

# Sexual health innovations in undergraduate medical education

E Ferrara<sup>1\*</sup>, MP Pugnaire<sup>1</sup>, JA Jonassen<sup>2</sup>, K O'Dell<sup>3</sup>, M Clay<sup>4</sup>, D Hatem<sup>5</sup> and M Carlin<sup>1</sup>

<sup>1</sup>Office of Medical Education, Department of Family Medicine and Community Health, University of Massachusetts Medical School (UMMS), Massachusetts, USA; <sup>2</sup>Department of Physiology, UMMS, Massachusetts, USA; <sup>3</sup>Department of Obstetrics and Gynecology, UMMS, Graduate School of Nursing, Massachusetts, USA; <sup>4</sup>Office of Ethics, UMMS, Massachusetts, USA; and <sup>5</sup>Department of Medicine, UMMS, Massachusetts, USA

**Recent national and global initiatives have drawn attention to the importance of sexual health to individuals' well-being. These initiatives advocate enhancement of efforts to address this under-represented topic in health professions curricula. University of Massachusetts Medical School (UMMS) has undertaken a comprehensive effort to develop an integrated curriculum in sexual health. The UMMS project draws upon the expertise of a multidisciplinary faculty of clinicians, basic scientists, a medical ethicist, and educators. This article describes the project's genesis and development at UMMS, and reports on three innovations in sexual health education implemented as part of this endeavor.**

*International Journal of Impotence Research* (2003) 15, Suppl 5, S46–S50. doi:10.1038/sj.ijir.3901072

**Keywords:** sexual health; human sexuality; undergraduate medical education

## Introduction

This article will describe three innovative curricular components of the Sexual Health Initiative Project (SHIP) implemented at University of Massachusetts Medical School (UMMS) in AY 2001–02. UMMS was selected as one of seven schools in the US to receive a 2-y grant to develop and implement a comprehensive, integrated sexual health curriculum across the 4 y of medical education. The innovations described in this article are a representative sample of the comprehensive SHIP curriculum being implemented at UMass.

## Background

In the US over the past 10 y, there has been a growing consensus to address sexual health as a critical aspect of individuals' well-being. Most recently, Healthy People 2010, a federal program launched in 2000, designated 'responsible sexual behavior' as one of 10 priority health indicators for

the US for the first decade of the new millennium. On a global level, the Pan-American Health Organization (PAHO), World Health Organization (WHO) and World Association for Sexology (WAS) issued recommendations for action to promote sexual health, including the strategy to 'provide education and training in Sexual Health for health and allied health professionals.'<sup>1</sup>

Despite the impetus of these national and global initiatives, recent studies indicate that sexual health topics are often not broached by physicians within the medical encounter. Among the barriers to communication about sexual health are: lack of provider comfort and knowledge; provider biases about sexual issues; fear of offending patients; and time constraints within the typical patient encounter.<sup>2–4</sup>

These studies are all the more remarkable when juxtaposed with the fact that sexual health is overwhelmingly viewed by the general public as a 'quality of life' indicator. In a recent US poll of 500 adults 25 y or older, 94% stated that sexual enjoyment added to quality of life at any age.<sup>4</sup> This same study indicated that 75% of those surveyed believed a doctor would dismiss sexual health concerns raised by a patient, and 68% believed they would embarrass their doctor by discussing sexual dysfunction.<sup>4</sup> Other studies have found that on average, only 25% of primary care physicians take a patient's sexual history (range 11–37%), and that the reason most often cited for not taking a sexual history is a lack of training.<sup>5–7</sup>

\*Correspondence: E Ferrara, MA, Assistant Professor of Family Medicine and Community Health, University of Massachusetts Medical School, Office of Medical Education, 55 Lake Avenue North, Worcester, MA 01655, USA. E-mail: emily.ferrara@umassmed.edu

In a 1999 survey of 125 medical schools in the US, Canada, and Puerto Rico (72% response rate, conducted by Solarsh and Lewis, University of Virginia), authors found that 61% of medical students receive 10 h or less of training in human sexuality/sexual functioning, 17% receive 11–19 h, and 15%, 20 h or more. At UMass, students receive more than 20 h of sexuality education within their medical school curriculum. Prior to the Pfizer-funded curriculum development initiative, the core elements of UMMS's 4-y curriculum included:

- *Year 1:* sexual history as an element of the complete medical history and reproductive options counseling;
- *Year 2:* lectures on conducting sensitive gynecologic (GYN) and genitourinary (GU) examinations and practice sessions with standardized patients; lectures on human sexuality and sexual dysfunction; small group case discussions, including assessing risk for HIV;
- *Year 3:* 'Communicating About Sexuality' curriculum integrated across five required clerkships in medicine, family medicine, psychiatry, pediatrics, and ob-gyn.

Despite this relatively extensive coverage of sexual health topics, in 2001 UMass students indicated on the Association of American Medical College's Graduation Questionnaire that, although greatly improved as a result of a focus on sexual health communication skills through the Macy Initiative in Health Communication project (begun in 1999), 19% of graduating students at UMass (compared to 28% in 1999) continued to feel that instruction time in human sexuality was 'inadequate.'<sup>8</sup>

## Project overview

The UMMS was one of seven US schools to be selected to receive an unrestricted medical education grant from Pfizer, Inc., to promote sexual health as a core element of comprehensive health care, through the development of an integrated, 4-y medical school curriculum. The project is administered centrally through the school's Office of Medical Education (OME), and draws on a multidisciplinary committee of faculty experts. The support of several divisions of the OME, including Research and Evaluation, Standardized Patient Program, and Curriculum and Faculty Development, is integral to the project. Project leadership is provided by a family practice clinician and vice dean for undergraduate medical education, who is the Principal Investigator on the project; an educator based in the Office of Medical Education, who is

Project Director; and a multidisciplinary executive committee including: a reproductive physiologist, a certified nurse midwife specializing in urogynecology, a general internist, and a medical ethicist. This leadership team developed the school's curriculum plan, working in consultation with an advisory committee and key faculty members representing a range of perspectives in sexual health education including urology, obstetrics and gynecology, psychiatry, pediatrics, geriatrics, neurology, family medicine, and internal medicine.

In a survey of 1st and 2nd year UMMS medical students, conducted in December 2001 during the first semester of the Pfizer project (response rate of approximately 32%), respondents identified the following challenges and barriers to discussing sexual health with patients:

- societal attitudes toward sexuality as private;
- student lack of knowledge;
- patient discomfort and embarrassment;
- student discomfort and embarrassment;
- cultural differences, defined as differences in culture/ethnicity, language, gender, age, and sexual orientation.

UMMS students identified the following topics as the most challenging sexual health issues they would face as practitioners: patients who engage in extramarital affairs, cheating and multiple partners, patients affected by domestic violence and sexual abuse, taking a sexual history from older patients, working with nonadherent patients in sexually transmitted disease (STD) high-risk groups. Many of these topics are highly charged, taboo subjects, with ethical implications.

The UMass SHIP was designed to address the following areas of sexual health knowledge, skills, and attitudes in the medical school curriculum: core skills in sexual history-taking and physical exam, skills in self-awareness and reflective practice, and knowledge of population-specific sexual health, dysfunction, and treatment.

The SHIP project builds on the legacy of the Macy Communication Skills Curriculum Initiative in sexual health topics implemented in academic year (AY) 1999–2000 that targeted the third year medical school curriculum. The Macy curriculum included coverage of the following topics:

- Adolescent sexuality (family medicine)
- Healthcare for gay/lesbian youth (pediatrics)
- HIV risk reduction counseling (medicine)
- Reproductive counseling (ob-gyn, medicine)
- Lesbian healthcare (ob-gyn)
- Ethical issues in women's sexual health (ob-gyn)
- Medication-related sexual dysfunction (medicine, psychiatry)

- Post-traumatic stress disorder (PTSD) following rape (psychiatry)

## UMMS curricular innovations in sexual health

### *The basic science interface: dissecting the pelvis*

A reflection session on 'Dissecting the Pelvis: Sharing Thoughts, Questions and Reflections' was offered as an adjunct to the Anatomy Course for first year students in AY 2001–02. Sponsored by the Office of Medical Education and the Office of Ethics, the goals of the session were to: (1) provide first year students with the opportunity to discuss the clinical importance of the knowledge being gained through dissecting the pelvic region in the Human Anatomy course; and (2) share ideas about coping strategies for dealing with intense emotional and physical reactions and feelings that dissecting the pelvis may evoke.

The method utilized for this reflection session was facilitated discussion in small groups. Each small group was cofacilitated by a team of a physician–educator and a 4th year medical student. These facilitators were selected based on their level of teaching experience in sexual health topics, their comfort with and skill in facilitating discussion on sensitive topics in medical education, and their understanding of the value of reflection in medical education. Stimulus questions were provided to guide the discussion, and included:

- What is the clinical importance of this region of the body?
- Does the fact that you will be dissecting genitalia raise any issues for you?
- How do physicians and medical students deal with sexuality when they have to touch intimate parts of a patient's body?

One-quarter of the class (25 students) opted to participate in this elective session. A post-session survey was administered to the entire class (totaling 100 students), including to those who did not elect to participate in the reflection session. In all, 66 responses were received (66% response rate); of these, 21 participated in the reflection session and 45 did not. Survey results indicated that when compared to those students who did not participate in the reflection session, the students who elected to participate reported a higher degree of apprehension prior to doing the pelvic dissection (14% reported that they were 'very apprehensive,' compared to 2% of the students who did not participate; and 19% reported that they were 'not at all apprehensive,'

compared to 35% of the students who did not participate).

In total, 48% of those who participated in the session indicated that participation reduced their apprehension about dissecting the pelvis 'very much' or 'somewhat'; 48% reported 'a little' reduction in apprehension as a result of the session, and 5% reported 'not at all'. All respondents indicated that the session was an appropriate forum for talking about issues related to dissecting the pelvis, and 95% would attend activities like this in the future to discuss difficult issues and experiences.

### *Cultural competence: caring for gay, lesbian, bisexual, and transgendered (GLBT) patients*

In the third year of the medical school curriculum at UMass, the interclerkship program provided a ready venue for the integration of sexual health topics within existing 1-day intensive programs on important topics not adequately covered in other parts of the curriculum. UMMS established the interclerkship program in 1995; since that time, an average of eight 1-day interclerkships are conducted each year, on topics such as domestic violence, multiculturalism, end of life care, and complementary and alternative medicine. The interclerkship model provides a focused, intensive educational experience using a CME-type format, which offers diverse program components including: plenary speakers, panel discussions, small group discussion, and skills-building workshops using standardized patients.

One of the SHIP innovations implemented within the interclerkship context was a 1-h workshop on 'Medical Risks of the Gay, Lesbian, Bisexual and Transgendered (GLBT) Community', offered as a component of the Interclerkship on Multicultural Issues. Topics covered included: introduction to GLBT community as a 'multicultural' group; the component strands of sexuality (orientation, biological anatomy, gender identity, and social sex role); the impact of homophobia and heterosexism in medicine; and general health risks of the LGBT community: psychiatric disorders, hate crimes, access to health care, substance use, and domestic violence. Following this overview, the particular health risks of the various segments of the GLBT population—lesbians, gay men, GLBT and questioning adolescents, and transgendered individuals—were covered. The workshop, which highlighted evidence-based medical data where available and emphasized clinical implications, was developed and presented by the author (EF) in collaboration with a 3rd year medical student. Student advocacy for inclusion of sexual health topics in the curriculum has been critical to

successful implementation, and served as the impetus for the Multicultural Interclerkship's course directors to include GLBT health as a component of 'cultural competence,' most frequently associated only with racial and ethnic cultural differences.

A total of 45 students, representing 45% of the total class of 100 students, attended the workshop. In all, 95% of those who attended this workshop evaluated it as 'effective' (51%) or 'highly effective' (44%). Of the eight presentations and workshops evaluated as part of the Multicultural Interclerkship Course, the 'Medical Risks of the Gay, Lesbian, Bisexual and Transgendered Community' workshop received the highest percentage of ratings in the 'highly effective' category. Comments from students included: 'This is such an important topic that should have been addressed sooner,' and 'The GLBT issues program was great and should be required for all students.'

#### *Women's health mini-selective course*

Owing to the impact of gender on disease prevention, diagnosis, and treatment, a Women's Health Course was developed as part of the medical school's existing 4th year mini-selective course series. The UMMS Office of Medical Education has sponsored this series of 1-week mini-selectives since 1997, to provide intensive, focused teaching in particular content areas—laboratory medicine, physician as teacher, emergency medicine—using small group interactive learning methods, and emphasizing interdisciplinary approaches to teaching. The goal of the newly developed 'Women's Health' course was to provide an overview of current issues from a range of disciplines and perspectives. As medical education addressing gender differences often lags behind newer research findings and treatment recommendations, this intensive, week-long mini-selective course emphasized new and interdisciplinary approaches to many women's healthcare concerns and research issues.

The course was taught by 19 multidisciplinary faculty and attended by seven fourth-year medical students and two graduate nursing students. Methods of instruction included lectures, case studies, discussions, patient interactions, and independent student projects/presentations. The diverse topics covered in the course included: sexuality in health and disease, contraception, assisted reproduction, menopause, hormone replacement therapy, heart disease, pelvic floor health, reproductive cancers, transgendered sexuality, ethical issues in women's health, and sexual health and the arts.

To assess course efficacy, students' pre- and post-course performances on a 25-item knowledge test and a 28-item confidence scale (7-point Likert) were compared. Also, students provided course feedback

through anonymous post-course evaluations. The outcomes of the Women's Health Course in the first year of its implementation (March 2002) included highly significant improvements in two areas: (1) knowledge about specific women's health care issues and (2) confidence in counseling patients about these issues ( $P < 0.005$ ; paired *t*-tests). A total of 100% of the students strongly agreed that this course enhanced their understanding of women's health and would be useful in their care of patients; 100% also would recommend the course to other students.<sup>9</sup>

The success of this pilot curriculum project in effecting statistically significant change in students' knowledge and confidence in specific areas of women's health has encouraged course directors to find ways to integrate key elements of the seminar series into the required curriculum for the entire student body in the future.

## **Conclusion**

In order to prepare future physicians for effective practice, it is critical to develop and implement a comprehensive curriculum addressing a range of sexual health topics. Particularly relevant and critical areas of instruction include: assessment of high-risk behavior and counseling strategies; defining of 'normal' sexual function inclusive of all sexual orientations; assessment and treatment of sexual dysfunction; and screening for sexual abuse and/or assault. Barriers to addressing sexual health in the healthcare context, both from the perspective of the patient and the physician must be taken into consideration when designing this curriculum, with emphasis on the clinical relevance of incorporating nonjudgmental, targeted screening for sexual health issues with all patients.

## **Acknowledgements**

The following individuals enthusiastically provided expertise and guidance to SHIP curriculum development efforts described: William Conners MD, Diego Sanchez, Holly Ryan, Marjorie Safran MD, Susan Billings-Gagliardi PhD, John Cooke PhD, and Kate O'Hanlan MD. This content was initially presented in part at the Sexual Medicine Society of North America Annual Research Meeting, January 2003 in Boca Raton, Florida, and at the 113th Annual Meeting of the American Association of Medical Colleges, November 2002 in San Francisco, CA. The Sexual Health Initiative Project (SHIP) at University of Massachusetts Medical School is supported in part by an unrestricted medical education grant from Pfizer, Inc.

## References

- 1 Pan American Health Organization, World Health Organization, Promotion of Sexual Health Recommendations for Action, Guatemala, 2000.
- 2 Maheux B, Haley N, Rivard M, Gervais A. Do physicians assess lifestyle health risks during general medical examinations? A survey of general practitioners and obstetrician-gynecologists in Quebec. *Can Med Assoc J* 1999; **160**: 1830–1834.
- 3 Epstein R *et al*. Awkward moments in patient-physician communication about HIV Risk. *Ann Intern Med* 1998; **128**: 435–442.
- 4 Marwick C. Survey says patients expect little physician help on sex. *JAMA* 1999; **281**: 2173–2174.
- 5 Council on Scientific Affairs, American Medical Association. Health care needs of gay men and lesbians in the United States. *JAMA* 1996; **275**: 1354–1359.
- 6 Boekeloo BO *et al*. Frequency and thoroughness of STD/HIV risk assessment by physicians in a high-risk metropolitan area. *Am J Public Health* 1991; **81**: 1645–1648.
- 7 McCance KL, Moser Jr R, Smith KR. A survey of physicians' knowledge and application of AIDS prevention capabilities. *Am J Prev Med* 1991; **7**: 141–145.
- 8 Association of American Medical Colleges Medical School Graduation Questionnaire Final School Report: University of Massachusetts Medical School, (1999–2001).
- 9 Jonassen JA, Ferrara E, O'Dell K. An intensive, multidisciplinary mini-selective course improves senior students' knowledge and self-confidence about women's healthcare and women's health research. Presented at the *113th Annual Meeting of the Association of American Medical Colleges*, San Francisco, CA, November 11, 2002.