

What Works?

Integrating Gender into Government Health Programmes in Africa, South Asia, and Southeast Asia

CASE STUDY SUMMARY REPORT:

Gender integration in
medical education in
Maharashtra and
other states (India)



Regional promising practice project overview

Strengthening health systems in order to improve health and gender-equality outcomes requires robust country leadership and governance. Widespread commitments have been made to integrate gender into health, yet substantial gaps remain in intent, level of investment, and implementation. There is a pressing need for more contextualised, practice-based evidence of the pathways along which gender integration can be institutionalised and sustainably resourced in government health programmes.

The United Nations University International Institute for Global Health (UNU-IIGH), in partnership with the School of Public Health at the University of Western Cape in South Africa, and the Public Health Foundation of India through the Ramalingaswami Centre on Equity and Social Determinants of Health in India, co-led a collaboration to document and analyse six diverse and promising practices of gender integration in government health programmes. The resultant case study series consists of six stand-alone summaries with key findings spanning policy, systems, institutional, and community levels. Detailed case study reports are forthcoming.

Gender based violence service provision in primary health care, Ethiopia (systems level)

Gender integration in medical education in Maharashtra and other states, India (systems level)

Right to safe abortion, Nepal (policy level)

Gender integration in Baguio General Hospital and Medical Center, Philippines (institutional level)

The “Ecole des Maris” programme – bringing men into reproductive health, Niger (community level)

The Gender Guidance Clinics of Tamil Nadu – meeting the healthcare needs of the transgender community, India (institutional level)

Gender integration in medical education in Maharashtra and other states (India)

This case study focuses on the integration of gender issues in medical education in Maharashtra, India, and its expansion to other states. The programme was selected as a promising practice because it addresses the integration of gender perspectives into medical education, recognised as vital for enhancing the competence of medical and healthcare professionals, enabling them to provide effective, culturally sensitive healthcare that promotes gender equity in health and improves wellbeing (House et al. 2021).

This study was led by Renu Khanna and Shreelata Rao Seshadri, with support from V Srinidhi, Anuradha Sreevathsa, Radhika Kaulgud, Amruta Bavadekar and Durga Vernekar. Based on in-depth analyses of interviews and published materials, it documents and analyses contextual factors that gave rise to the gender in medical education (GME) initiative, the enabling factors and challenges encountered, some of the outcomes achieved and lessons learned, including those that might be transferable to other contexts working on integrating GME, both within India and abroad (see Figure 1).

1. Background

Gender biases in medical education

Medical knowledge and practice have a long history of reinforcing harmful gender stereotypes both between providers and clients and within the health workforce (Verdonk et al. 2009). However, assessments of medical and public health educational materials continue to reveal significant shortcomings in addressing the social determinants of health, particularly gender-related issues. As a result, women and LGBTQ+ groups experience persistent gender bias and discrimination when seeking healthcare, which has a negative effect on their overall health and wellbeing.

Integrating gender perspectives into medical education is vital for enhancing the knowledge and competence of medical and healthcare professionals, enabling them to provide effective and culturally sensitive healthcare that promotes gender equity in health and improves overall

wellbeing (Brubaker et al. 2022). Globally, over the last two decades, there have been efforts to integrate gender in pre-service training of health professionals, with insights shared from experiences in Canada, Germany, Australia, US, Thailand, and the Philippines (WHO 2006). However, the pool of practice-based evidence on integrating gender into medical education from low- and middle-income countries remains limited.

The GME initiative

In India, an early pioneer of gender integration in medical education was the GME initiative, which began over 10 years ago in Maharashtra state. The Centre for Enquiry into Health and Allied Themes (CEHAT), an NGO in Maharashtra, along with the Maharashtra University of Health Sciences (MUHS) and the Directorate of Medical Education and Research (DMER), worked to implement gender-integrated modules in undergraduate

medical education. The first phase, between 2014 and 2017, was in Maharashtra; the second phase began in 2021, expanding beyond the state. This case study systematically documents and analyses contextual

factors that gave rise to the GME initiative, the enabling factors and challenges encountered, some of the outcomes achieved and lessons learned, including those that might be transferable to other contexts.

2. What has been achieved?

Based on interviews and reviews of documents, the GME initiative has led to a number of achievements including:

- **Gender-integrated modules.** These have been developed across five undergraduate medical disciplines, accepted by MUHS and available in the public domain.
- **Gender-sensitive resource materials.** These include teaching/learning materials and guidance materials, such as standard operating procedures, protocols and checklists.
- **Pools of trained medical educators and champions for GME.** Twenty educators were trained across five disciplines and seven medical colleges. Some incorporated gender concepts into their undergraduate teaching, as well as their postgraduate research. Among trained medical educators, some evolved into “champions” of GME – those who consistently integrate gender into their medical curricula.
- **A directive for implementing the gender-integrated curriculum,** which was issued to medical colleges across Maharashtra by the Academic Council of Maharashtra in 2018, once it approved the gender-integrated curriculum.
- **Generating evidence** through better record-keeping in hospitals, analysis of service data and gendered medical research, particularly at the postgraduate level.
- **Influencing/contributing to national quality standards.** For example, the Labour Room Quality Improvement Initiative (LaQshya) guidelines, which are based on GME work in Aurangabad Medical College.
- **Expanding beyond the seven original medical colleges** to a larger pool of educators, including other medical colleges in Maharashtra, as well as to other states (Karnataka, Telangana and Bihar).

Some evidence suggests that the initiative has supported improvements in gender-sensitive clinical practices, leading to improved quality of care, including reductions in caesarean section rates, reductions in episiotomies, reduced neonatal intensive care unit admissions, and increased patient satisfaction (Azim Premji University 2019). In the community and schools, departments of community medicine have worked to promote reflections on social norms¹.

¹ Full case study report forthcoming.

3. What contextual factors facilitated the establishment of the GME programme?

A range of national and organisational factors helped to initiate and scale up the GME programme in Maharashtra and other states. Globally, there was a growing understanding that medical education plays a critical role in shaping the future professional life of medical graduates. This was bolstered by the Reorientation of Medical Education Scheme for Southeast Asia (adopted by WHO in 1971 and launched in India in 1977), with a renewed focus on creating socially relevant and responsive medical doctors by revisiting medical education. Examples of such integration emerged from the global North but also from neighbouring countries, including the Philippines and Thailand.

National and state level (Maharashtra)

Supportive legal and policy frameworks

- In 2011, the Medical Council of India (MCI) published Vision 2015. This document contained guidelines for medical education comparable to global standards. The goal was for Indian medical graduates to become skilled and motivated primary care physicians for the community, both urban and rural, while also being globally relevant. Integration of ethics, attitude, and professionalism was suggested as a key curricular strategy in the document to enable graduates to function professionally.
- In 2017, India's National Health Policy referred to the urgent need to review and revise its medical and nursing curricula. It also acknowledged the adverse effects of gender-based violence on women's health and urged state governments to take steps to provide dignified, free and comprehensive services to survivors/victims in private- and public-sector health institutions.

- In 2019, MCI introduced the "Competency-Based Medical Curriculum" (CBME) MBBS curriculum, revised after 21 years. This curriculum offers a framework of competency-based learning in the attitudes, ethics and communications (AETCOM) domain. Gender-sensitive attitudes and communication are arguably important in nurturing an ideal medical graduate, but were missing from the earlier curriculum. CBME and AETCOM thus offered an opportunity to integrate GME.
- Changes in laws to improve gender equality in health also created an enabling environment to support GME efforts. Examples include amendments (in 2014) to the Medical Termination of Pregnancy Act, 1971, and the passing of the Criminal Law (Amendment) Act, 2013, which amended a number of offences in the Indian Penal Code.

Supportive actors in the medical education sector

- Openness and support of key actors in medical education institutions in Maharashtra were key, including the director of Medical Education and Research, who oversees and regulates over 40 institutions spanning medical and dental colleges, teaching hospitals, and various health units of the state, and the vice-chancellor of MUHS, which has affiliations with all colleges and institutions with health sciences programmes.

Organisational level (CEHAT)

Involvement in previous efforts to integrate GME

- Between 2002 and 2008, the Achutha Menon Centre for Health Science Studies of the Sree Chitra Tirunal Institute for Medical Sciences and

Technology (AMCHSS), a government training centre for health professionals, introduced a programme to integrate gender in medical education. Medical educators from institutions across India and the world received two weeks of training on gender concepts. CEHAT was one of the partners in this initiative. The AMCHSS initiative led to indigenous conceptualisation of GME content, as well as a pool of trainees from reputable medical colleges, who became seasoned gender-sensitive medical educators on faculty.

CEHAT's history and experience to address the health system's response to sexual violence

- CEHAT has led several training initiatives for medical professionals on VAW (violence against

women) and demonstrated evidence-based health systems models for responding to domestic and sexual violence. Dilaasa, a hospital-based crisis centre, was a joint initiative of the Municipal Corporation of Greater Mumbai and CEHAT, established to sensitise healthcare providers and train them to consider domestic violence as a health issue.

Donor partner with clout

- The United Nations Population Fund (UNFPA) Country Office is positioned as a credible partner on gender issues. The Maharashtra State UNFPA officer at that time (2012) was a passionate gender advocate and supported CEHAT's work.

4. What catalysed the GME programme?

Certain catalytic moments, whereby a change in the internal or external context opened a window of opportunity, which was seized by specific actors, included the following:

- **CEHAT's history, perspective, competencies and social capital**, combined with the interest of a like-minded donor partner in UNFPA, and the openness and receptivity of the medical education system. This built on previous efforts by the AMCHSS-GME programme and leveraged support from UNFPA. The combination created a powerful partnership to start the programme.
- The first part of CEHAT's strategy was aimed at winning the support of concerned stakeholders in Maharashtra. As such, they brought in UNFPA as a credible external agency. CEHAT then anchored the next phase of the GME initiative in Maharashtra, where the state UNFPA team had a deep interest in gender issues. The UNFPA brought the DMER and MUHS on board, enhancing legitimacy, and projecting the project as collaborative.
- **CEHAT and UNFPA brought partners together in a national consultation** with senior officials from the Department of Health and Family Welfare, DMER, MUHS, the State Women's Commission and the Indian Council for Medical Research, along with academics, activists, and organisations working on gender and health. The consultation served as the first step in seeking feedback and co-operation from senior health and medical education officials. CEHAT used findings from the 2005 gender review of medical textbooks to highlight the undergraduate medical curriculum's gender gap to the DMER and MUHS, and discussed findings from the previous AMCHSS initiative. During the consultation, it was revealed that MUHS had a mandate to implement curricular changes to integrate gender. The GME initiative was then implemented as a joint project of CEHAT and MUHS. This decision helped to address issues around differences between institutional mandates, which had hindered the integration of gender into medical education.

- Collaboration with stakeholders through the initial consultation was key factor in ensuring that feasible and operational details were worked out, responsibilities were taken, and everyone was on board to roll out the GME programme in Maharashtra.
- Medical colleges were involved throughout the training process. While CEHAT and UNFPA initially supported teaching and learning activities, medical colleges eventually made provisions for such activities. From a sustainability point of view, it was suggested that the training workshops could be hosted by selected medical institutions.

5. What actions allowed the GME programme to be sustained over time?

The collaboration between CEHAT, the DMER, MUHS, and support from UNFPA involved numerous discussions to engage in decision-making, and strategically plan and provide recommendations to conceptualise, design and implement the GME intervention. This produced successful outcomes, including expansion of the programme to other states. Key ingredients that contributed to this success included the following:

- **Establishment of a working group with key stakeholders.** A working group was formed to periodically review the project and comply with MUHS protocol for incorporating gender perspectives into the medical curriculum.
- **Expansion of the evidence base through ongoing research.** Meticulous process documentation of this programme was essential to run evidence-based advocacy efforts. Full-time personnel from CEHAT were assigned to this task.
- **Generation of evidence.** This included:
 - **A gender review of medical textbooks.** Latest editions of *ObG*, *PSM* and *Forensic Medicine and Toxicology* were reviewed from a gender perspective by trained medical educators and faculty of the respective disciplines. This review found biases and glaring gaps in gender awareness and provided concrete entry points for integrating gender into curricula.
- **A situational analysis with the seven participating medical colleges.** This analysis aimed to understand the gender perspectives of medical educators and elicit their opinions related to integrating gender into medical education and practice.
- **A quasi-experimental study.** Carefully designed to assess the effects of the programme, this study found significant results among students in understanding and appreciating gender perspectives in medicine.
- **Development of an evidence-informed curriculum and revisions in priority areas.**
 - Multiple discussions around core disciplines and themes ensured the successful integration of GME into the curriculum without significantly increasing the teaching load. This led to the development of gender-integrated modules across the five disciplines.
 - Curriculum revisions in five focus areas across the five disciplines were identified.

These were: (1) social construction of gender, and differences between “sex” and “gender”; (2) gender as a social determinant of health; (3) gender-based violence; (4) abortion, contraception and sex selection; and (5) ethics in practice. The next and most challenging step was ensuring that the newly developed content aligned with the actual hours of teaching allocated to lectures. Innovative teaching techniques were used to fit the timeslot of lectures.

- These modules were subsequently disseminated, both horizontally to other medical colleges in Maharashtra, and vertically to the National Medical Commission (formerly known as the Medical Council of India), DMERs and deans in other states.
- **Training of medical educators.**
 - A 2-week course on integrating gender into medical education was developed. The content drew on earlier courses for medical educators run by AMCHSS Trivandrum in the early 2000s, and on CEHAT’s course on the role of health professionals in addressing VAW.
 - The course equipped educators with an understanding of client-centred care, skills for planning gender-sensitive services within hospital settings, and for mainstreaming gender in undergraduate teaching. Specific emphasis was laid on contraceptive information and services, access to safe abortions while preventing sex selection, domestic violence, sexual violence, ethical issues (e.g. informed choice and consent), and issues related to privacy and confidentiality, among others.
 - The decision to train carefully selected (by their own fraternity) medical educators to be centrally involved in the roll-out of the GME project ensured ownership from medical educators for the revised curriculum, and ongoing support by these mentors. This may have contributed to overcoming barriers in implementing GME related to provider perspectives and workload in under-resourced medical colleges (financial and human resources).
- A support group of gender-sensitive subject experts from each of the five disciplines was created for ongoing learning by these medical educators. The resource persons and faculty/trainers continued to support the core group of champion medical educators during the process of gender mainstreaming the curriculum.
- After training the 20 medical educators, regional meetings of medical colleges were organised across Maharashtra to share the gender-integrated modules.
- **Continuous advocacy.** This involved relevant state institutions and the MCI advocating for the need to incorporate gender perspectives into medical curricula, including:
 - Joint letters to the Secretary, Medical Education and DMER.
 - A workshop with the deans of selected medical colleges. After being briefed on the project, the deans selected faculty members to train leaders from their respective medical colleges. The deans also were consulted on developing training workshops and identifying potential barriers to implementing the project.
- **Establishment of a virtual resource centre.** Because of the lack of research or textbooks on integrating GME, relevant teaching/learning materials were developed and a [virtual resource centre](#) was launched in 2014 as a live portal, updated on a regular basis by trained medical

educators. The web portal has also generated interest in the medical teaching community outside Maharashtra.

- **Leveraging networks of champions.**

- Investment in training and ongoing support resulted in a core group of gender-education champions who could advocate for the development of gender-integrated modules across five medical disciplines and gender-integrated medical teaching using interactive methodologies. These captured the interest of young students and led to increased classroom attendance and, ultimately, shifts

in mindsets and perspectives, and changes in clinical practices that led to better quality of care and improved health outcomes.

- The resource persons and faculty/trainers in the course continued to support the core group of champion medical educators during the process of gender-mainstreaming the curriculum.
- The core group of medical educators who participated in capacity-building workshops played a crucial role in determining the process of revising the curriculum.

6. What were the missed opportunities and challenges?

Although this case study distils crucial ingredients that led to gender integration in medical education, it also identified a number of missed opportunities and challenges that worked against the project. These challenges included:

- **Inadequate resources for different activities on mainstreaming gender into the medical curriculum.** Such resources are required not only for the GME programme, but also for monitoring and testing competencies of medical educators and medical students to provide gender-sensitive/responsive health services and generating research evidence on associations between gender and health outcomes. Resource centres, such as CEHAT, need to be acknowledged and adequately funded. The persons interviewed for this study stressed the need for ongoing support in terms of refresher courses, exchanges with others (to share experiences), publishing advice, and so on. The virtual resource centre needs to be updated and kept alive.

- **Systemic issues that proved to be a bottleneck.** Staffing shortages in certain disciplines, such as psychiatry and forensic medicine and toxicology, means that their representation in GME is a challenge. The institutional framework to allocate responsibility for carrying out GME training is unclear. While MUHS has given the directive and made the modules available, the mechanism for its implementation across all colleges is not clear.
- **Involvement of colleges and faculty has been less than consistent.** An important step towards institutionalisation is the sensitisation of the deans of medical colleges and chairs of boards of studies of different disciplines. The CBME context should be leveraged to convince them about the relevance and value of gender-integrated modules. The need for sustained leadership in individual colleges was highlighted. Deans play a key role in implementing gender-integrated modules. However, deans' tenures and other responsibilities constantly change, constraining their impact.

- **Buy-in from the medical fraternity continues to be an issue.** Trainees said the general ethos among the medical fraternity was that they “know better”, and any training that challenges their knowledge or attitude was not easily accepted. While they appreciated the ideas discussed, they found them impractical to implement in clinical settings, which are overburdened with high caseloads. One way to address this could be to create opportunities for

trained faculty from one institution to periodically meet to discuss their efforts, plans, and challenges for furthering GME in their medical colleges. But this appears to be lacking. There has been no internal meeting of trainees except for one held by CEHAT, in which the trained educators were asked to conduct a session in each department for medical students.

7. Conclusions

The GME case study shows that advancing gender equality in health is possible in medical practice through investments in undergraduate medical education. It indicates that consistent and thoughtful interventions can institutionalise change through the education of medical practitioners. This can contribute to the development of gender champions within the medical education system, further supporting intergenerational change to make medical practice more gender-responsive. Building this constituency and institutionalising these changes within the medical community remains a long-term effort, especially given multiple systemic constraints, including financial and human resource shortages, both for the GME programme and for the health system at large. Public health systems in India are overburdened (Dutta

et al. 2018), and medical staff work in resource-constrained environments with huge patient loads (Malik 2022), leaving little time or interest in developing an understanding of gender discrimination in health or, more broadly, the social determinants of health. Integrating gender, or indeed any non-clinical discipline, into the curriculum means confronting these constraints head-on.

This example from Maharashtra provides important lessons, in India and in other contexts, for a way forward to enhance the quality of pre-service medical education, both as a prerequisite for enhancing quality of care, but also for achieving the broader goals of universal health coverage and gender equality (Frenk et al. 2010; Kruk et al. 2018).

8. References

- Azim Premji University (2019). “Integrating gender in medical education and clinical practice: The transformation of the Department of Obstetrics and Gynecology, Government Medical College, Aurangabad, Maharashtra”. In *Stories of change: Case study challenge – Case studies on development action and impact*.
- Brubaker, L., Marsh, E., Cedars, M. I., Fenner, D., Murtha, A., Goff, B., & Khabele, D. (2022). “Promotion of gender equity in obstetrics and gynecology: Principles and practices for academic leaders”. *American Journal of Obstetrics and Gynecology*, 226(2), 163–168.
- Dutta, A., Paul Abraham, B., Roy, R., & Seetharaman, P. (2018). “Public health system performance challenges in India: A systems thinking approach”. (January 24). George Mason University School of Business Research Paper, (18–4).
- Frenk, J., Chen, L., Bhutta, Z. A., Cohen, J., Crisp, N., Evans, T.,... & Zurayk, H. (2010). “Health professionals for a new century: Transforming education to strengthen health systems in an interdependent world”. *The Lancet*, 376(9756), 1923–1958.
- House, A., Dracup, N., Burkinshaw, P., Ward, V., & Bryant, L. D. (2021). “Mentoring as an intervention to promote gender equality in academic medicine: A systematic review”. *BMJ open*, 11(1), e040355.
- Kruk, M. E., Gage, A. D., Arsenault, C., Jordan, K., Leslie, H. H., Roder-DeWan, S.,... & Pate, M. (2018). “High-quality health systems in the Sustainable Development Goals era: Time for a revolution”. *The Lancet Global Health*, 6(11), e1196–e1252.
- Malik, M. A. (2022). “Fragility and challenges of health systems in pandemic: Lessons from India’s second wave of coronavirus disease 2019 (COVID-19)”. *Global Health Journal*, 6(1), 44–49.
- Verdonk, P., Benschop, Y. W., De Haes, H. C., & Lagro-Janssen, T. L. (2009). “From gender bias to gender awareness in medical education”. *Advances in Health Sciences Education*, 14, 135–152.
- WHO (2006). “Integrating gender into the curricula for health professionals”. Meeting report. http://www.who.int/gender/documents/GWH_curricula_web2.pdf.

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Figure 1: Key catalysts, contextual enablers and sustaining mechanisms for gender integration in medical education in Maharashtra and other states

