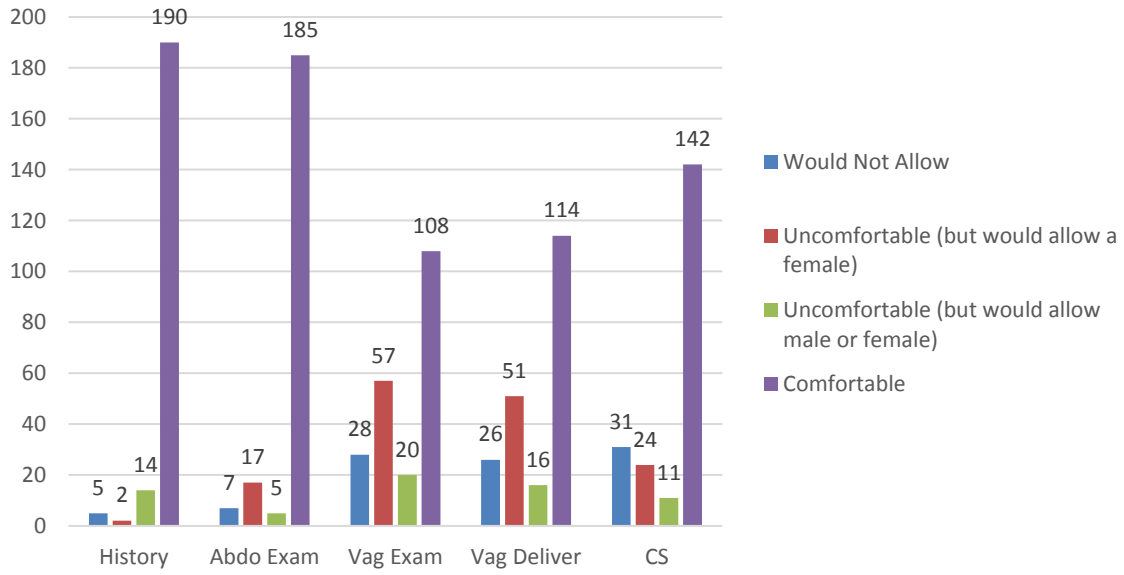

Figure 1: Patient comfort with students observing clinical tasks.

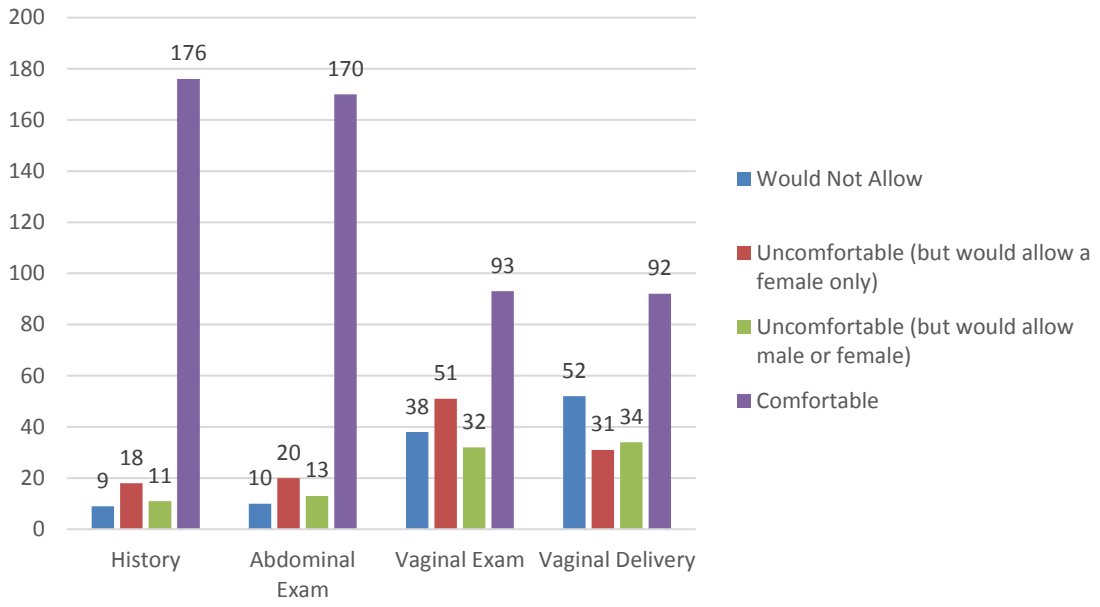

Figure 2: Patient comfort with students performing clinical tasks.

Parity

Comparison of nulliparous versus parous patients, showed that having a child did not significantly increase the likelihood of a woman being comfortable with students observing a physician in any of the clinical scenarios (Figure 3). Furthermore, in comparison to nulliparous patients, parous patients did not have an increased likelihood of being comfortable with students taking a history, performing an abdominal exam, or performing a vaginal exam. However, parity did prove to significantly increase the likelihood that a patient would be comfortable with a student performing a vaginal delivery, with 48.5% of parous women and 33% of nulliparous women stating that they would be comfortable ($p<0.05$) (Figure 4).

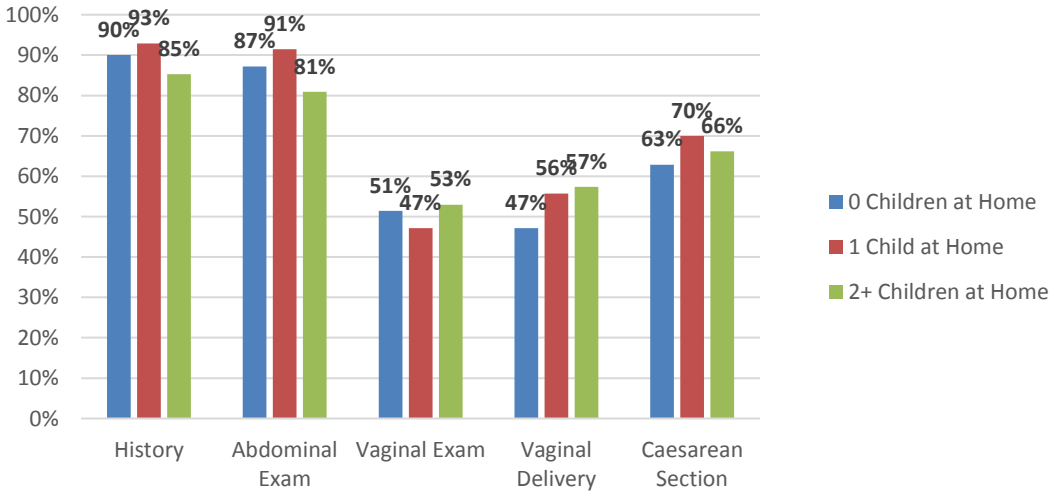

Figure 3: percent of patients comfortable with clinical tasks being observed by students.

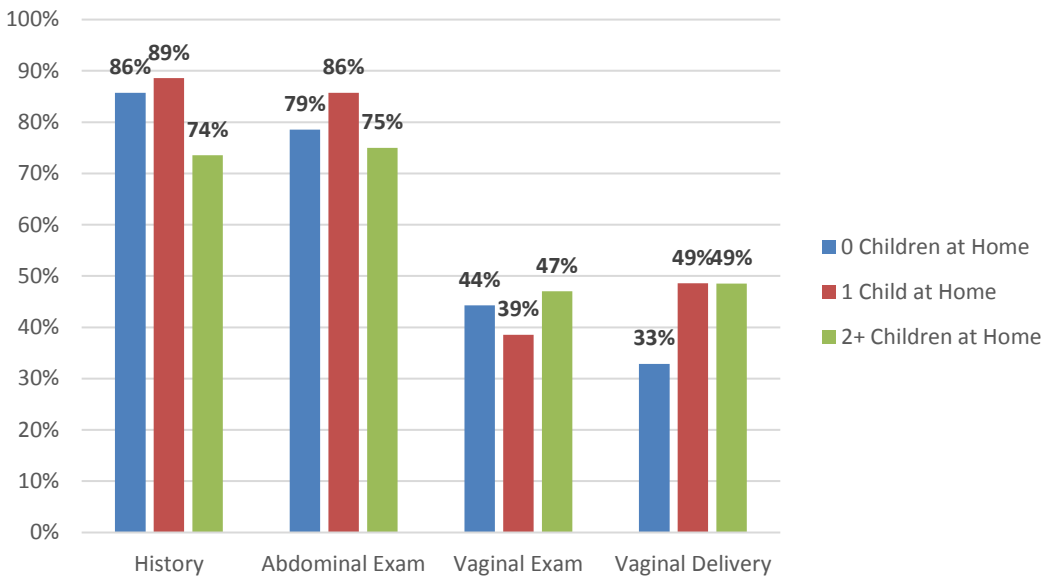

Figure 4: percent of patients comfortable with clinical tasks being performed by students.

Age

Age appears to be a greater determinant of how comfortable a woman might be with student presence. Those in the age group of 26-40 were significantly more comfortable with students observing a physician take a history and perform an abdominal exam compared to those aged 18-25 ($p<0.05$). There was no statistically significant difference between the 18-25 age group versus the 26-40 age group when it came to comfortability with students observing a vaginal exam. However, in comparing the 18-25 group against the 40+ group, those aged 40 and over were significantly more likely to be comfortable with a student observing a physician perform a vaginal exam ($p<0.05$). With respect to observing deliveries, comparing all three age groups showed that there was no statistically significant difference for observing a vaginal delivery, while the 26-40 group were significantly more likely to be comfortable with a student observing a caesarean delivery than those aged 18-25.

Age did not significantly impact whether a patient was comfortable with a student taking a history. Those aged 26-40 were more likely than those aged 18-25 to be comfortable with a student performing an abdominal exam ($p=0.048$). Those aged 26-40 were not significantly more likely than age 18-25 to be comfortable with a student performing a vaginal exam or vaginal delivery, however, those over 40 were significantly more likely than age 18-25 to be comfortable with both ($p=0.036$ and $p=0.004$). It is important to note that while age and parity had varying impacts on patient comfortability, we did not account for a separation between Obstetrics patients and Gynaecology patients, nor did we explore the impact of those who were attending hospital for the first time. These factors would be an informative area of further exploration.

Discussion

Medical student clinical involvement in core Obstetrics and Gynaecology clerkships varies between countries, and indeed between medical schools. However, the exclusion of students in this specialty is not unique to any one country or medical school – Baecher-Lind et al. found that after completing their Obstetrics and Gynaecology clerkship in America, students reported "low levels of student involvement and, subsequently, an overall passive learning environment" with the hypothesized reason being the overprotective nature of Ob/Gyn.[4] This is particularly interesting given that another American study found rates of medical student acceptance by patients in outpatient Ob/Gyn settings to be upwards of 80%.[5] It appears that patient acceptance of students is in part driven by the desire to contribute to medical education.[5, 6, 7, 8]

To date, no studies have been done in Ireland to assess the attitudes of women towards medical student involvement in their obstetric and gynaecologic care. Without a thorough understanding of how patients view medical students, it would be easy to assume that given the sensitive nature of obstetrics and gynaecology, most patients would not want a student present. However, the results of this study are encouraging and may prove to be useful in improving medical education.

We have demonstrated that in Ireland, a minority of women would refuse to have a medical student present in all clinical scenarios presented in the questionnaire. Providing this data to doctors and other health care professionals who are responsible for teaching students in obstetrics and gynaecology could result in an increased willingness to involve students in patient care. While keeping in mind the importance of patient wishes and consent, it is possible that patient willingness to allow for student participation may be underestimated in Irish hospitals. Interestingly, an underestimation of patient acceptance of medical students in obstetrics and gynaecology is not unique to Ireland. A 2014 American study surveyed patients on their beliefs surrounding medical education and student involvement in their care, as well as surveying healthcare providers on what they expected the patient response would be. Indeed, providers underestimated the value and acceptance patients have for medical students.[9] Further to this point, another study in 2019 found no statistically significant difference in patient satisfaction when comparing Labour and Delivery patients who had a student involved in their care to those who did not.[10] In fact, research regarding how patients view medical students in other specialties, specifically, internal medicine, found that patients *appreciated* active student involvement, and that it contributed to a greater perception of "patient-centeredness".[11]

The exclusion of medical students from clinical experience is not for a lack of patient understanding. An Australian study found that 84% of antenatal patients agreed that participation in intrapartum care was important for student education.[12] However, when consenting patients on medical student presence, we must be clear on their role. The same study found that only 54% knew that "medical student" specifically refers to doctors-in-training, and does not include students training to be nurses or midwives.[12] Therefore, we must also consider the role patient education plays in their acceptance of medical students.[13]

It is important that we continue to explore patient beliefs and perceptions regarding medical students. Not only *how* patients feel, but *why.* We must be critical of whether we are underestimating patient comfortability and if we are underserving students in the delivery of clinical experience. The results of this study are one step towards a better understanding in Ireland.

Obstetrics-gynaecology patients in an Irish health care setting are willing to involve medical students in their care. Majority of the patients involved in this study are comfortable with student involvement, whether in an observational or hands-on capacity. Parity appears to have less of an impact on patient comfortability than age, with older women being more comfortable in most clinical scenarios. These results are an important guide to Irish health care professionals and students as they consider what level of student involvement is appropriate in clinical teaching. Given that this is the first study in Ireland assessing this matter, more research is needed to determine how we can make advances in medical education while maintaining the highest standard of patient care and safety.

Declaration of Conflicts of Interest:
The authors declare no conflict of interest

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