

## COMMENTARY

# The State of Sexual Health Education in U.S. Medicine

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*Although studies have shown that patients want to receive sexual health services from their physicians, doctors often lack the knowledge and skills to discuss sexual health with their patients. There is little consistency among medical schools and residency programs in the United States regarding comprehensiveness of education on sexual health. Sexuality education in U.S. medical schools and residency programs is reviewed, highlighting schools that go beyond the national requirements for sexuality education. Increasing the amount of sexuality instruction provided for medical education and training, standardizing sexuality education requirements in medical school and residency programs, incorporating different learning models, establishing means of consistently assessing and evaluating sexuality knowledge and skills, and creating national certification standards for the practice of sexual medicine are recommended.*

**KEYWORDS** *Medical education, sexuality education, medical residency, medical curriculum, patient sexual health*

## INTRODUCTION

In 2001, the U.S. Surgeon General's Call to Action to Promote Sexual Health and Responsible Sexual Behavior stated that physicians and other health care professionals are frequently a main point of contact for individuals

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with sexual health concerns or problems and consequently can have great influence on the sexual health and behavior of their patients (U.S. Office of the Surgeon General, 2001). However, physicians often feel unprepared and lack the knowledge, comfort, and communication skills that their patients expect from them in discussing sexual health.

Through examination of published literature, examples of structured, systematic education and training experiences to prepare physicians to address the sexual health concerns of their patients are lacking. Physicians in many specialties, including general internal medicine, obstetrics/gynecology, family medicine, adolescent medicine, psychiatry, and pediatrics, need to provide sexual health medical care to their patients, yet the amount and breadth of sexual health education provided in U.S. medical schools and residency programs vary widely. This lack of systematic and regulated information sharing and training of medical students on sexual health leaves both the physicians and their patients at a disadvantage.

## SEXUAL HEALTH

Definitions of sexual health vary, though, for the purposes of this article, a broad definition was used. The following working definition (World Health Organization [WHO], 2006) is widely used internationally:

Sexual health is a state of physical, emotional, mental and social well-being in relation to sexuality; it is not merely the absence of disease, dysfunction or infirmity. Sexual health requires a positive and respectful approach to sexuality and sexual relationships, as well as the possibility of having pleasurable and safe sexual experiences, free of coercion, discrimination and violence. For sexual health to be attained and maintained, the sexual rights of all persons must be respected, protected and fulfilled. (p. 5)

Many aspects of sexuality and personal factors related to sexual health are important components for physicians to integrate into comprehensive care. The WHO report also includes reproductive health care and the right to make child-bearing decisions, access to health care and sexuality education, awareness of cultural diversity, and advocacy.

## SEXUAL HEALTH EDUCATION

Sexual health education is defined for this article as a life-long process of acquiring information and forming attitudes, beliefs, and values related to sex and sexuality, sexual identity, relationships, and intimacy (Sexuality Information and Education Council of the United States, n.d.). It includes

topics such as sexual development, anatomy, sexual and gender identity, gender roles, relationships, intimacy, sexual function and dysfunction, sexual risk reduction, family planning, sexual desire and pleasure, and cultural influences on sexuality. Ideally, sexual health education should incorporate three aspects of learning: cognitive learning (acquisition of information and facts), affective learning (exploring feelings and attitudes), and behavioral learning (practicing skills and improving communication) (Hedgepeth & Helmich, 1996).

## PATIENT DEMAND FOR SEXUAL HEALTH CARE

Research shows that patients are concerned with addressing sexual health with their physicians. A survey of 501 undergraduate and graduate students as patients found that most (45.1%) would prefer to receive sexual health information from a medical provider who initiates the conversation. These patients preferred working with medical providers who are “knowledgeable about sexual concerns” (74.5%) and those who “seem comfortable addressing sexual concerns” (68.3%) (Wittenberg & Gerber, 2009).

A survey of 500 U.S. adults aged 25 years or older showed that even though 85% said they would try to talk to their physicians about a sexual problem, 71% felt that their physicians would dismiss these concerns, and 68% thought their doctors would be uncomfortable discussing sexual problems (Marwick, 1999). The patients also reported that because of the lack of options presented by their physicians, these patients sought other sources, often including the Internet, although they would prefer to discuss their concerns with “educated” professionals (Brandenburg & Bitzer, 2009; Ferrara et al., 2003; Marwick, 1999).

A study from the University of New Mexico queried 47 health care providers (obstetrics and gynecology residents and attending physicians and nurse midwives) and 83 patients presenting for routine gynecologic care. Both providers and patients stated that asking about a patient’s sex life was important in medical care (Leonard & Rogers, 2002). However, patients were significantly more likely than providers to feel that it was important for providers to ask specific questions about sexual function and satisfaction ( $p < .001$ ).

In an international survey of 27,500 men and women in 29 countries, including the United States, 43% of men and 49% of women reported that they had experienced at least one sexual problem, but only 18% sought medical help for that problem (Moriera et al., 2005). Patients were more likely to seek medical help if they had been asked about sexuality by a doctor during a routine visit in the previous three years. While only 9% had been asked about their sexual health during a routine visit in the past three years, 48% of men and 41% of women among total respondents (ranging

from 29.5% to 76% by regional country cluster) reported that they thought sexual health conversations should be initiated by the physicians during routine visits.

If sexual health is an expected and important part of patient health care, why are medical providers disconnected from the information?

## LITERATURE REVIEW

### Sexual Health Education in Medical School

The gap between patients' desire to discuss sexual health and the likelihood that their physicians will discuss sexual health with them may be aggravated by the lack of education, training, and practical skills that physicians typically receive during medical school and residency. A telephone survey of 500 fourth-year medical students found that almost all students thought that counseling patients about risky behaviors and condom use was appropriate (497; 99.4%) (Malhotra, Khurshid, Hendricks, & Mann, 2008). This same study also conducted a separate telephone survey of curriculum offices at all 122 medical schools in the United States, which had a 71.3% response rate. Only 55.4% (51 of 92) of the medical schools responded that they had a sexual health curriculum; responding schools reported that they provided a median of eight hours of clinical education on sexual health topics.

Another survey study demonstrated that although 75.2% of 125 third- and fourth-year medical students in one medical school thought that taking a sexual history would be an important part of their future career, only 57.3% reported feeling comfortable taking a sexual history and 58.1% of the respondents thought that they had been adequately trained in this area (Wittenberg & Gerber, 2009). Of the 68.8% of medical students who felt that addressing and treating sexual concerns would be an important part of their future career, 59.2% reported feeling comfortable addressing patient sexual concerns, but only 38.2% thought that they had received adequate training to do so.

A large survey ( $n = 2,261$ ) of medical students in the United States and Canada found that 64.4% (375 of 582) of first-year medical students did not feel sufficiently trained to deal with sexual health issues in their clinical practice (Shindel et al., 2010). While perhaps not surprising that first-year medical students would not feel sufficiently trained in any area of medicine, the percentages for second-, third-, and fourth-year medical students who reported they did not feel sufficiently trained—while incrementally lower—still averaged almost half of each class year (53% to 49%).

Medical Students for Choice (MSFC), a nonprofit group that advocates for abortion training for medical students and has student groups at medical schools across the world, performed a study of the inclusion of sexual and reproductive health topics in medical school curricula (Steinauer et al.,

2009). They selected a sample of 122 U.S. and Canadian medical schools and asked MSFC coordinators to report on specific subtopics that were included in the preclinical curriculum. With 63% of schools responding, the coordinators indicated that the following topics were most frequently covered in the curriculum: sexually transmitted infections (STIs) and pregnancy (100%), contraception (96%), infertility (86%), sildenafil citrate (Viagra) (84%), and elective abortion (67%). The majority of schools reported spending more than two hours of preclinical instruction on the topics of pregnancy, contraception, infertility, and sexually transmitted infections. The authors concluded there was little consistency among U.S. and Canadian medical schools regarding comprehensiveness of education on sexual health and reproduction topics.

Another survey of 2,316 medical students found that 55% believed that it would be relevant in their practices to counsel patients about safer sex (Frank, Coughlin, & Elon, 2002). At entry to wards, 85% of all students thought it was important for physicians to talk to patients about safer sex, but by senior year only 17% reported always or usually *discussing* safer sex with their patients. Regarding their comfort in counseling their patients about safer sex, 57% reported feeling highly comfortable while 43% reported feeling only somewhat comfortable.

### Leading University Programs in Medical Sexual Health Education

Despite the inconsistencies in the quality and availability of sexual health education in U.S. medical schools and clinical programs, some programs have emerged as leaders in this area. At the University of Minnesota Medical School, for example, first-year medical students are required to take a full-semester course through the Program of Human Sexuality in order to prepare to effectively care for patients with sexual concerns (University of Minnesota Medical School, n.d.). The University of Minnesota also offers graduate-level courses on sexual health, surpassing the minimum requirements of the Accreditation Committee for Graduate Medical Education (ACGME). Further enriching these courses is a 1.5-day elective seminar for residents, focusing on sexual counseling and covering common sexual problems encountered by medical providers during clinical practice.

The Robert Wood Johnson Medical School of the University of Medicine and Dentistry of New Jersey has had an internationally recognized model for comprehensive sexual health education for medical students since launching its human sexuality program called “Sex Week” in 1973 (Rosen, Kountz, Post-Zwicker, Leiblum, & Wiegel, 2006). The course is required for all second-year medical students and welcomes sexuality educators and sexologists from all over the country to provide didactic and interactive presentations on a variety of sexuality issues relevant to medical practice. However, what

was a highly regarded five-day program has since been reduced to three days.

The Morehouse School of Medicine's Center of Excellence for Sexual Health, in Atlanta, Ga., has a curriculum for physicians called "Promoting Sexual Health and Responsible Sexual Behavior" (Morehouse School of Medicine, n.d.). Topics include sexuality language and communication; values, attitudes, and beliefs; sexual anatomy, physiology, and response cycles; sexual function and dysfunction; relationships; fertility, pregnancy, and infertility; gender variation; sexual orientation and identity; and culture and religion.

The University of South Carolina Medical School devotes 17.5 hours to human sexuality as part of their Introduction to Clinical Medicine course (Dwyer & Thornhill, 2010). The program includes lectures, community guests, films, expert panels, small group discussions, and patient simulation to allow students to practice discussing sexual issues. Topics covered include sexuality in culture and medicine, child and adolescent sexual problems, paraphilias, health needs of gay and lesbian patients, and the sexual response cycle.

### Sexual Health Initiatives Among Medical and Professional Organizations

The American Medical Student Association (AMSA), a student-governed national organization representing the concerns of medical students, has a gender and sexuality committee that has issued policies related to gender and sexuality education (American Medical Students Association, n.d.-b). AMSA also initiated a Sexual Health Scholars Program in 2009, an online course addressing the training of medical students in sexuality education (American Medical Students Association, n.d.-a). The curriculum incorporates knowledge, skills, and attitude objectives related to increasing comfort and ability to care for patients' sexual health. Unfortunately, the scholars program is voluntary and cohorts are limited in size, so the majority of medical students do not participate. However, the committee posts online resources, including lessons, for self-directed learning about sexuality issues.

One medical school organization that has done some work on standardizing sexual health education within its discipline is the Association of Directors of Medical Student Education in Psychiatry. The association has published its expectations of what medical students should master in sexual health in their Clinical Learning Objectives Guide (Association of Directors of Medical Student Education in Psychiatry, 2007). The clinical learning objectives stipulate that all physicians should be knowledgeable about sexual biology and physiology, as well as common patient concerns and dysfunctions. The Association also calls for students to develop skills such as effective communication, effective sexual history taking, and the providing of referrals.

Although they do not directly address every aspect of healthy sexuality or comprehensive sexual health, their guidelines stress that dissatisfaction regarding individuals' sexuality can have devastating effects on their overall health, a connection that many individuals and organizations have failed to recognize.

### Sexual Health Education in Residency

The ACGME, which establishes standards and guidelines for post-MD medical training programs in the United States, provides residency program training requirements for all specialties. It does not require residents in all specialties to have sexual health training or clinical skills experience. The only medical specialties that have residency requirements related to sexuality are obstetrics and gynecology, internal medicine, family medicine, pediatrics, urology, pediatric urology, adolescent medicine, colorectal surgery, and psychiatry. Table 1 summarizes the sexuality-related training requirements for these medical specialties.

Compared with studies of sexual health curricula in medical schools, fewer studies have measured or evaluated sexual health education during residency. In one study, 117 residents in psychiatry, obstetrics and gynecology, family medicine, and internal medicine programs at Wayne State University Medical School in Detroit completed an Internet-based survey. Nearly all residents believed that sexual health was an important part of patient quality of life and that it was important for physicians to know about their patient's sexual health (99% and 93%, respectively) (Morreale, Arfken, & Balon, 2010). However, 66% reported having no previous educational experiences in sexual problem management while 24% reported having only one. More than half (52%) were unsatisfied with their formal curriculum on sexual health issues. Since this study was limited to only one medical school, it is unknown whether the results are generalizable to other residency programs.

Another Internet-based residency study explored education and training on the topic of female sexual function and dysfunction among third- and fourth-year obstetrics and gynecology residents in programs across the country. Of 234 respondents, 91.5% reported that their training had included fewer than five didactic activities on female sexual function and dysfunction (Pancholy et al., 2011). Almost half (43%) said they were dissatisfied with the female sexual function and dysfunction-related training they had received, while two-thirds had little knowledge of how to administer or interpret screening questionnaires on these topics. Residents reported that the following tactics would increase their knowledge and comfort with female sexual function and dysfunction: additional lectures, patient observations, urogynecology rotations, and online modules.

**TABLE 1** Accreditation Committee for Graduate Medical Education (ACGME) Requirements for Sexual Health Education in Selected Residency Programs

Most residency programs have the following diversity requirement that includes gender and sexual orientation: "Residents are expected to demonstrate sensitivity and responsiveness to a diverse patient population, including but not limited to diversity in gender, age, culture, race, religion, disabilities, and sexual orientation."

Anesthesiology	No guidelines specific to sexual health (ACGME, 2006).
Emergency medicine	No guidelines specific to sexual health (ACGME, 2013a).
Family medicine	All residents must be trained to competency in normal gynecological examinations, gynecological cancer screening, preventive health care in women, common sexually transmitted diseases and infections, reproductive and hormonal physiology including fertility, family planning, contraception, options counseling for unintended pregnancy, pelvic floor dysfunction, and disorders of menstruation, perimenopause, and postmenopause, including osteoporosis; program should provide adequate instruction and clinical experience in issues of sexual health, management of breast disorders, and management of cervical disease (ACGME, 2007a). Note: These requirements will change effective July 2014. New requirements focus on obstetric and gynecologic training and do not include other areas of sexual health (ACGME, 2014).
Internal medicine	No guidelines specific to sexual health (ACGME, 2009a).
Neurology	No guidelines specific to sexual health (ACGME, 2010).
Obstetrics and gynecology	Obstetrics and gynecology residency programs have some of the more expansive requirements for sexual health education, including the following specific topics: pelvic floor dysfunction, family planning, psychosexual counseling, patient education on high-risk sexual behaviors, comprehensive sexual history taking, sexual assault, infertility, as well as the full range of obstetric care (ACGME, 2008b).
Pediatrics	No guidelines specific to sexual health (ACGME, 2013b).
Psychiatry	Residents must be trained in the biological, genetic, psychological, sociocultural, economic, ethnic, gender, religious/spiritual, sexual orientation, and family factors that significantly influence physical and psychological development throughout the life cycle; also in recognizing and responding to family violence including sexual abuse, and its effects on both victims and perpetrators (ACGME, 2007b).
Radiation oncology	Residents must have experience with gynecologic, genitourinary, and breast tumors (ACGME, 2009b).
Radiology (diagnostic)	No guidelines specific to sexual health (ACGME, 2008a).
Surgery (craniofacial)	No guidelines specific to sexual health (ACGME, 1997).
Surgery (general)	No guidelines specific to sexual health (ACGME, 2012).
Urology	Residents should receive training in sexual and reproductive dysfunction and infertility (ACGME, 2009c).

## RECOMMENDATIONS

The World Association for Sexual Health (World Association for Sexual Health, 2008) issued recommendations for medical education in their *Sexual Health for the Millennium: A Declaration and Technical Document*:

Information on sexual functioning should be included as an integral component of the comprehensive sexuality education available to all people. Schools, through their sexual health education curricula, and the health sector (physicians, nurses, and other health workers) must play key roles in educating their students and patients about sexual functioning. (Section 7.3)

### Standardizing Sexual Health Education

In 2013, the Program in Human Sexuality at the University of Minnesota Medical School held a summit of U.S. and Canadian medical school educators on the topic of medical education in sexual health. The summit's report contained a blueprint for incorporating sexual health into medical education (Coleman et al., 2013). The experts acknowledged that, overall, sexual health education in medicine is variable and decreasing in some settings. Their broad recommendations include the need to integrate sexuality longitudinally throughout medical school and residency training and to implement a multidisciplinary, diverse, and culturally sensitive approach to sexuality education. Additionally, the expert panel proposed that existing curricula, which tends to focus mainly on disease and dysfunction, be expanded to promote sexual function and wellbeing. The panel suggested that sexuality education be a mandatory component of medical education that should be included and evaluated as part of medical licensing examinations.

A core set of sexual health knowledge and skill competencies should be established so that there is consistency for all physicians finishing medical school. A standardized curriculum for sexual health education in medical school and residency programs should include the following topics:

- Reproductive/sexual anatomy and physiology
- Normal sexual function (including pleasure) and sexual dysfunction
- Sexual response cycles
- Gender identity and sexual orientation
- Contraceptive methods and mechanisms
- Testing and management of STIs, including HIV
- Sexual risk reduction techniques
- Sexual side effects of common medications, treatments and illnesses
- Sexual abuse and assault (adult and children)

- Health disparities of lesbian, gay, bisexual, and transgender patients and other marginalized populations
- How and when to refer patients to sexuality specialists

Instruction in these core sexual health topics should be incorporated longitudinally throughout medical education and should include activities to develop the important skill sets needed to address sexual health issues in patients, such as performing sexual histories, conducting sensitive genital exams, or screening patients for sexual abuse. In addition, medical students and residents should have opportunities to assess their own biases and attitudes toward sexuality in order to be able to discuss patient issues without judgment or discomfort.

### Implementation of a Sexual Wellness Framework

The Sexual Wellness Model, developed for application in HIV prevention, includes the following essential aspects of human sexuality, integrating sexual, relational, and emotional variables: talking about sex, culture and sexual identity, sexual anatomy and functioning, sexual health care and safer sex, challenges to sexual health, body image, masturbation and fantasy, positive sexuality, intimacy and relationships, and spirituality (Robinson, Bockting, Rosser, Miner, & Coleman, 2002). This expansive model demonstrates the multiple and overlapping factors that may contribute to an individual's sexual wellness. In a sexual wellness framework, it is not sufficient to simply discuss biological sexual function or dysfunction: physicians would need to be comfortable discussing the broader psychological, interpersonal, emotional, and cultural factors that influence a patient's sexual health status.

The topic of patient sexual health should thus be reframed from a problem-based approach to a wellness-based approach. Because the discussion of sexual pleasure is frequently neglected, there should be some emphasis on pleasure included as a key component of sexual health, as “[although] often ignored or stigmatized, sexual pleasure cannot be an afterthought in sexual health promotion” (World Association for Sexual Health, 2008). Sexual pleasure and enjoyment are often primary reasons why people have sex—these factors influence many individuals' decisions regarding their sexual health and behavior (Philpott, Knerr, & Boydell, 2006). Encouraging a positive attitude toward sexuality and discussing pleasure and enjoyment can open the door to honest discussions of sexual health behaviors with patients. Desire, attraction, power, love, affection, pleasure, and self-esteem all influence an individual's risk-taking behaviors and other aspects of sexual health (Robinson et al., 2002). Studies of teens and adults have shown that condom and contraceptive use is influenced by their perceptions of pleasure (Higgins, Tanner, & Janssen, 2009; Mosher & Jones, 2010; Nettleman, Brewer, & Ayoola, 2007; Randolph, Pinkerton, Bogart, Cecil, & Abramson, 2007).

Addressing these issues with patients could help empower them to become more confident sexual agents and to make choices that improve their sexual wellness. Physicians should aim to strike a balance between promoting pleasure and promoting health, recognizing that both are important to their patients (Philpott, Knerr, & Maher, 2006).

In sexuality education, medical schools must go beyond biology and address race, ethnicity, cultural values, life experiences, and human behavior. Introducing students to the societal realities of human sexual expression would likely make them feel more prepared to discuss sexual health issues with their patients (Gill & Hough, 2007).

### Incorporating Different Learning Models

Teaching students and professionals about sexual health issues in a variety of formats allows them to build on their knowledge and better grasp complex topics. Different learning models also target different learning styles, resulting in more effective, inclusive instruction that can make students more comfortable with sexuality (Wittenberg & Gerber, 2009).

Examples of different learning methods include:

- Didactic lectures
- Expert panels and debates
- Guest lecturers/community representatives
- Small-group discussions
- Sexual attitude reassessments
- Case-based learning
- Pelvic dissections
- Practice with taking sexual health histories, teaching risk reduction strategies, and performing genital/reproductive examinations with standardized patients

While most medical schools reported providing lectures on taking a sexual history, students say that they are rarely evaluated on how well they are subsequently able to perform them. This lack of focus on clinical evaluation highlights the need for multiple methods of teaching, testing, and evaluating the entire spectrum of learning (Dean & Fenton, 2010).

### Development of Standards for Curriculum Assessment and Evaluation

Standards regarding program and student assessment and evaluation must be developed to monitor and track success of curricular innovations and compliance with new standards. Ongoing research is necessary to track the number of medical schools that offer sexual health education for their students. Systematic program evaluation and quantification of the types and content of the sexual health curricula offered would also be beneficial.

## Creation of National Certification Standards

The International Society for the Study of Women's Sexual Health recently developed a fellowship program that involves training in female sexual medicine within a clinical or research track (International Society for the Study of Women's Sexual Health, n.d.). Other professional organizations, such as the American Association of Sexuality Educators, Counselors and Therapists and the Society for Sex Therapy and Research, should follow this example in creating a national medical sexual health certification. Such certification would allow the public to seek out individuals who can demonstrate training and expertise in sexual health and medicine. Currently, such groups focus on women's sexual health, but standards should be developed for certification in men's health and in special populations such as adolescents, the elderly, the disabled, chronically ill, and the lesbian, gay, bisexual, transgender, and queer communities.

## CONCLUSION

The current medical education system, from medical education to residency and continuing medical education for attending physicians, lacks standardization regarding sexual health education. Increasing the amount of sexual health instruction received during medical training would be a major step toward better preparing physicians to address patient sexual health. Accreditation agencies should develop and monitor standards for sexual health education. Medical schools and residency programs should implement evidence-based sexual health curricula, validated through assessment and critical evaluation. All health care professionals should maintain a core level of knowledge and skills in sexual health to meet the needs of their patients.

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