

deliveries done by obstetrics residents (34.5 percent) in this study indicates that consults are regularly sought and referrals readily made. The fact that none of the patients studied had problems on the delivery table or postpartum supports the conclusion that problems are identified early and patients are referred appropriately. A key to this process has been qualified supervision by experienced family practice and/or obstetrics attending staff. (In fact, the FP/OB clinic may have referred more patients than was necessary.)

A final advantage of such a program is the continuity in the educational process provided for the family practice residents. In most family practice residency programs residents are afforded a four- to six-month rotation in an obstetrics clinic. Programs, such as the one described, allow family practice residents to gain three years of experience in an obstetrics clinic. Such an extensive experience is likely to have the effect of encouraging family practice residents to include obstetrics as part of their regular private practice.

Student Evaluations of a Required Sex Education Course

Elizabeth Gammon and Sidney Zisook, M.D.

Sex education has evolved from an infrequent, hotly debated item to an accepted part of the medical school curriculum. Over the last 20 years the majority of American medical schools have adopted sex education in some form (1). Yet there is little agreement on effective educational strategies when sex is the subject of instruction. Lloyd and Steinberger's (2) survey of American medical schools documents the disparity of sex education in the medical curriculum. Variables such as whether the course should be elective or required (1), augmented by explicit sex films (3), or "spaced" (that is, integrated within a life cycle curriculum format) or "massed" (concentrated in a time block such as a weekend workshop) (4, 5) are debated in the literature.

The behavioral science curriculum at the University of Texas Medical School at Houston (UTMSH) incorporates much of the formal "sex education" provided to students. Until the 1978-79 academic year, the course had been conducted in a massed style, and both students and faculty were receptive and enthusiastic

about the educational experience. In 1979, however, the curriculum committee's dictates to reduce the number of hours devoted to human sexuality necessitated a course restructuring. The authors retained a previously successful format but spread the 14 hours over a four-month period. This paper reports on the student response to the required, spaced sex education course.

Course Goals

The goals of the sex education course were aimed at preparing future physicians to deal with sexuality as an issue in medical practice. Through information presented in the lectures and films and peer values encountered in small-group discussions, students were informed of facts about sexuality and the range of sexual practices and values and were encouraged to discover where their values fit in the continuum of sexual behavior.

More specific goals in the form of skills, attitudes, and knowledge were outlined to both faculty and students in the course syllabus. Sexual facts, sex history-taking and interviewing, sexual function/dysfunction, and the intertwining of human sexuality with disease, medications, and clinical procedures comprised the

Ms. Gammon is a teaching associate in the Department of Psychiatry and Behavioral Sciences at the University of Texas Medical School at Houston. Dr. Zisook is an associate professor and director of undergraduate medical education there.

major areas of course focus. As sophomores, students were anticipated to begin developing clinical expertise in recognizing sexual concerns of patients, offering factual sexual information, and providing counseling or referral.

Course Description

The 14-hour human sexuality course was interwoven with the 122-hour behavioral sciences course spanning the fifth and sixth quarters of the preclinical years. Lectures (seven and three-quarters hours) presented for the most part by physicians with expertise in human sexuality covered: childhood and adolescent sexuality, sex role stereotypes, adult heterosexuality (homosexuality was covered in another department), aging and sexuality, sex and physical disability, medical illness and sexuality, sex therapy, and rape. Films (three and one-fourth hours) focused on adult heterosexual love-making, aging and intercourse, physical disability and sex, sex therapy, and rape. A group discussion followed each of the first four lecture topics (group discussion time totaled three and one-half hours). Students were examined to determine their grasp of factual information from lectures and readings but were not tested on material presented through films or in discussion groups. While discussion group attendance was mandatory, student presence at films was optional.

Course Evaluation

The 156 students were asked to complete anonymous paper-and-pencil evaluations comprehensively for the fifth and sixth quarters. A separate form aimed at the first nine hours of the sex education course asked students to rate style of presentation on a four-point scale, judging content and interest as well as perceived usefulness in medical practice.

Findings and Discussion

Evaluation findings reflect definite student attitudes regarding the required, spaced sex education course. Ninety-three percent of the 144 students responding in the fifth quarter evaluations felt that sex education should be required for all students, and 98 percent of the respondents affirmed that the course was best taught in the behavioral science curriculum.

Student attitudes toward course format clearly emerged. Students rated group discussion, films, and lectures in that order as to usefulness and interest. The film "Men's Lives" received the highest rating as to usefulness, and the films ("Quickie" and "Closeup") on adult heterosexuality were least useful. The most highly rated sessions were those offering a "patient education" approach to sexual themes in medicine (a female paraplegic discussed her own sexual adjustment after an automobile accident, and a female rape victim talked about her experience from a medical/psychological perspective).

A number of students indicated that the course paid "a bit too much" to "much too much" attention to sexuality. This complaint could easily result from students' reluctance to confront sexuality in themselves or in their future patients. It may also have reflected the attitude of facilitators in the discussion groups, half of whom were appointed from the faculty and half recruited from a volunteer pool interested in sex education. Although all of the facilitators were invited to a two-hour orientation session, where, in addition to previewing the majority of the explicit sex films used in the course, they viewed Harold Lief's film, "Sexuality in the Medical School Curriculum—An Introductory Film for Medical Educators," personal faculty reservations concerning sex education in the medical curriculum surfaced in the group discussions.

Twenty-two percent of students rated the course as being "boring." As much of the literature (6-9) on sex education in medical school focuses on describing the conscientious, grade-oriented medical student able to postpone gratification, the denial of interest by almost a quarter of the sophomore students does not surprise the authors.

Desensitization must attend both to student anxiety and boredom: While films have been well received, educational, and frankly stimulating to past students, the general onslaught of sexuality and sexual themes in movies ("Coming Home," "Midnight Express") and television ("Three's Company") may now do much of the desensitizing that the behavioral science course in sex education has initially done in the past. Responding to a 68 percent student rating of heterosexual love-making films as being less

than useful and comments that they presented "nothing new," sex education course designers must offer new techniques of desensitization. Response of 1979 students to patient education suggests one approach. The paraplegic and rape victim who could openly discuss their experiences captured student attention where other approaches did not. Combining a panel discussion of both sexes talking openly about sexual experiences with a film may provide more intense desensitization than films alone.

Since group discussions were rated considerably higher than films, course designers probably should focus more on this format. Perhaps structured group activities could be utilized for desensitization in place of films. One team leader reported success with an activity which broke into student sexual stereotypes. Students were handed a list of 25 statements and asked to mark true or false for such statements as "women are better cooks than men" and "birth control is the woman's responsibility." The group began to admit to and confront stereotypes and attitudes about sexuality that they had denied or professed to having conquered.

No question attempted to correlate the spaced style with student satisfaction with the course. Perhaps the spacing of the course over a four-month period relieved student anxiety sufficiently to contribute to their feelings of being bored. But the faculty evinced a significantly negative reaction to the 1979 spaced sex education course. The course director commented that spaced sex education felt like "dragged out" sex education. The department chairman, in the past supportive of the massed style, received enough unfavorable faculty feedback to suggest reducing the number of films and deleting the word "sex" from lecture titles in the later portions of the four-month period.

The results of student evaluations of this course suggest that students themselves have an objective awareness of sexuality as an integral part of medicine. Yet they are reluctant to admit interest in the subject and uncertain where their knowledge will be utilized. Course designers must capture the attention of and educate both students who are anxious and inexperienced with sexuality and those who are bored with information that is not new to them.

References

1. HOLDEN, C. Sex Therapy: Making It a Science and Industry. *Science*, 186:330-332, 1974.
2. LLOYD, J. A., and STEINBERGER, E. Training in Reproductive Biology and Human Sexuality in American Medical Schools. *J. Med. Educ.*, 52: 74-76, 1977.
3. CHEZ, R. A. Movies of Human Sexual Response as Learning Aids for Medical Students. *J. Med. Educ.*, 46:977-981, 1977.
4. MARCOTTE, D. B., and KILPATRICK, D. G. Preliminary Evaluation of a Sex Education Course. *J. Med. Educ.*, 49:703-705, 1974.
5. MARCOTTE, D. B., GEYER, P. R., KILPATRICK, D. G., and SMITH, A. D. The Effect of a Spaced Sex Education Course on Medical Students' Sexual Knowledge and Attitudes. *J. Med. Educ.*, 10:117-121, 1976.
6. MUDD, J. W., and SIEGEL, R. J. Sexuality—The Experience and Anxieties of Medical Students. *N. Engl. J. Med.*, 281:1397-1403, 1969.
7. LIEF, H. I. Sexual Knowledge, Attitudes and Behavior of Medical Students: Implications for Medical Practice. In *Marital and Sexual Counseling in Medical Practice*. E. Nash, L. Jessner, and D. W. Abse (Eds.). Chapel Hill: University of North Carolina Press, 1964, Pp. 474-479.
8. LIEF, H. I. Preparing the Physician to Become a Sex Counselor and Educator. *Ped. Clinics N. Amer.*, 16:447-458, 1969.
9. MARCOTTE, D. B., KILPATRICK, D. G., and WILLIS, A. The Sheppe and Hain Study Revisited: Professional Students and Their Knowledge and Attitudes About Human Sexuality. *Med. Educ.*, 11:201-204, 1977.