

Education paper

Integrating gender and culture into medical curricula: putting principles into practice

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ABSTRACT

In a multicultural and diverse society with vast health disparities, facing rapid socio-economic and demographic change both in the community and within the medical profession, it is imperative that our medical education system addresses appropriately issues arising from this diversity. The educational task is not only to encourage the development of our medical students in their understandings of how human diversity affects the health of their patients, but also to help them understand how it affects their own development as individuals and health practitioners. For several years, and in particular since introducing its new curriculum, the

University of Adelaide Medical School has been developing innovative appropriate methods to encourage adequate discussion and learning about human diversity by its undergraduates. This article describes some of the techniques used to introduce gender and cultural discourse into the medical curriculum, and the challenges faced by medical educators in their efforts.

Keywords: culture, curriculum, diversity, gender, integration, medical education, medical personnel, PBL, professional development

Introduction

It is increasingly clear that gender, race, culture, sexuality and other aspects of human diversity have significant effects on the health of patients. The worldwide negative impact of social, economic and cultural inequality on women's health has long been documented (Doyal, 1995) and other international reports provide evidence that women (World Health Organization, 1998) and patients of non-dominant cultures (Dennis, 2001) receive inadequate medical care. The health of men also is often threatened by social expectations. For example, in white Australian culture, as in many other western cultures, it is expected that men perform heavy manual work, and it is accepted that young men exhibit risk-taking behaviour that results in a higher

rate of accidental injury and death. There is significant concern that medical curricula reinforce social stereotyping of women and men. Philips and Ferguson (1999) showed that after only three years of medical education, Canadian medical students equated the term 'adult' with 'man', and 'woman' with 'not adult' or 'other'.

However, human diversity influences not only the experience of patients, but also that of medical students and practising doctors. Research from one Swedish medical school concluded that the degree to which a medical practitioner displays gender awareness may be one factor affecting the distribution of men and women in different specialties. Risberg *et al*

(2003) reported that although all male and female doctors in their study considered gender important in physician–patient consultations and to some extent in preceptor–student relationships, male doctors rated gender of lower importance in these relationships than did female doctors. Other studies report on the effects of sexual harassment and gender discrimination on medical education and career choices (White, 2000; Nora *et al*, 2002; Nicholson, 2002; Heru, 2003; Quinlivan *et al*, 2003). Indeed, there are several dimensions to the contemporary discourses about gender and diversity other than women’s health and men’s health. For example, cultural differences in gender expectations, effects of physician or patient gender in rural medicine, the ‘feminisation’ of medicine, and the impact of sexual identity and preference on the teaching and practice of medicine.

As women and students of non-English-speaking backgrounds born in Australia and overseas are enrolling in medicine in increasing numbers, and research shows that women patients prefer women doctors (Young *et al*, 1998), it is timely that our approaches to medical education, particularly relating to these aspects of human diversity, are addressed. In November 2003 the University of Adelaide in South Australia funded a project through its Department of General Practice, reviewing current practice in teaching medical students about human diversity. The goal of the ‘Teaching Gender and Diversity’ project was to develop understandings of recent innovations in the teaching of diversity in medicine, with particular emphasis on gender and its intersections with culture.

The Teaching Gender and Diversity project

The basis of the project was a review of published literature describing current practice in the teaching of gender and diversity in medical schools internationally and nationally. There was a sense in some parts of the University of Adelaide Medical School that the school could do something more, or better, to aid its students in their development. The Teaching Gender and Diversity project was funded by a University of Adelaide Learning and Teaching Grant to review what other universities were doing to encourage medical student learning about diversity, identify good practice, and then compare the University of Adelaide against any identified best practice. The project included a comprehensive review of the gender and diversity content of the University of Adelaide medical curriculum (Curriculum 2000), and individual faculty members’ practice in discussing gender with medical students at the University of Adelaide. The methods used to map diversity content in Curriculum 2000

included review of the year level learning objectives, curriculum committee minutes and selected current concept maps; interviews with course conveners, year management committee conveners, heads of departments and attachment co-ordinators; and surveys of staff members both within and outside the Faculty of Health Sciences.

The literature review did not identify any published reports of major curricular change in the teaching or assessment of medical students in the area of human diversity, or in the evaluation of pedagogic practice in this area. It found that most literature focused on content for inclusion, with less emphasis on processes for successful introduction of the content. However, the book *Teaching Gender, Teaching Women’s Health: case studies in medical and health science education*, edited by Lenore Manderson (2003), provides some preliminary work addressing the incorporation of teaching about both sex and gender in various university curricula.

Phase 2 of the Teaching Gender and Diversity project addressed the medical curriculum at the University of Adelaide, by reviewing the points at which and the methods by which a gender perspective or diversity perspective (concentrating particularly on cultural diversity, but recognising references to other aspects) has been included in teaching medical students. This article focuses on some of the approaches used at the University of Adelaide to introduce appropriate discussions of gender in particular, but also other aspects of human diversity, into its medical curriculum.

Curriculum 2000

The University of Adelaide started to refocus its medical curriculum in 1988, when members of the medical school convened a three-day conference to redefine the qualities of the graduates they wished to produce for the future, to develop a vision for and to begin a process of curriculum development directed at bringing those objectives to fruition.

Ten years later the Curriculum Committee initiated a total re-examination of the type of graduate the medical school would wish to produce for medical practice after 2010. In response to this review, Curriculum 2000 was developed with the overriding consideration of identifying the qualities, skills and abilities that would best serve such a medical practitioner, and to devise a strategy for producing medical graduates who would effectively use these attributes in practice. A ‘Concepts and Themes’ working group was charged with the task of identifying core concepts to be included in the curriculum. To ensure that concepts from all areas were identified, small, multidisciplinary working groups were convened to discuss the required concepts, including special interest groups which

developed the concepts and teaching approaches for areas such as gay and lesbian health, disabilities, and indigenous health. These groups clearly identified the need for future medical practitioners to not only consider the special health needs of these groups, but to be aware of, and perhaps to value, the entire range of human diversity.

Curriculum 2000 commenced in the year 2000. The sixth (final) year course of the new curriculum is being taught for the first time in 2005. This new curriculum was based on a form of student-centred learning with a programme design emphasising the acquisition of appropriate learning skills for lifelong use, the importance of community-based teaching with maximum exposure to patients, and the development of an understanding of the environmental and social determinants of health. In the early years, Curriculum 2000 has less large group didactic teaching than the previous curriculum, and most aspects of the course have students working in small groups with individual tutors. This structure offers opportunities to develop innovative and contemporary approaches to the learning and teaching of medicine. The other key principles of Curriculum 2000 are student learning through horizontal and vertical integration of core concepts being presented to the students as they progress through the course, and development of an understanding of the ethical aspects of medicine. The concepts are continuously revisited and expanded from one year to the next – both horizontally (within the curriculum streams each year) and vertically, through the six years of the undergraduate medical course. It encourages a deep approach to learning based on higher order experience, for example through reflective practice. A further underlying principle of Curriculum 2000 is that assessment matches the learning – through curriculum planning, design and evaluation, and in the actual delivery of teaching.

There are three curriculum streams, all commencing in the first year, that provide learning experiences for the medical students: medical personal and professional development (MPPD), which focuses on developing the professional and interpersonal skills of future medical practitioners, including communication skills; scientific basis of medicine (SBM), which uses problem-based learning (PBL) cases to develop students' understanding of the scientific context of medicine, with each case supported by carefully staged interactive lectures addressing core concepts; and the clinical skills programme that concentrates on the students developing the history-taking and examination skills required in medical practice. While most of the MPPD and SBM education occurs on campus, clinical skills development occurs at a number of sites that include on-campus clinical skills laboratories, hospital settings and community sites such as general practices and community health centres. However, in

view of the integrated nature of the curriculum, the definition of and the distinctions between these streams are not emphasised and there are many areas in which they intermesh.

The development and delivery of Curriculum 2000 created new opportunities to include discussion of the potentially sensitive areas of gender and diversity in the educational experiences of students in an appropriate manner. The recognition of the importance of inclusion of such discussion in the medical curriculum is largely due to the efforts of Dr Ted Cleary, the Associate Dean for Curriculum and founding Director of the Medical Education Unit at the University of Adelaide. This article describes approaches used at the University of Adelaide to include gender and culture in PBL cases, and in the third year clinical skills programme.

Scientific basis of medicine

PBL at the University of Adelaide medical school occurs over three to six two-hour sessions, depending on the year level. Groups of eight to ten students are allocated a tutor, who progressively releases information as they work through the case. In most cases, this information is presented as history, examination findings and investigation results, and is based on the students' working hypotheses and justification of the need for particular information. By Year 3, the tutors are generally clinically qualified, although in the earlier years of the course this is not a requirement. The tutors attend a case briefing session in the week prior to the case being presented to students. The briefing session provides the opportunity for tutors to review the case and accompanying notes, discuss learning objectives for the case, and raise any concerns they may have with the case structure or learning objectives.

In the curriculum planning process for the completely rewritten curriculum, both the Curriculum Committee (overseeing the whole curriculum) and the committee responsible for managing the medical personal and professional development theme developed a strong view that issues related to diversity needed to be embedded in the mainstream of the curriculum. One key way of achieving this was to incorporate diversity into the case studies on which the curriculum is based. It was decided that one way of normalising members of these groups was to ensure they were represented in PBL cases such that their membership in a special interest group was not a factor of their disease. An example of a case that includes facets of diversity such as gender, sexuality and socio-economic circumstances is that of patient 'Bonnie Thomas' presented to Year 2 students. The case describes a 68-year-old woman who presents to

her general practitioner (GP) with chest pain. As in all cases, information regarding the patient presentation is offered in stages, with students developing hypotheses about the causes and underlying mechanisms of chest pain. Their hypotheses are tested against further history, examination and investigation results as requested by the students. The students need to justify their requests for further information on the basis of their postulated mechanisms and new and previously learned knowledge.

In the case of Bonnie Thomas, the cause of her symptoms is ischaemic heart disease. The initial presentation is with angina, and later in the case she presents with prolonged chest pain and dyspnoea due to a myocardial infarction. Learning objectives that the students are expected to identify and address include:

- to revise the structure and function of the cardiovascular system
- to identify the various causes of chest pain
- to develop a clinical approach to chest pain
- to describe the pathology and pathophysiology of ischaemic heart disease
- to understand the principles of management of ischaemic heart disease.

However, students are not expected to focus merely on the biological and pathological aspects of disease, and the PBL process allows for and expects students to identify and deal with the other aspects of each case. In an integrated curriculum, students are introduced to the principles of history taking in the first year in MPPD, clinical skills and PBL components of the course, and begin to apply these principles early. The cases used in the PBL programme aim to have a balance of ages, gender, ethnicity and sexuality (about 10% gay, lesbian, bisexual or trans-sexual). The intent is to raise student awareness of the diversity of living arrangements and personal relationships, as a part of society, and not just where 'medically relevant'. Such information is available in every case, and the students are expected to seek this information and incorporate it into their understanding of the case. In the case of Bonnie Thomas, students learn that the patient lives within a supportive relationship with her female partner of 30 years, has two adult children from an earlier relationship, who are also supportive, and is a retired librarian, who is financially comfortable. The tutor notes will contain relevant references to particular aspects of diversity that may potentially impact on the social and medical issues, and possible methods by which students can be encouraged to engage with and discuss these issues in their groups. In the case of Bonnie Thomas, although specific detail regarding how, for example, gender may affect the presentation and management of ischaemic heart disease is not emphasised in the student handouts, tutors are encouraged

to establish a 'what if' scenario for the students, to facilitate their learning about the documented differences in presentation of ischaemic heart disease in males and females. 'What if the patient presented with acute severe shortness of breath and no chest pain?' is a fairly simple trigger question that can generate discussion among the students about sex differences in the presenting symptoms of this condition. Having addressed the fairly 'safe' topic of the impact of sex and gender on clinical presentation, it becomes easier to engage the students in discussion of the potential impact of gender on social issues, for example the expectation that women are the primary caregivers in a family, and that the longer predicted lifespan of women may result in a higher burden of chronic illness in this group. It also allows students to discuss the effects of gender on the health of men, to identify higher rates of risky behaviour and lower rates of medical consultation as significant contributors to the health and ill health of men.

The integrated nature of Curriculum 2000 not only allows students to discuss issues of diversity in their allocated PBL time, but also encourages them to raise these issues with their clinical tutors in parallel streams at MPPD tutorials and during clinical skills sessions.

Clinical skills

The third year Clinical Skills Three (CS3) course has as one of its core themes the interaction of culture and gender in the medical consultation, which provides another opportunity, along with the PBL cases, for students to discuss the impact of societal and cultural expectations on patients, doctors, and the students themselves. Other core themes are the unique aspects of general practice in urban and rural Australia and elsewhere; psychosocial issues; ethical practice; and issues of public health.

The gender and culture module was developed with reference to and support from the Yaitya Purrana Indigenous Health Unit at the University of Adelaide, and input from experts at other Australian medical schools. It draws upon theory that culture and gender are socially constructed and its pedagogy from theory concerning the role of democratic dialogue in emancipatory education. Sources of intellectual inspiration include indigenous academics of Australia and New Zealand and also the work of theorists such as Jurgen Habermas, Paulo Freire, Donald Schon, John Dewey, Henry Giroux and others (Lawless, 2005). In the campus-based sessions, a multicultural teaching team presents to 45 students at a time. Guest speakers from Sudanese, Iranian and indigenous Australian staff, as well as male and female white Australians, use one half-day session to present the students with perspectives

of health in different settings. The material is presented in the context of the lived experience of the triad of doctor, patient and student. For example, an indigenous patient's story, a Sudanese-Australian's vision of the culturally competent doctor, and a mini-lecture on treating the Muslim patient may be presented to emphasise that all individuals have both culture and gender. Compulsory reading material encourages students to take the issues further. The team leader acknowledges to the students that dealing with issues of gender and cultural diversity may be sometimes difficult and uncomfortable, and that often there are no clear-cut right or wrong answers. It is emphasised to the students that engaging with and reflecting on their own perceptions and reactions to experiences affected by culture and gender will enrich their capacity to be clinically competent. The rationale for reflective practice is made clear at the end of the induction seminar, when it is shown that reflective practitioners are curious about and concerned to reflect on gender and culture.

Off-campus learning occurs in general practices and in specialised community health centres. Special placements are available with the Migrant Health Service, Indigenous Health, and in services providing for homeless, mainly male patients and intellectually disabled patients. Preceptors are culturally diverse – many work in the socio-economically disadvantaged outer northern suburbs of Adelaide, and many are Asian-Australian. In these settings, students quickly learn about patients in their own communities, through experiences as simple as male students being refused permission by female patients to be present at or perform intimate examinations, and the knowledge that some preceptors have specifically asked that no male students be assigned to their practices, factors that impact on student opportunities for learning about social issues in medicine.

CS3 uses portfolio-based learning to encourage students to reflect on their experiences of the clinical encounter. In these portfolios, students are required to write a reflective journal in which they can include their thoughts on their placements as well as the course itself. The students are encouraged to discuss their experiences with peers, preceptors, and the clinical skills facilitators. The purpose of the portfolio, which is not formally assessed, is to encourage the development of reflective practice and therefore to deepen their understanding and encourage higher order learning. Students must demonstrate that they have attempted such reflection or they may not sit the end-of-year exams. The students take this very seriously, and seek out extra guidance on reflective practice. Online prompts as well as real-life demonstrations of reflective practice by teaching staff are used to guide the students in their development of this skill. More recently, an optional structured reflective

exercise was included in the student portfolio and was warmly welcomed by the students. In addition, exemplars of reflective writing were discussed with the students at the induction seminar, and samples were given as a handout. The samples covered the health of an indigenous male child, demonstrating aspects of both gender and cultural influences.

Challenges

A number of issues come under the umbrella of human diversity, as do a range of perspectives, positions and assumptions. Gender in particular is a controversial and often unpopular contemporary social issue, and experiences at this university and others indicate that many staff and students are reluctant to engage in uncomfortable discussions that may challenge the ideal that all people are treated equally and the same. It is clear that gender needs to be strategically embedded in curriculum design and evaluation as well as institutional practices such as curriculum mapping, committee membership, educational research and reporting requirements. At the time that Curriculum 2000 was being developed, the medical school at the University of Adelaide was able to provide significant leadership support for its curricular innovations addressing gender and other aspects of diversity. This support was provided by a proactive Executive Dean for Curriculum, and members of the Curriculum Committee and Medical Personal and Professional Development committee.

In the future, the focus should be on maintaining a place for gender issues in the curriculum and sustaining it in the long term, in a way that enlivens the issues and enriches student learning. In addition, it is important to foster and affirm key personalities who influence and promote awareness of gendered medical issues. To achieve this, it is essential that medical educators be supported in practical ways to achieve the objectives of the curriculum. Support from senior male academics has been a significant influence at the University of Adelaide. Senior staff members need to actively engage in promoting staff development and fostering career pathways for medical educators. There is also an underlying need for appropriate time release and adequate resource allocation to educators to ensure the inclusion of accurate, evidence-based and timely information in all learning opportunities.

Beyond the immediate learning environment are other potential development areas. General staff are often in a unique position to support gender issues through flexibility in student administration (for example, supporting pregnant students and students with family responsibilities), and advocacy for the

issues based on their student knowledge and their own scholarly endeavours.

A significant contributor to the successful integration of gender and human diversity issues into medical curricula must be appropriate staff development. It is clear that if educators are unwilling to engage with the issues of gender and value it in medical education curricula, it is less likely that students will. A common challenge to all medical schools is that of engaging their academic faculty in staff development. These members of staff are often overloaded with clinical, research, and teaching commitments, and need to be convinced that attending these sessions is a priority that will result in some measurable academic benefit. The University of Adelaide attempts to include appropriate and accurate information about diversity issues in the tutor briefings for PBL cases. As most of the tutors are paid for their teaching, they usually attend the weekly briefings. These sessions provide the opportunity to generate discussion about issues among the tutors themselves. Although there may be some resistance to these discussions from individuals, on the whole the tutor group accepts that the students should be encouraged to discuss these issues, both in the context of the PBL case and in related MPPD sessions. To some extent there may be some preaching to the converted, as those tutors who find it difficult to engage with these issues may cease their appointments. It is crucial that staff development occurs in constructive ways to empower and challenge our understandings and pedagogic practices. It needs to reach both those who are already committed and interested as well as those who have not considered the issues important, if at all.

Interviews with individual faculty members carried out during the Teaching Gender and Diversity project did not identify any evidence of overt sexist or racist attitudes, although the project was not designed specifically to address this. However, many members of the clinical teaching faculty believed that these issues did not require specific teaching time, as appropriate attitudes would be learnt by observing clinical teachers' interactions 'at the bedside'. This of itself suggests that some effort is yet required to engage all of the teaching staff in appropriate discussions of the issues of diversity. In order to achieve this, the support of senior academic staff and leaders is again essential, as are institutional policies and practices that support this work.

More research is required to identify appropriate teaching and learning methods. How do we create the learning environment that students need when dealing with challenging contemporary issues in medicine and in society? How do we deal with groups that freeze out controversial issues, for example by refusing to engage with teachers, tutors and guest lecturers? Those frozen silences can be disempowering for staff and

students – and patients too if they are there. It is interesting that we have not seen hot explosions or combustions in the classroom as found in other academic disciplines, but perhaps more telling is the animated enthusiasm reflected in feedback sheets after what appeared to be polite refusal to engage in public debate and discussion. We have also seen students enthusiastically support our teaching, and invite us to their student club events so they can discuss it in a peer-friendly forum. What can this tell us about our teaching and our students?

Successfully integrating human diversity into the curriculum requires constant vigilance and tireless effort. In a society facing vast health disparities it is essential that our doctors can deal with the associated challenges in a competent and sensitive manner. We believe that although there is a need for significant improvement in the way that our education system addresses these challenges, by implementing several simple approaches to integrating diversity into the medical curriculum the University of Adelaide medical school has enhanced the learning experiences of its undergraduates and enriched their understanding of the environmental and social determinants of health.

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CONFLICTS OF INTEREST

None.