

Integrating Gender in Medical Education

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How does medical education respond to gender issues? Is it responsive and sensitive to women's health concerns? How do subordinate-dominant relations based on caste/class/race/ethnicity and gender get played out in medical syllabi and services? This article tries critically reflect on these mind bogging issues.

1. Introduction

Women's health advocates challenged the biomedical model of health and illness and identified gender-based inequalities, in particular women's lack of control over their sexuality and reproduction, as a determinant of their poor health. Sexism in medicine has been noted by women and health activist/researchers many years back. Gender bias pervades many aspects of medicine in India: clinical practice, research, health program delivery, and medical education. Even the health programmes and policies lack a gender perspective. Gender insensitivity has inexcusably come to form a core element of practice and research in medicine. For example, medical research often focuses on males and results are extrapolated to females, neglecting their unique physiological makeup. Secondly, gender analysis is often found to be absent in the research. Very few researchers include sex disaggregated statistics. Also, research on diseases more prevalent in women is lacking e.g. rheumatism. Health care personnel are uniquely placed to address issues related to gender and gender inequalities, sexuality, violence, and many culturally defied norms that increase vulnerability to human immunodeficiency virus/acquired immunodeficiency syndrome (HIV/AIDS) and adversely affect the health of women in many societies. Initiatives to address gender issues in health have included a number of attempts to build health professionals' capacity to identify and address sex- and gender-based differences in health care needs. Given this context integrating gender within the medical education needs to be recognised as a priority. The paper provides a glimpse into an initiative in Maharashtra being spearheaded by CEHAT, DMER and MUHS. This effort builds on an

earlier project on gender in medical education run by Achutha Menon Centre for Health Sciences of Sree Chitra Tirunal Institute for Medical Sciences and Technology, Trivandrum in 2002.

2. Manifestation of gender bias

In clinical practice, the gender bias is manifested in the likely oversight of investigating symptoms of heart conditions. For example, symptoms of women related to ischemic heart disease are considered to be atypical complaints as compared to symptoms found in men.¹ Health care providers often have a biased attitude towards women. Complaints of women like nausea are often attributed to psychogenic causes². It is likely that majority of the students simulate gender biased practices of their seniors. The factors that affect susceptibility to a disease, timely access to health care services, treatment compliance and prognosis differ for men and women. These are mostly overlooked in programme planning. For e.g. in cases of tuberculosis time and again authors have highlighted the importance of incorporating gender sensitiveness in the tuberculosis control programmes.³ Likewise family planning programmes tend to hold women responsible for child birth and contraceptive use is as such directed solely towards them. A review of Indian medical textbooks across disciplines has also revealed prevailing gender bias, so much so that a text book of forensic medicine by Modi asks doctors to be careful of women who have been raped. The author warns doctors that women could be falsely claiming of having been raped.⁴ A careful study of medical language will also reveal a gender bias. In cases of infertility, a woman is said to have "hostile" cervical mucus, whereas the sperm of the male is said to develop antibodies; never are sperms referred to as hostile.⁵ Lecturers often say "she" and refer to women while explaining diseases having a "psychogenic" origin.² Educating medical students on gender issues and how 'gender' interacts with other determinants of health is critical for the benefit of

¹P. Verdonk, From gender bias to gender awareness in medical education

² Padma Prakash, Sexism in Medicine and Women's rights The Indian Journal of Social Work, Focus Issue, Patients' Rights, Vol. LIV, No. 2, April 1993, pp.199-201.

³M.G. Weiss et.al.2008

⁴Agnes, Flavia, Gender Review of Medical Textbooks,

⁵ Bower 2001, Terminology and gender insensitivity, a corpus-based study on LSP of infertility, language in society 30, 589-610

patients as well as co-workers. This can prove as a fundamental first step to change biases that exist in the field of medicine.

3. Conceptualisation of the project

The WHO clearly acknowledges the imperative of systematic integration of gender in medical education specifically, in the 'pre service training curricula' of students (2007:1) An international consultative meeting of leaders of medical education organised by WHO arrived at a consensus that gender and human rights perspectives should be integrated in all disciplines of medical education and such training should be continued throughout the professional life commencing with the undergraduate course (ibid.:26) This clear recommendation of the WHO on integrating gender in medical education was pivotal to bring the stakeholders on board. Globally there was recognition that teaching gender in medical schools was key to increasing sensitivity of doctors and for improving health outcomes for women. Several such projects were underway across the globe.

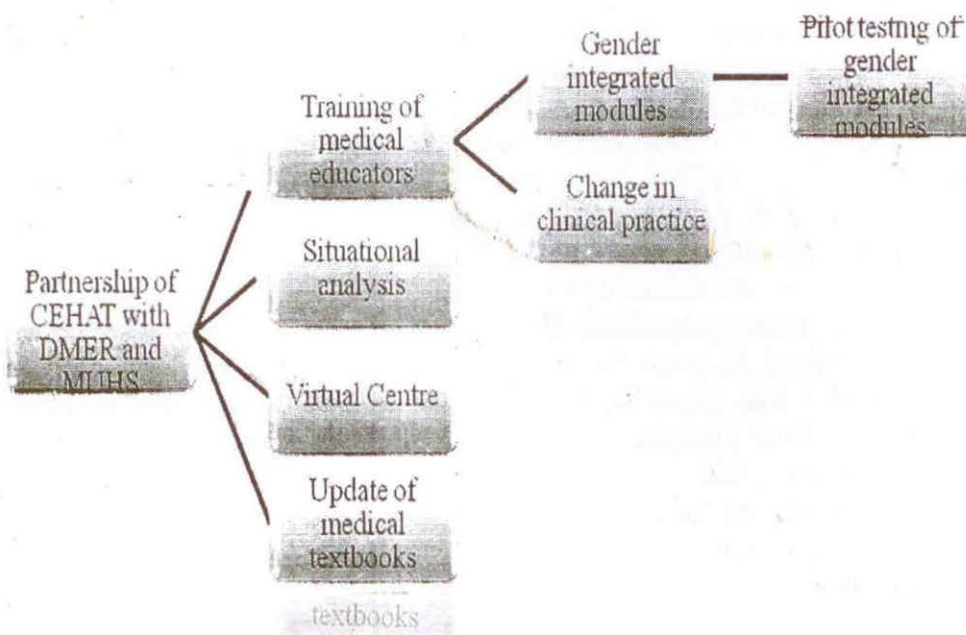
The CEHAT team reviewed the various models that were tried out. Its own experience of working with the health system in developing health sector response to VAW also informed the approach that was taken. To begin a workshop was organised where the proposed ideas as well as the evidence on the subject were presented to representatives of the DMER and MUHS. There was a lot of discussion on how to take this forward. A draft curriculum was developed on gender in medical education which can then be taught across all colleges or medical professors are trained as trainers on the subject so that they could then integrate this in teaching. Questions such as how many teachers should be trained to teach the course were also discussed. Finally, it was decided that six colleges be selected across the state and professors from five disciplines viz Obstetrics and Gynaecology, Forensic Medicine and Toxicology, Medicine, Community Health and Psychiatry be trained through a ToT on gender in medical education. The trained medical faculty then could teach the additional lecture on gender.

The CEHAT team also developed an understanding into how medical curriculum is developed. It was clear that changes in training content in

terms of inclusion of new concepts/idea, methodology, new evidence can be made at the state level once recommended by the DMER. One approach could be to table new training modules to the academic council and push for its inclusion. However, it was felt that there was a need to build more buy-in from the medical professors and so it was decided that medical professors across medical colleges be trained in gender related aspects of health and then the modules be developed together. It was also decided that the modules be taught in medical schools to gauge their effectiveness in integrating gender. This would further provide an evidence base for inclusion of these modules in medical schools.

So the broad objective of the project was to sensitize medical teachers and students on gender inequities by integrating gender perspectives in MBBS education in Maharashtra. It was envisaged that this would be done through building capacities of medical faculty on gender and they would be provided support in facilitating gender integrated modules in their respective colleges through mentoring by experts.

Box 1: Initiative of CEHAT, DMER and MUHS, 2013-2017



4. Key elements of the approaches to integrating gender in medical education in Maharashtra

The **Box 1** depicts the conceptualisation of this initiative in Maharashtra. Each of the blocks was crucial as described below.

4.1 Partnership of CEHAT, DMER and MUHS:

The project was conceptualised as a collaborative one and the DMER and MUHS were brought on board from the beginning of the project. Their roles were laid down and agreed upon. This created the necessary policy environment for the project to take off and for the medical colleges to come on board. These included a briefing meeting with Director, DMER; establishing rapport with MUHS; finalisation of colleges for the intervention; establishing contact with the selected colleges; and a workshop for Deans of selected colleges to create an enabling environment. As part of the workshop with the Deans, they were briefed on the project and methodology and their collaboration was sought in selecting appropriate faculty members for the training of trainers from their respective medical colleges. Deans were also consulted for deciding a plan for training workshops in their respective colleges, and to identify potential barriers in implementation of the project.

Criteria were prepared for selection of faculty for the training of trainers and sent to the Deans for deputation of faculty. Key criteria included aspects such as popularity of faculty with students, their record of trying out innovative teaching methodologies and their readiness to act as agents of change in their institutions. It was also informally suggested that members of MUHS board of Studies in these colleges should be considered for selection, so as to facilitate inclusion of course modules in the MUHS curriculum. Colleges were requested to depute around five faculty members from departments of Preventive and Social Medicine [PSM], Internal Medicine, Genecology, Forensic Medicine and Psychiatry. These departments were chosen in light of their relevance to women's health.

4.2 Understanding the Gender perspectives of medical educators:

In the early part 2014, a Situational Analysis was conducted by CEHAT in the participating colleges to understand the gender perspectives of the medical professors and to elicit their opinions, suggestions, challenges and apprehensions for integrating gender in medical education and practice.⁶ As part of this study, 60 medical professors, and 24 other staff were interviewed. 12 students were also interviewed. The findings of this study indicated that gender was understood by the medical educators in varied ways, from a demographic category, to referring to it as health issues of women, to associating it with increase in violence against women or increased presence of women in workforce. Few professors referred to gendered social systems and structures. Most of them were of the opinion that gender as a social determinant was irrelevant to medical curriculum. They also opined that sexual harassment is an outcome of increased women's work participations. They also had some stereotypes about women patients such as women give vague histories as compared men who provide a clear history; women reported more somatic complaints than men and therefore the presence of intentional hysterical syndrome amongst them. The study also found that these notions also influenced the procedures that were laid down for women seeking abortion care, or those with contraception needs.

4.3 Building capacity of medical educators – the ToT approach:

In the early part of 2014, a 10-day course on “Gender in Medical Education” was designed by experts in the fields of gynaecology, forensic medicine, women's studies and community medicine. The course curriculum focused on gender concepts with special reference to issues related to sex selection, domestic violence, sexual assault, issues related to informed choice and consent, issues related to privacy and confidentiality, etc. The first ToT was a five-day programme held in February 2014. However, many of those who were deputed had short contracts with the medical college and so

⁶John, Priya; Bavadekar, Amruta; Hasnain, Ameerah and Karandikar, Asilata. (2015). Gender in Medical Education: Perceptions of Medical Educators. Mumbai: CEHAT.

they had to be replaced. Few of them were hostile to gender and had to be dropped. Therefore, a second two day programme was organised to replace these. A final five day programme was then held in February 2015. Thus, a pool consisting of 19 gender sensitive medical educators across seven medical colleges in the state was created that had core.

The TOT equipped the medical faculty members with perspectives and skills to incorporate gender and violence against women as concepts in medical education. In this way, faculty would encourage medical students to make an association between medical knowledge and gender-related concepts. For example, a trained medical educator teaching medical examination of patients reporting sexual assault, would incorporate not just the medical examination but also how to ensure sensitive medical treatment and counselling. This would build a more rounded perspective on sexual violence and refute some of the myths that forensic textbooks carry on rape. Other examples include training the teachers on respectful maternity, on the issues of rights and importance of choice in family planning, etc.

4.4 Updated review of medical textbooks:

Equipped with the training on gender integration at the level of medical curricula, latest editions of the medical textbooks of ObG, PSM and Forensic Medicine and Toxicology were reviewed from a gender perspective by mentors of the respective disciplines by some educators and faculty in 2015. EPW had carried out a review of medical textbooks from a gender perspective in 2005. This latest review was undertaken after a decade of the first, to build further on the earlier review in order to map any changes in medical textbooks vis-à-vis the inclusion of social determinants of health, specifically gender. The main goal of the review was to bring attention to the need to integrate gender in the medical curriculum. The project identified the urgent need to make medical textbooks gender sensitive by sensitization of authors and motivating them for revisions in future editions.

This review was conducted by Prof. Padmaja Samant, Prof. Jagadeesh Reddy and Asst. Prof. Rishikesh Wadke. These reviews found that the

biases and gaps noted in 2005 and were still part of the medical textbooks and they found some more glaring gaps.

A short summary of what was found in these update reviews is presented below. The textbooks of Obstetrics and Gynecology⁷ had the following content:

- Text books advise doctors to seek written consent from both partners while providing female Sterilization.
- Topics on contraception speak of IUD as simple as wearing an earring and can stay inside for 5 years.
- Textbooks suggest that Injectable progesterone contraception Depo-Medroxyprogesterone acetate DMPA is a good contraception and underplays the side effect as only menstrual irregularity is mentioned, risk of osteopenia is not mentioned
- Textbooks overemphasize population control and connect it to better economy, reduction of poverty and less population

The forensic textbooks⁸ carried the following:

Regressive perspective and comments still find place in books like below –

- “Rape is an allegation, easily made, hard to prove and harder to disprove” (Parikh pg 399) and “Rape is an accusation easily to be made, and hard to be proved, and harder to be defended by the party accused” (Reddy pg 423)

⁷Gynaec_Mudaliar and Menon Clinical Obstetrics - 12th edition 2015. C.S. Dawn textbook of Gynecology, contraception and Demography 2003 D. C. Dutta's Textbook of Obstetrics - 7th edition November 2013 Shaw's Textbook of Gynecology - 16th edition, 2015 Updated edition of Holland and Brew's Manual of Obstetrics – 3rd Edition 2012

⁸Justice Kannan, K & Mathiharan, K. (2012). Modi A Textbook of Medical Jurisprudence and Toxicology (24th ed.). Gurgoan: LexisNexis. Reddy, K. S. Narayan & Murty, O.P. (2014). The Essentials of Forensic Medicine and Toxicology (33rd Ed.) New Delhi: The Health Science Publishers. Nandy, A. (2013). Nandy's Handbook of Forensic Medicine and toxicology (1st. Ed.). Kolkata: New Central book agency. Subramanyam, B.V. (2014). Parikh's Text book of Medical Jurisprudence, Forensic Medicine and Toxicology: for classrooms and courtrooms (7th Ed.). New Delhi: CBS publishers.)

- Books only depict male models/pictures for examination and understanding on injuries.
- Topics related to understanding injuries does not explain reasons for absence of injuries.
- Topics related to teaching on injuries related to burns does not bring a perspective related to women.
- Topics related to medical ethics in the forensic textbooks speak of informed consent, but the very next paragraphs quote case laws, where abortion carried out without consent of husband was taken as 'cruelty' and therefore ground for divorce, thus passing on biases about women seeking abortion services
- New and emerging issues related to sex verification which falls in the domain of medical sciences does not find any discussion depriving medical students of an understanding related to the gaps in these tests

The medical textbooks on community health⁹ had the following:

- The topic on evolution of medicine, one of the quotes reflecting bias is "The first doctor was the first man and the first woman the first nurse".
- Community medicine speaks of social factors affecting health of people and community and so health economics, rural and urban health, poverty etc. do find a mention but gender is conspicuous by its absence.
- Man is considered the host factor and therefore etiology of diseases considers sex differences based on metabolic, structural and genetic differences but does not comment on gender as a determinant of health.
- In the chapter related to demography quotes such as "females who marry before the age of 18 give birth to a larger number of children than those who [are] married after." without analysing aspects such as forced marriages, lack of control over how many children she can have and dearth of contraceptive choice.

⁹Text Book of Community Medicine – A. P. Kulkarni Fourth Edition Text Book of Community Medicine – Mahajan Park and Park – Text Book of Community Medicine Sathe's Textbook of Community Medicine

- The topic on sexually transmitted infection again carries bias quotes such as “Promiscuous women are usually drawn from broken families.” creating victim blaming attitudes.

4.5 Developing the gender integrated modules:

The entire MBBS curriculum for the five disciplines was studied in detail and the mentors and some trained professors were invited to support the preparation of gender-sensitive modules for the curriculum as a whole. Besides, they were also equipped with the review of contemporary medical textbooks from a gender perspective. Gender-sensitive content for all the semesters for FMT, Medicine, PSM, ObG and Psychiatry in the MBBS programme was prepared through this collaborative process. After the TOT course, the trained medical faculty members had mentors assigned to them based on similarity of professional discipline. The mentors who engage with the medical faculty members to provide feedback/assistance on developing session plans and activities in their respective colleges, assessed barriers faced by them at the institutional level and brainstormed on solutions to overcome problems encountered.

The content of the draft gender-sensitive modules was then reviewed at two levels. First, the gender sensitive content under each topic, across all five subjects, was segregated as per learning objectives of ‘knowledge’, ‘attitude’ and ‘skills’. Later on the major themes were identified in the modules to establish the primary focus areas for the teaching modules. The focus areas of the modules thus established were [a] Sex and Gender, [b] Gender based Violence, [c] Gender as Social Determinant of Health, [d] Abortion and Sex Selection and [e] Ethics in Practice.

4.6 Virtual centre

A challenge faced was the limited research and evidence base on integrating gender in medical education and the non-availability of teaching learning material, it was hence decided to creating a pool of relevant teaching learning material by establishing a virtual resource centre on the theme of engendering medical education. <http://www.gme-cehat.org/Home/index.aspx>. The virtual resource

centre was launched in 2014. This is a live portal and is updated on a regular basis. The web portal has been able to generate interest in the medical teaching community even outside of Maharashtra.

5. Facilitate teaching of gender perspectives in medical colleges by trained medical educators

Most gender in medical education programmes world over, follow a method of including additional lectures on gender. But this initiative makes effort to integrate gender in all disciplines and across five years in all the lecture topics ensuring retention of knowledge among medical students throughout the MBBS course.

The topics included were across the following themes:

- Gender as a socially constructed concept
- Gender as a social determinant of health
- Gender based violence
- Abortion, contraception and sex selection
- Ethical issues in practice

The actual implementation of the gender-sensitive modules by the trained educators in the classroom setting among MBBS students was carried out in three medical colleges. The intervention was undertaken in early 2016 with the semester six batches of MBBS students in three medical colleges viz. Government Medical College, Aurangabad; Government Medical College, Miraj; and Swami Ramanand Teerth Government Medical College, Ambejogai. All the GME trained educators belonging to the participant medical colleges were involved in the intervention. The trained educators teaching two subjects namely community medicine and obstetric and gynaecology were given the gender-integrated modules to be taught in the classes for semester six, along with a checklist of essential content to be covered. The checklist was to ensure that the students are introduced to the necessary gender content as per the semester curriculum.

The intervention was undertaken with 400 students belonging to batches that would be attending PSM and ObGy classes of semester six in three medical colleges. For the purpose of the study, the experimental group were those batches that had attended classes based

on the gender-sensitive modules. The control group comprised of students in their eighth semester of MBBS education, i.e. students who have recently undergone the MUHS curriculum of the sixth semester.

The entire process of teaching the course was documented. The trained faculty maintained a regular diary to document their experience in implementing the GME modules throughout the intervention period. Additionally, the CEHAT team documented the entire intervention to capture the details of the lectures held, level of attendance, methods used, processes followed, discussions with students etc. The preliminary findings of the intervention study show promising results in terms of increase understanding and sensitivity to gender amongst medical educators as a consequence of the use of gender integrated modules by their teachers.

6. Outcomes of the project

Key outcomes of the project was the availability of gender sensitive faculty in seven medical colleges of the State. These would be the resource for the rest of the state to demonstrate how they integrated gender in an innovative manner in the medical education. There is also the availability of pilot intervention to test the effectiveness and impact of gender integrated modules conducted in one semester in three medical colleges of Maharashtra there by generating evidence related to impact of integration of gender in medicine. In the project period, we have also developed gender integrated modules for five years of MBBS curriculum for five discipline and these have been submitted to DMER and MUHS for integration at the level of Maharashtra medical colleges. This endeavor has now paved way for taking the learnings of Gender perspectives integrated in medical education in Maharashtra to other states in order to enable similar initiatives.