Integrating gender perspectives in gynecology and obstetrics: Engaging medical colleges in Maharashtra, India

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Abstract
Failure to acknowledge the impact of sex and gender differences affects the quality of health care provision, and is an impediment to reducing health inequities. Systematic efforts were initiated in Maharashtra, India for reducing these disparities by developing gender-integrated curricula in undergraduate (UG) medical education between 2015 and 2018. A review of UG obstetrics and gynecology curricula indicated a lack of gender lens and focus on the reproductive rights of women. Based on these gaps, a gender-integrated curriculum was developed, implemented, and tested with medical students. Significant positive attitudes were seen among male and female students for themes such as access to safe abortion; understanding reproductive health concerns and their complex relationship with gender roles; violence against women as a health issue; and sexuality and health. These results strengthened the resolve to advocate for such a curriculum to be integrated across all medical colleges in the state.

KEYWORDS
Gender; Medical education; Reproductive health; Rights

1 | INTRODUCTION

Gender bias pervades many aspects of medicine in India, such as clinical practice, research, health programme delivery, and medical education. Gender hierarchies are understood to create differences between men and women in terms of their exposure to risk factors, household-level investment in nutrition, care and education, access to and use of health services, experience in healthcare settings and social impact of ill health.¹ There is compelling evidence to support how health is experienced differently by men and women owing to ‘sex-specific vulnerabilities’ and ‘gendered vulnerabilities’. For example, differences in XY karyotypes make men vulnerable to prostate and testicular cancer, while women are vulnerable to cancer of the cervix and ovaries. These are examples of sex-specific vulnerabilities. Gendered expectations imposed on men and women owing to the division of labour between sexes can also affect health conditions and lead to certain health outcomes.² These gender inequities affecting health were highlighted at the International Conference on Population and Development in Cairo (1994) and the Fourth World Conference on Women in Beijing (1995).

In 2002, the WHO adopted a gender policy that committed itself to promoting gender equality and gender equity in health. A key to achieving this goal was making gender considerations an integral part of the pre-service health training curricula, as this would directly impact health policies and programmes in various countries. This was based on the evidence that, despite efforts made through short training courses and in-service health provider training, many of these endeavours could not be sustained. Globally, there have been efforts to integrate gender in the pre-service training of health professionals for at least two decades in high-income countries such as the USA, Canada, Australia, and Germany, and middle-income countries such as the Philippines and Thailand.³

Over the last few decades, systematic critiques of medicine and public health curricula in India have highlighted many lapses related to the inclusion of social determinants of health in medical education.¹ A systematic review of commonly used Indian medical textbooks
revealed that the content was at best gender-blind, and at worst gender-biased. Anti-abortion views among medical interns and unethical practices such as making abortion services conditional to spousal consent have also been noted in more recent studies.3

Centre for Enquiry into Health and Allied Themes (CEHAT), with the support of the United Nations Population Fund (UNFP) in collaboration with the Directorate of Medical Education and Research (DMER) and Maharashtra University of Health Sciences (MUHS), undertook an initiative on integrating gender in medical education into the Bachelor of Medicine, Bachelor of Surgery (MBBS) undergraduate curriculum in Maharashtra in 2015. This initiative aimed to encourage medical faculty and students to address gender inequities in health and develop gender-sensitive health services. Five core disciplines including gynecology and obstetrics were chosen for integrating gender perspectives into undergraduate medical education.

This paper aims to present the steps undertaken to engender medical curriculum into undergraduate (UG) education, with a specific focus on obstetrics and gynecology by way of examples related to the project objectives. The first section of the paper will identify gender gaps in the teaching of OBGYNs and explain how these were clarified by focusing on specific themes. The second section of this paper will present key findings of the action research study undertaken to assess the effects of gender-integrated teaching on the attitudes of medical students.

2 | IDENTIFICATION OF GENDER GAPS IN GYNECOLOGY AND OBSTETRICS CURRICULUM

A review of the UG curriculum indicated that gender concerns were not taken into account in topics such as physiology of menstruation, urinary disorders, genital fistulae, genital prolapse, infections of genital tract, sexually transmitted infections, and medical termination of pregnancy. Language pertaining to the reproductive rights of women was omitted from the entire syllabus. Situational analysis carried out by CEHAT to understand perspectives of medical educators on this topic showed that they understood “gender” as a “demographic category”. Many educators readily stated that they did not offer abortion services without spousal consent, even though the Medical Termination of Pregnancy (MTP) law in India does not require spousal consent. They firmly believed that even if it was the woman who carried the pregnancy ahead, the decision should belong to the couple. All second trimester abortions were viewed with suspicion; if women were offered an abortion at all, doctors ensured that they underwent a sterilisation post-abortion. Repeated pregnancies, inability to use contraceptives, and sexually transmitted infections were not understood as possible consequences of violence. Many continued to believe that the status of the hymen and presence of injuries were critical to determine whether sexual violence had taken place.5

3 | CAPACITY-BUILDING OF SELECT MEDICAL EDUCATORS

Medical educators teaching this syllabus had to be equipped to recognize and implement a gender-integrated syllabus. Deputations were sought for middle- to senior-level medical educators because they would have the autonomy to implement changes in teaching practices. Training topics included conceptual clarity on issues such as gender; sex; the role of gender and reproductive rights in a health setting; debating the issues of family planning; abortion services; ethical issues surrounding archaic medical practices such as two-finger tests; unnecessary hysterectomies in women with psychosocial disabilities; and recognizing violence against women as a public health issue.

Once trained, educators had to integrate gender within the framework of the existing medical curriculum so that it was suitable for the timeframe allocated to existing lectures. From a perspective of feasibility, care had to be taken not to extend the teaching period. Thus, gender content was introduced using various methodologies such as case studies, discussions, debates, and films. Each topic finished with a clear direction on the steps that doctors need to take to provide gender-sensitive clinical care.

Considerable time was allocated for familiarizing medical educators with participatory methods, because many came from a background where didactic teaching was the norm. Additional resources such as factsheets for gender content were developed for specific lectures to ensure retention of the content by students. Besides integrated lectures, two foundation lectures, “Gender and Sex in Health,” and “Violence against Women (VAW) as a Health Issue” were introduced in Gynecology and Obstetrics modules.

4 | SNAPSHOT OF GENDER-INTEGRATED CONTENT

A snapshot of gender-integrated content is given in Table 1.

5 | ACTION RESEARCH STUDY TO ASSESS CHANGES IN ATTITUDES OF MEDICAL STUDENTS

The content needed to be supported with evidence which exemplified its utility and feasibility. A quasi-experimental design was used to test the hypothesis that integration of gender content in medical lectures for undergraduate medical students would lead to positive attitudes toward gender sensitivity. For the purpose of the study, a control group and an intervention/experimental group of medical students were necessary. The study included Semester 6 students who formed the intervention category and received a total of nine topics, all of which included gender content. Besides integrated lectures, two foundation lectures, “Gender and Sex in Health” and “Violence against Women (VAW) as a Health Issue”,
**TABLE 1** Snapshot of gender-integrated content.

<table>
<thead>
<tr>
<th>Lecture name in syllabus</th>
<th>Gender topic</th>
<th>Content</th>
<th>Method</th>
</tr>
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</table>
| Physiology of menstruation | Taboos about menstruation, secretive menstrual practices and health consequences | • Discusses nature of discrimination faced by adolescent girls that leads to secretive menstrual practices  
• Presents links between discrimination faced by girls and health consequences such as anemia and reproductive tract infections (RTI)  
• Raises ethical concerns about hysterectomies of intellectually challenged adolescent girls for managing menstruation and its health effects on girls  
• Discusses alternative mechanisms needed to train intellectually disabled girls and women to take care of themselves during menstruation | Use of a case study to present a situation of adolescent girl reporting with anemia  
Guided discussion on poor nutrition in girls leading to anemia, followed by posing questions on menstruation and practices by the girl in the case study, and providing accurate information on menstruation, cycle, normal blood flow, and hygiene |
| Menstrual disorders | Sexual abuse as one of the reasons for amenorrhea | • Recognizing sexual abuse of adolescents as a possible indicator of amenorrhea resulting in pregnancy  
• Provides steps in communicating with the adolescents in a non-judgmental manner, creating safe space for disclosure of sexual abuse, explaining relevance of medical examination and treatment | Use of a case study related to sexual abuse and amenorrhea to initiate a discussion on the importance of seeking patient history in a sensitive manner |
| Hysterectomy | Overuse of hysterectomies to deal with menstrual disorders | • Recognizing side effects of hysterectomies for women and addressing menstrual problems through other treatment protocols  
• Questioning the uncritical use of hysterectomies and critiquing the encouragement of hysterectomies through government-sponsored schemes | Use of a case study to illustrate adverse effects of hysterectomy on a woman, and guided discussion |
| Infections of the genital tract | Concept of sexuality | • Offering clarity on terms such as ‘sexuality’, ‘sexual health’, and ‘sexual and reproductive health rights’  
• Debunking common gender-based notions about men having more ‘sex drive’ than women and addressing stereotypes related to gendered roles of men and women in society  
• Addressing health concerns of transgender and intersex persons and response of health systems | Presentation of case scenarios related to RTIs and STIs to facilitate communication skills in medical students to provide contraception alternatives and treatment |
| Genital prolapse, genital tract displacement | Gender discrimination and poverty as factors related to prolapse of the uterus | • Recognizing socioeconomic factors and gender roles leading to prolapse of the uterus  
• Addressing overburden of physical labor, inadequate rest post-delivery, and lack of control over sexual relationships as causes of prolapse, among others | Use of a case study to illustrate physical labor resulting in a prolapse condition |
| Perineal tears, rectovaginal fistulae (RVF) & vesicovaginal fistulae (VVF) | Obstetric violence and health consequences | • Recognizing different forms of violence against women in labor as obstetric violence. Presenting laws developed to address obstetric violence in western countries.  
• Understanding that genital fistulae and perineal tears are also a consequence of mismanaged labor and the indiscriminate use of episiotomy.  
• Emphasizing respectful maternity care as a universal human right | Additional slides while teaching main topic |
were introduced in Gynecology and Obstetrics for Semester 6. Semester 8, who were preparing for their final MBBS examinations, formed the control group in the study. A total of 268 and 244 medical students responded in the control group for the pre- and post-test, respectively. Similarly, 360 and 327 students responded in the experimental/intervention group in the pre- and post-test, respectively.

### RESULTS

1. **Gender attitude overall**: There was a positive change in gender attitude as seen in Figure 1, indicating the effectiveness of the gender-integrated modules in fostering gender perspective and sensitivity among medical students.6

2. **Attitude towards role of gender in health**: As seen in Figure 2, a significant increase at $P<0.01$ in the mean attitudinal scores of students is observed among the intervention semester from baseline to endline. The positive shift can be ascribed to the additional lecture explaining differences in the terms “gender” and “sex”, along with reiteration of this in other lectures. A story of twins was used to discuss social construction of gender. The story traced the journey of a girl and boy from their birth to old age. Examples of clothes worn, toys purchased, choice of career, access to public and private spaces, right over property were discussed in the context of gender. Students reflected upon their experiences of gender by what they were and were not allowed do as girls and boys. The students’ attention was also drawn to the fact that none of the medical textbooks carry information on differences in gender and sex and how gender impacts access to health services as well as health outcomes. The concepts of transgender identities and alternative sexual orientations were introduced too.

3. **Attitudes towards women and girls seeking abortion services**: A significant increase at $P<0.01$ in the mean attitudinal scores of intervention students was observed from pre-test to post-test, as seen in Figure 3. The content of these lectures dealt with implications of

![FIGURE 1](image1.png)  **Gender attitude — overall**

![FIGURE 2](image2.png)  **Gender attitude — gender role**
ad hoc procedures for MTP, such as asking for spousal consent or recording police complaint when single women sought MTP. Delays in seeking abortion services are often associated with doctors carrying out sex-selective abortions. The implications of such assumptions were discussed at length. Students were familiarized with a range of reasons for delay in seeking abortions, such as lack of knowledge about being pregnant; restriction of mobility by family members; and late realization that pregnancy may be an outcome of rape. Medical students were oriented to the pitfalls of not providing women with timely services, such as the prospect of women being abused; the social and psychological impact of carrying an unwanted pregnancy full term; and lack of support by family members. The term “family planning” was critiqued, as it does not acknowledge access to contraceptives for a host of people who may be outside the institution of marriage. People in same-sex relationships and single people may also need contraceptives but they are not covered in the family planning programs. The role of male partners in contraceptive decisions was emphasized and skills for speaking to couples were imparted through the gender-integrated content.

4. **Attitude towards delivering reproductive health services to women and men**: A significant increase in the mean attitudinal score towards reproductive health services delivery for men and women was observed among the intervention group, as shown in Figure 4. A sharp decrease in the mean attitudinal score of medical students in the control group was observed in the post-test results. Medical students were familiarized with data pertaining to the lack of toilets for girls in public schools and its direct association with girls dropping out from school with the onset of menstruation. Special focus was also given to the issue of hysterectomies conducted on girls with psychosocial disability. Skills training provided them with the protocol to discuss menstrual management both with caregivers and girls with psychosocial disabilities. The dangers of unindicated hysterectomies for menstrual management in such girls were discussed. The use of case studies and role play further enhanced skills in speaking to girls and women about menstrual issues. The content also included the concerns of adolescent boys about their sexual and reproductive health.

5. **Attitudes towards sexuality**: Figure 5 shows that the mean attitudinal score for medical students in the intervention category increased to some extent. However, the shift was not significant. Sexuality is a concept integral to sexual health, but the medical curriculum does not discuss the concepts of sex, sexuality and sexual orientation. Sexuality was discussed as a central aspect throughout life, ranging from sex, gender identities and roles to sexual orientation, eroticism, pleasure, intimacy, and reproduction. It is expressed through thoughts, fantasies, desires, beliefs, attitudes, values, behaviours, practices, roles, and relationships. The content debunked myths such as “Sexual desire is lower in women than in men”; “Men are always ready to have sex”; “Men should be embarrassed if they are unable to get an erection during sex”; “It disgusts me when I see a man acting like a woman”. The prescribed role for women in sexual relations is to be passive, whereas for men it is to conquer and exercise power over the woman’s body to prove masculinity. Such gender stereotypes do not allow for women to make decisions about their sexual partner, or to protect themselves from unwanted pregnancies or infections, or to seek sexual pleasure. Men, on the other hand, find it difficult to discuss sexual health because of the pressure of sexual performance. Students were also made aware of the contraceptive needs of people in same-sex relations and transgender persons. Students were alerted to the fact that the health system mistreats them and also disregards their

**FIGURE 3** Attitudes towards women and girls seeking abortion services.

**FIGURE 4** Attitude towards delivering reproductive health services to women and men.

**FIGURE 5** Gender attitudes towards sexuality.
health concerns. Students were oriented to recognize their health needs and to respond in a non-judgemental manner. This topic needs to be reinforced in multivarious ways in order to develop comfort and engender confidence amongst doctors to engage with male and female patients with regard to their sexual health.

6. Attitudes towards gender-based violence: As seen in Figure 6, there is a significant positive change in the attitude of students in the intervention group towards gender-based violence compared to their baseline scores. The topic of gender-based violence was introduced as a foundation lecture and was also integrated in topics such as sexually transmitted infections/reproductive tract infections, medical termination of pregnancy, and family welfare. The foundation lecture focused on understanding the phenomenon of violence as an abuse of power. Myths such as “violence being a personal matter”; “it happens in poor and illiterate families”; and “violence is inflicted by alcoholic men” were countered with contemporary national and global evidence. Medical students were made aware of rape myths in forensic examination, especially the “finger test” and comments on hymen status. Scientific evidence that questioned such tests was presented and the damaging consequences of such reports were discussed. The content also offered concrete suggestions for the role of medical students in identifying forms of abuse, providing emotional support and medical support, and providing information and referral to the survivor.

FIGURE 6 Attitudes towards gender-based violence.

The department started to use mannequins instead of patients for teaching students. One of the most significant changes was the change in the name of the department from “Department of Family Welfare, Obstetrics and Gynecology” to “Gynecology and Obstetrics Department—Antenatal Care, Comprehensive Abortion Disha Centre”. The change exemplifies the change in perspective; it is not about family planning, but instead about women’s reproductive health. Focusing on abortion care also sends an important message.

8 | CONCLUSION

Although there have been initiatives to integrate gender in global medical education, they are mostly restricted to introductory and standalone lectures. These are taught during internships or clinical rotations. They are not in specific classroom teachings. Very few initiatives like the efforts in the Philippines have included specific issues such as women’s health and intimate partner violence in the academic curriculum. Similar observations can be made about China and Turkey, where women’s health and intimate partner violence have been integrated within the topics of sexual health, reproductive health and sexuality. However, there is a dearth of documentation related to the experience of integrating gender in medical education; only two such documented initiatives exist: one is Monash University in Australia and the other in Chulalongkorn University in Thailand.

The uniqueness of the present study is that the gender content has been developed across all five disciplines of undergraduate medicine and has been included in relevant medical lectures. Gender in medical education initiatives developed from introducing a few lectures on gender perspective to integrating an understanding about gender in each of the lectures. This ensured that gender sensitivity was applied to each topic, and it was not left to the students to link the “gender” lecture to the current topic.

There is now a clear need to sustain integration in the medical colleges already involved in GME and also to expand this initiative and disseminate learning in the medical colleges in different states of India.

7 | REPORTING GOOD PRACTICE

The Department of Obstetrics and Gynecology at GMC Aurangabad expanded the scope of gender integration beyond classroom teaching and introduced gender-sensitive changes in clinical practice.

They added curtains to individual beds in the labour room, introduced respectful maternity care, developed a protocol for responding to pregnant burns victims, and introduced gender-sensitive protocol for medico-legal care of sexual violence survivors.

A routine practice for medical students is to observe patient care, but such observations and discussions can be invasive for patients. Recognizing the ethical challenges in this practice, the team introduced a mechanism of informing the patient in advance, and respecting privacy by covering the patient while the discussions went on.

AUTHOR CONTRIBUTIONS

SR and PB-D conceptualized the intervention and research and drafted the paper. PS led the pioneering Gender in Medical Education project in Maharashtra, India. SG, SD, NG, and SV trained under the GME project and implemented gender-integrated modules in their respective medical colleges.

CONFLICTS OF INTEREST

The authors have no conflicts of interest.

REFERENCES


