

Suicide Management Skills and the Medical Student

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Abstract—To determine the suicide management skills of medical students at different levels of training, 141 medical students were administered the Suicide Intervention Response Inventory (SIRI), a self-report instrument assessing skills in responding to the self-destructive patient. As predicted, third-year students having completed a course in medical interviewing scored higher on the SIRI than first-year students who had not. Additional improvement in suicide management skills was evidenced for third-year students who completed a six-week inpatient psychiatry rotation. Whether or not students believed that suicide was ethically acceptable in some circumstances had no impact on their ability to select an appropriate response to the self-destructive patient. Several additional findings are discussed, and the potential utility of the SIRI in evaluating medical student skills in this important area is highlighted.

Estimates of the annual frequency of suicide in the United States range from 25,000 to 50,000, placing it among the top causes of death in this country (1). Despite a growing awareness of this public health problem on the part of the medical and psychological communities, the suicide rate reached 12.7 per 100,000 by the mid-1970s, the highest incidence since World War II (2).

Existing data suggest that the majority of these deaths could be foreseen and perhaps averted. Fully 75 percent of all victims of suicide consult physicians within four months of taking their lives (3), often communicating their intent through a variety of direct or indirect means (4). The fact that medical care givers are so often in a position to diagnose self-destructive ideation on the part

of their patients has prompted Rockwell and O'Brien (5) to refer to the practicing physician as "the front line of defense in the prevention of suicide."

Unfortunately, many physicians may be poorly equipped to play this role. As medical education becomes increasingly specialized and technological, it may fail to emphasize sufficiently the skills needed to diagnose and intervene in the emotional, psychological, and social difficulties presented by the life-threatening patient (6). As Waltzer (7) notes, "Very commonly the [suicidal] patient presents a series of somatic complaints. . . . The usual procedure is to do a physical examination and a complete medical workup. . . . What is lost during the examination is an attempt by the physician to explore with the patient his mood and general mental state. . . ." Some empirical evidence suggests that an insufficient recognition of nonbiological problems in clinical management of patients is the rule rather than the exception. Young (8),

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for example, has reported that internists in his study made an accurate psychiatric assessment of only 28 percent of their patients, the majority of whom had prominent psychological components to their illness. Similarly, Querido (9) found that while a group of general practitioners correctly recognized 95 percent of serious physical disorders encountered during routine examinations, the physicians remained unaware of 50 percent of the associated psychological difficulties. More specifically, Rockwell and O'Brien (5), studying nearly 60 percent of the practicing physicians in a California county, concluded that physicians may lack the requisite knowledge to deal effectively with the suicidal patient. For instance, they found that their sample tended to underestimate the frequency of suicidal behavior, especially among women; half failed to recognize the tendency of women to attempt self-injury three times as often as men. More seriously, only 14 percent correctly identified the most vulnerable age group (the elderly), and only 18 percent knew that firearms were the most commonly used method among suicide victims. Forty-eight percent of the physicians reported never having had a class on suicide while in medical school, and 58 percent indicated a serious interest in receiving further education on the topic.

The study reported here was undertaken for several reasons. First, although several investigators (6, 8, 9) have evaluated the ability of medical care givers to recognize and appropriately manage general psychiatric dimensions of patient problems, no one has yet studied their skill in accurately assessing and responding to the suicidal patient *per se*. In particular, it would be valuable to know whether their ability to manage self-destructive patients improves—or, as some have implied, deteriorates (10)—over the

course of medical training. Second, the study sought to determine whether these clinical skills vary as a function of the age, sex, or intended specialty of the medical student or of previous experience in nonmedical "human service" work. Finally, in light of the current discussion among crisis intervention professionals (11, 12) concerning the ethics of the suicidal choice, the researchers attempted to discover whether adherence to one or the other value stance (that suicide is or is not acceptable under some conditions) would be more effective in the clinical management of self-destructive patients.

Sample

Fifty-nine first-year and 82 third-year students enrolled in the University of Wisconsin Medical School during the 1981-1982 academic year comprised the sample. The first- and third-year groups who volunteered for the study represented substantial samples of the total classes from which they were drawn (36 percent and 53 percent, respectively) and closely approximated the latter in terms of age (first-year total: mean = 24.30, S.D. = 2.80; first-year sample: mean = 25.30, S.D. = 2.51; third-year total: mean = 26.10, S.D. = 2.49; third-year sample: mean = 25.74, S.D. = 2.44) and sex ratio (percentage of males in first-year total versus first-year sample = 71 and 65; third-year total versus third-year sample = 75 and 78).

Instruments

A background information questionnaire was administered to solicit general demographic information, such as the respondent's age, sex, marital status, religion, and intended medical specialty. This instrument also asked whether the student had "ever worked as a volunteer or paid employee in a human service

field." Social work, crisis intervention, and drug rehabilitation were presented as examples. It concluded with an "opinion question" eliciting the respondent's belief on the issue of suicide: "Can you think of any circumstances under which suicide could be considered an acceptable solution to a life problem?" Two response options were provided: "Yes, under some circumstances" and "No, not under any circumstances."

The primary instrument used in the study was the Suicide Intervention Response Inventory (SIRI), a 25-item self-administered questionnaire containing a series of hypothetical patient remarks followed by two replies, one of which demonstrates relatively more skillful management of the suicidal patient. Respondents make a forced-choice between the two response options, and the total score on the SIRI represents the number of correct options they endorse. Item content focuses on common difficulties encountered in responding to the suicidal patient, such as problems in attending to implicit or explicit suicide threat, avoiding simple reassurance or professionalism, and securing a verbal contract from the patient not to consider self-injury before again contacting the care giver. Studies by Neimeyer and his colleagues (13, 14) have demonstrated both the use of the SIRI to discriminate validly among groups of respondents known to differ in suicide management skills (for example, trained crisis counselors and untrained college students) and the moderate convergence of the instrument with other well-validated tests of general patient-interviewing skills. Furthermore, the SIRI possesses high internal consistency and test-retest reliability. More important in the present context, research has demonstrated that the SIRI can detect improvement in care giver skills that results from focused training in suicide management.

Procedure

To study the impact of medical education on suicide management skills, two samples of medical students were tested. The first consisted of 59 students in their first year who had not yet completed a course in medical interviewing skills. A mandatory part of the curriculum, this second-year course included didactic instruction and role-playing of physician/patient interactions in order to teach history-taking skills, empathic responding, and facilitative questioning. The second group consisted of 82 third-year students who had completed the interviewing course but who had not yet begun a six-week rotation through inpatient psychiatry, where firsthand experience in managing self-destructive patients routinely is obtained. To complement this cross-sectional research design, 28 of the third-year students were readministered the SIRI after completing their required psychiatry rotation. The postpsychiatry subsample also closely matched the total class from which it was drawn in both age (mean = 25.64; S.D. = 2.65) and sex ratio (75 percent male).

Results

The mean SIRI score obtained by the 141 medical students was 22.65 (S.D. = 2.39), roughly comparable with the normative score of 23.05 obtained by neophyte crisis counselors in an earlier study (13). The fact that the present sample scored relatively high on the instrument contradicts the assumption that medical students, as a group, are inept in selecting an appropriate response to the suicidal patient (5).

Of the background variables investigated, age, medical specialty, marital status, and religion were found to be unrelated to scores on the SIRI (all *p* values >.10). The single exception to this trend

was sex: female students obtained significantly higher scores (mean = 23.64; S.D. = 1.29) than male medical students (mean = 22.27; S.D. = 2.60; $t = 3.13$; $p < .0025$). It appears that, at least in the present sample, the average female student may be somewhat more adept than her male counterpart at managing the emotional distress of the severely distraught patient.

No significant differences in suicide management skill emerged between those 44 respondents who had a human service background and those 97 who did not ($t = .74$). Similarly, respondents' attitudes regarding the ethical acceptability of suicide under certain circumstances ($n = 78$ in "yes" category; $n = 63$ in "no") were unrelated to SIRI scores ($t = .86$).

As hypothesized, third-year medical students displayed better clinical management skills on the SIRI (mean = 23.02; S.D. = 1.94) than did first-year students (mean = 22.14; S.D. = 2.83; $t = 2.21$; $p < .029$). Although it is unwarranted to conclude that this apparent training effect was due solely to the intervening course in interviewing skills, the insignificant correlation ($r = .14$) between the SIRI total and respondent age argues against attributing this improvement to simple maturation.

Finally, as predicted, the subsample of 28 third-year students completing the inpatient psychiatry rotation scored higher on the SIRI upon completion of the experience than they had prior to it (matched pairs $t = 4.05$; $p < .0004$). Apparently, experience in actually managing patients (many of whom are suicidal) under the supervision of a senior psychiatrist produces a further increment in clinical skill. In fact, the postrotation scores obtained by this third group (mean = 24.04; S.D. = 1.00) compare favorably with the normative score of 24.17 obtained by ex-

perienced suicide and crisis intervention workers in the earlier study (13).

Discussion

Despite the fact that the sample of medical students in the study reported here on average performed well on the SIRI, it is important to emphasize that the actual scores obtained by respondents showed considerable variation. Actual scores ranged from a high of 25 (a perfect score) to a low of 13 (markedly substandard). If a score of 21 on the SIRI (one standard deviation below the mean obtained by neophyte crisis counselors) is taken as a "cutoff" score for minimally adequate performance, then 13 percent of the total sample of 141 medical students scored in the substandard range. Unfortunately, these less-adequate students did not differ in identifiable demographic or academic respects from their more-adequate peers, except that the majority of the former (15 of the 18 substandard respondents) represented first-year students who had not yet had the benefit of education in interviewing skills. Still, the finding that some third-year students recognized as few as 13 or 14 correct responses out of 25 should caution against the assumption that such courses develop adequate levels of clinical interviewing skills in all students. The fact that third-year medical students assume substantial responsibility for case management in many teaching hospitals makes evaluating their level of clinical expertise all the more crucial.

These results also carry some indirect implications for medical education. As Bardness (15) has observed, "... medical school selection mechanisms and the fact-oriented academic reward system ... may make it difficult for human insight and support techniques to gain real credibility in the curriculum. Nevertheless,

medical schools can, at least, heighten awareness in students of such areas as the . . . kinds of supports patients require, and the techniques available for providing them."

In recognition of the need for training in nontechnological aspects of patient care, medical schools have begun to add to their curricula courses in interviewing and counseling skills, sometimes incorporating sophisticated teaching methods, such as videotaped feedback and simulated patient interviews (10). Still, one limitation of such courses is that they typically emphasize only "nondirective interviewing" (10), whereas effective management of suicidal patients may require a delicate balance of directive and nondirective responses (13). The importance of such domain-specific skills suggests that courses in counseling skills for medical students should be broadened to include instruction in the use of direct questioning and assertive patient education in addition to more general training in empathic responding. It bears emphasizing that in the present study the amount of skill training received was clearly more closely related to student competence in suicide management than were personal beliefs regarding the ethics of suicide. This implies that medical education need not challenge students' fundamental values concerning life and death in order to be effective.

The findings of the study reported here need to be replicated with additional samples to permit confident generalization to other contexts. Ideally, further research should employ other assessments of suicide management skill in addition to the SIRI, especially in vivo assessments derived from actual patient contacts. It is hoped that the SIRI, in combination with such methods, can serve as a useful tool in evaluating this important domain of a

care giver's clinical and interpersonal skills.

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