ORIGINAL ARTICLE

TEACHING OBSTETRICS AND GYNAECOLOGY TO MALE UNDERGRADUATE MEDICAL STUDENTS: STUDENT'S PERCEPTION

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Background: In Pakistan there is a dearth of male practitioners in obstetrics and gynaecology (ObG) to cater for emergent needs. The Study was done to explore views of male medical students towards ObG as part of curriculum and to identify the problems during clerkship and its impact on selection of ObG as career. **Methods:** The study used a 20-item questionnaire-based survey at Shifa College of Medicine from November 2010 to December 2011. Third and fourth year male students (n=124) who completed ObG rotation were the participants. Inquiries were made regarding patient doctor interaction under residents and faculty members, perception of gender-bias during clerkship, inclusion of ObG in curriculum and subsequently as career. Results were analyzed using binary regression analysis. **Results:** Sixty percent students were satisfied though embarrassed and under pressure during gynaecological examination in consultant supervision. Another 61% said that ObG should be a part of curriculum (*p*-0.013) and necessary for male students (*p*-0.008). 62% of the respondents were of the view that faculty has a major role in encouraging the students to take up ObG as career. 84% students replied in negative to adopt it as profession (*p* 0.002). **Conclusion**: Although basic obstetric curricular objectives are important for medical practitioners, our social set up discourages male students to have concrete clinical interaction. The faculty needs to take a special supportive role to encourage learning and motivation for this specialty.

Keywords: Obstetrics and Gynaecology, career choice, Gender bias, medical students;

J Ayub Med Coll Abbottabad 2014;26(4):539–42

INTRODUCTION

The teaching of intimate examinations to medical undergraduates has received a great deal of attention in recent years largely because of the ethical and medico-legal issues surrounding patient consent.[1] Recent surveys of medical students' career preferences consistently show that men are less likely than women to express an interest in obstetrics and gynaecology (ObG) career both before and after the ObG clerkship.[2,3]

In a recent Royal College of Obstetricians and Gynaecologists (RCOG) publication on recruitment into the specialty, it was highlighted that the undergraduate experience has emerged as one of the major issues in encouraging medical students to consider a career in ObG.[4] It has been suggested that one of the reasons for male students' disadvantage was a higher rate of refusal by patients when compared with their female counterparts.[5] However, in our circumstances, the influences on students' experience of intimate examinations are likely to be even more complex and may include a number of intrinsic and external factors, including demographic and biographical factors such as cultural background, training set-up and support provision during the course of medical education.[6, 7]

Studies examining medical students' experiences of gender discrimination and sexual harassment have shown that mostly male students describe educational inequities, particularly on obstetrics and gynaecology services.[8,9] In another survey it has been told that patients prefer women obstetricians and gynaecologists and were, thus, discouraged from considering the field.[10]

The study was conducted to investigate as to how the male medical students visualize ObG as a course content of the syllabus of basic medical education. It also assesses the difficulties encountered during the training of ObG and to evaluate its influence on selection of this specialty as a career.

MATERIAL AND METHODS

The cross-sectional study was conducted on 3rd year and 4th year medical students at Shifa College of Medicine (SCM), during the academic year 2010-2011, with the approval of the ethical committee. The ObG course was delivered over eight weeks. They were divided in six groups and each group was allocated to one of the clinical teams headed by different consultants for their ObG clerkship. It is a curricular objective that students acquire basic competence at performing pelvic and speculum examinations during the course, and this has to be certified by the clinical tutor. There is guidance on obtaining informed consent from the patient; however, the method and setting of teaching of intimate examinations was at the discretion of the tutor. All

third year and fourth year medical students who completed the ObG 8 week rotation (n=124) were invited to participate. Anonymous questionnaires were distributed in the last (8^{th}) week of the course. The questionnaire contained single response questions. The content of the questionnaire was developed based on a number of aspects considering the previously published literature. The questions covered participants' demographic characteristics (age, ethnic back-ground, religion and marital status). Further, the questions made inquiries to assess if the respondents liked ObG as part of teaching, and if at all it is necessary to study. Moreover the questionnaire also aimed at finding their level of comfort while dealing with gynaecological problems and, conduct of vaginal deliveries. If not, then is this a responsibility of faculty to encourage patients for acceptance of male doctors? It also included questions about, the number and quality of interactions with residents and faculty of obstetrician-gynaecologists during the clerkship, the number and types of hands-on experiences, and their perception of whether they felt their gender had affected their clerkship experience in a positive manner or negative manner. Also is it justifiable for females to have gynaecological advice from male doctors, and do they have equal opportunity as of female doctors to take ObG as a career?

Questionnaire data were analysed in an SPSS-16.0 database. Responses were recorded as numerical values, and analyzed using frequencies and binary regression analysis. Normally distributed variables were reported as mean±SD.

RESULTS

Sixty one male students of each 3^{rd} and 4^{th} year MBBS classes were included in the study. The response rate was 100%. The mean age of the responders was 22.85±0.83 years, and all were Muslims and single. Thirty-six (29%) of the students did per speculum and 24 (19.4%) did speculum and vaginal examinations after taking consent, while only 10 students (8%) examined anaesthetized patients. Fifty percent of the patients registered during the study period refused to be examined by the male doctors/students even after counselling by a senior lady consultant.

Overall, 40 (32.3%) responders reported to have been supervised by a consultant while performing speculum or vaginal examination, 60 (48.4%) had also performed some examinations under middle-grade supervision and 20 (16%) reported being supervised only by senior house officers/ registrar. Ten percent of the students reported high levels of satisfaction, 60% satisfied, while 10% were unsatisfied even under consultant supervision; only 30% students were satisfied under middle-grade supervision while the satisfactory percentage decreased to 10% under registrar / senior house officer supervision, remaining were unsatisfied. During examination, student felt embarrassed, frightened and under pressure who were supervised by senior faculty members, and only few were confident and motivated.

Table-1 shows frequencies of experience during ObG rotation in students. Sixty percent of the male students agreed that ObG as a subject is necessary to be taught to medical students but 61% said that it should not be compulsory for male students. Fifty percent of the students showed their interest in performing vaginal deliveries and other procedures under faculty supervision. Most of the male students (83%) refused to take ObG as a career; 74% of the male students responded that males are not provided equal opportunities as that for females. More than 60% of the male students thought that it is the responsibility of the faculty members to facilitate during ObG rotation and in creating interest of male students in ObG. The results of Binary regression analysis are given in table-1.

Table-1: Percentages of ObG clerkship experience

Thought & Experiences	Yes (%)	No (%)	Odds Ratio(OR)	Confidence Interval (CI) 95%	*p*-value
ObG as a part of curriculum	48 (38.7)	76 (61.3)	4.71	1.387–16.00	0.013
Necessary to study for male medical students	75 (60.5)	49 (39.5)	5.624	1.568–20.172	0.008
Injustice with female to take advice by male	27 (21.8)	97 (78.2)	0.440	0.107–1.816	0.225
Vaginal delivery under supervision	62 (50)	62 (50)	0.966	0.330–2.824	0.949
Dealing with gynaecological problems	59 (47.6)	65 (52.4)	0.735	0.287–1.879	0.520
Responsibility of faculty	77 (62.1)	47 (37.9)	0.511	0.166–1.573	0.242
Equal opportunity as of female	32 (25.8)	92 (74.2)	1.717	0.680–4.334	0.253
To take ObG as a carrier	20 (16.1)	104 (83.9)	6.997	2.032–24.097	0.002

DISCUSSION

Gender discrimination in medical education is not new; while traditionally men are seen as having an advantage over women, male students have been reported to observe that their gender impacted on their relationship with tutors and as a result they felt excluded from certain learning opportunities.[4] In a questionnaire survey of 263 students, Emmons *et al.*[11] reported that 78% of men felt that their gender put them at a disadvantage in the acquisition of practical skills in obstetrics and gynaecology. This is similar to our results in which 92 % of our students said that they are not getting equal opportunity as of female medical students.

Nevertheless, the previously observed gender bias in obstetrics and gynaecology has been generally regarded as resulting from increased patient refusals of male students rather than female students. In addition the role of the tutor for helping male students in dealing with gynaecological patients has remained largely unexplored. In this study we tried to assess student's perception about faculty responsibility in helping male students in their interaction with gynaecological patients.77% of our students think that faculty has a major role in this respect. The differences in levels of support from clinical staff have not been widely described. There is some evidence that tensions in the professional relationships between male medical students and midwives are quoted as an important contributor to deficiencies in clinical training and are also specifically mentioned in the RCOG document on improving recruitment into the specialty; another reason to propagate simulators and simulated patients.[12] In addition to the level of tutor support, 40% male students in this survey reported greater embarrassment when performing intimate examinations (result not shown in table). This is not surprising, as published literature suggests that male students find situations involving intimate contact with patients more anxiety provoking than their female counterparts.[13]

The level of embarrassment and anxiety improved gradually during the course, with increasing experience and clinical exposure. However, this may have added to the difficulties and stress experienced by male students during the attachment, possibly adversely affecting their interaction with patients, and thus putting them at a greater disadvantage. Why male students were more likely to be left to 'fend for themselves' is unclear. There doesn't seem to be any bias in the intentions of tutors to deliberately behave differently with male and female students. There are many possible explanations; it is plausible, for example, that male students were perceived as less in need of support. Alternatively, as experienced practitioners, tutors may have anticipated that a patient was likely to refuse a male student and were avoiding an interaction with patients, which they themselves perceived as uncomfortable or that might put the patient in an embarrassing situation or de-motivate the student.[10,11]

Another possible explanation is that female students are more willing to ask for help from tutors or more able to persuade them to help in establishing rapport and consent. Further qualitative research would be helpful to identify the reasons for the difference in behaviour of tutors. Interestingly, this bias seemed specific to the phase in the teaching process of approaching the patient; once patient consent was secured the gender bias was no longer apparent. In fact, marginally more male students than female students expressed satisfaction with the subsequent supervision process, and male students were more likely to report that tutors checked their technique and provided feedback. The minority of students in this survey reported that they would, consider obstetrics and gynaecology as a specialty in future. Of those who offered open comments, there were few who alluded to any relationship between their course experience and probable specialty choice.[10] However, an outright negative experience during undergraduate training may conceivably act as a deterrent from a particular specialty, and the RCOGs most recent publication on recruitment to the specialty suggests that 11% of students and junior doctors, who did not want to enter the specialty, quoted a bad under-graduate experience as a reason.[4]

There are some limitations that need to be considered when interpreting the data presented in this paper. While we included a whole third and fourth year cohort of students, the sample size remains relatively small; in addition, questionnaire surveys always attract a degree of self-selection bias. Another limitation is type of questions, to judge the perception about any anything the best type are open ended questions but our questionnaire mostly has closed ended questions. Our data also highlights a number of important issues in the provision of undergraduate training in ObG, of which educators should be made aware.[14]

CONCLUSION

The study reveals that although a majority of students feel that ObG should be taught as a subject however only 20% of the respondents are willing to adopt it as a professional field. Thus more than half (>50%) students responded that they have difficulty in dealing with gynaecological problems as well as feel that faculty supervision is essential in performing vaginal deliveries. It is hence concluded that ObG should be taught as a subject for any eventual requirement in medical practice however its adoption as a profession is not an encouraging avenue for male practitioners. Use of simulators and simulated patients has to be evaluated and introduced for our undergraduate training.

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