

# Defining a Behavioral Science Curriculum for Family Physicians: What Do Patients Think?

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Patients have infrequently been assessed about their desire for their family physician to possess a certain level of expertise in managing a wide range of behavioral science problems. This has led to inconsistencies in the type of behavioral science training offered to family physicians and thence to a marked discrepancy between the amount of training offered (relatively large) and the amount of mental health care provided (relatively small).

This study reports the results of a study of patient attitudes concerning the level of involvement by their family physician for each of 45 psychosocial problems. The levels offered were (1) no help, (2) referral, (3) compassion, concern, and minor advice, and (4) expert therapeutic help. The mean responses place a majority (25 of the 45) of the problems in level 3. Certain obvious problems appeared in level 1 (religious/church problems) and level 4 (pregnancy). Child behavioral problems dominated in level 2. Certain surprises were also found, such as the presence of problems of marital discord in level 1, and the problem of long-term pain in level 4.

The need for family physicians to provide mental health care is commonly accepted. This need has been articulated by national organizations whose work led to the development of the spe-

cialty of family practice<sup>1-3</sup> and has been confirmed by studies demonstrating that more than one half of all patients with mental health care problems are provided care, not by specialists in mental health care, but rather by those in primary care.<sup>4</sup> A major study by the National Institute of Medicine<sup>5</sup> examines the problems of linking the provision of mental health care and primary care. Inherent in many of these problems are deficiencies of various types in the training of primary care physicians in general and family physicians in particular. This is confirmed by Cassata and Kirkman-Liff,<sup>6</sup> who

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report relatively high rates of discomfort in residency-trained family physicians who care for psychosocial problems. This discomfort apparently leads to less frequent psychosocial intervention, despite the high frequency of psychosocial problems reported by the same physicians.

The apparent discrepancy between the need for family physicians to provide mental health care and their discomfort and relative infrequency in actually doing so is exaggerated by the strong emphasis placed on behavioral science education in family practice residency training. This emphasis is legitimized by national accrediting and review organizations<sup>7,8</sup> which specify either absolute or relative requirements for behavioral science education, thus leading to the employment of significant numbers of behavioral science faculty. Hornsby and Kerr<sup>9</sup> note that 90 percent of departments of family practice employ one or more behavioral science faculty members, and 43 percent employ three or more.

It would appear that two issues have been adequately addressed: why behavioral science skills and attitudes are to be taught, and who is to do the teaching. Two issues are yet to be fully examined: what is to be taught, and by what methods. The former will determine, to some extent, the latter. Much work has been done in the area of curriculum content, but the results are best summarized by Geyman,<sup>10</sup> who notes that "behavioral science teaching has been insufficiently related to the residents' everyday management of common clinical problems."

Efforts to generate a behavioral science curriculum have taken many forms. Jones et al<sup>11</sup> have described a major institutional effort to define a behavioral science curriculum with family medicine faculty, psychiatry faculty, and residency-trained family physicians. Werkman et al<sup>12</sup> surveyed 202 family physicians, asking for the most frequent and most difficult behavioral science problems encountered. Hornsby and Kerr<sup>9</sup> surveyed instead the faculty of behavioral science programs in the United States, asking them to rate the importance of various topics. Bibace et al<sup>13</sup> created another list by calculating the frequency of consultation for various psychosocial problems encountered by a group of nine family physician faculty members. Schienvold et al<sup>14</sup> surveyed family practice resident opinions about relevant curricular items. Stewart<sup>15</sup> listed the behavioral

components of the top 12 causes of death in a general population and emphasized the need for family physicians to be skilled in effecting behavior change in such areas as smoking and obesity. Finally, in the Virginia Study, reported by Marsland et al,<sup>16</sup> the actual frequency of reported psychosocial problems was determined. It would seem that the advice of Bland et al,<sup>17</sup> "the best way to develop a curriculum is by consulting those involved in the administration, teaching, and learning of the material," has been followed. However, one important group has been nearly ignored: the patient population, those who do (or do not) benefit from the attitudes and skills that are taught.

Surveys of patients have been used only in a limited fashion to generate curriculum. Several studies<sup>18-21</sup> have examined general patient perceptions of their family physician, and Hyatt<sup>22</sup> has looked more specifically at the concordance of opinions by patients and physicians regarding the role of the family physician. Interestingly, in this group of urban patients, there was major disagreement as to whether family physicians should handle, without referral, problems like depression, marital discord, sexual dysfunction, aging difficulties, and pediatric behavior disorders. In all cases, patients were far less likely to think that these services should be provided than did physicians. In addition, patients thought it relatively unimportant for family physicians to take family circumstances and problems into account when treating an individual family member. This is in contrast to a study by Goldstein et al,<sup>23</sup> which examined the incidence of family psychosocial concerns among urban and rural family practice patients and found that 38.6 to 48.9 percent of these patients had major concerns about the emotional health of their parents, children, marriages, or selves.

Despite major efforts in trying to define a general behavioral science curriculum, no studies exist that survey the needs and desires of patients for specific psychosocial skills in family physicians. The purpose of this study is to further the process of defining a commonly accepted behavioral science curriculum for family physicians by designing and testing a questionnaire that asks patients to consider several specific psychosocial problems, then rate the level of expertise that they would expect of their family physician in treating the problem.

## Methods

A pilot questionnaire was developed according to the following three major criteria:

1. The list of psychosocial problems should represent the most common and most important behavioral problems seen in family practice as identified in the literature.<sup>9,12-16,24-26</sup>

2. The patient should be allowed a range of choices when deciding how much involvement he or she might desire from a family physician on any given psychosocial problem. A search of the literature revealed, in the few studies similar to this study, that patients are typically given all-or-none, yes-or-no choices. Results based on such data could generate potentially erroneous conclusions. For example, patients may check "yes" on physician involvement for a given psychosocial problem, and the problem would thereby be determined to be of importance. However, if patients were given the opportunity to rate how much involvement, this same problem might consistently be ranked low. The conclusions then change, as do the curricular implications.

3. The content of the questionnaire should be comprehensive enough to meet the needs of the study, yet be brief enough so as not to create patient fatigue or irritability. With this in mind, 45 items were selected.

The end product was a questionnaire in a grid format. Across the top the four levels of physician involvement were displayed. Levels of involvement were explained directly above the grid as follows: "For the following problems, my family physician would:

*Level 1:* not be involved; if I sought help, it would be elsewhere.

*Level 2:* be somewhat involved by learning enough about the problem to arrange for an appropriate specialist.

*Level 3:* be more involved in demonstrating concern for my family's problem by asking questions, being sympathetic, and providing some help.

*Level 4:* be very involved and give expert help for solving my family's problems by giving advice, doing specialized therapy, or prescribing an appropriate medicine."

The psychosocial problems were listed along the side. Three grids were designed on separate pages with 15 randomly selected psychosocial problems per grid.

The front page of the questionnaire provided a brief explanation of the study to the patient and asked for such demographic data as age, sex, marital status, and number of dependent children 21 years of age or under living at home.

The population sampled numbered 316 patients; the average age was 29 years (range 18 to 69 years) and 76 percent were female. Nineteen percent had never been married, 16 percent were not now married, and 65 percent were married. Almost 70 percent had at least one child living at home.

The patients came from two family practice clinics in a large metropolitan area, one a private group practice and the other a model family practice center.

The data collection was accomplished by one of the authors (G.J.) according to a protocol. A schedule of questionnaire administration took into account time of day and day of week to ensure validity between and within the two clinics. The equivalent of one week was spent in each clinic administering questionnaires.

All patients aged 18 years and older with whom the medical student had no prior contact were approached in the clinic reception area. According to the standardized procedure, the medical student very briefly introduced himself and the study and asked for the patients' participation in filling out the questionnaire. Less than 10 percent of the patients who were approached did not fill out the questionnaire, usually for reasons of functional illiteracy. Those who did complete the questionnaire did so while waiting for their appointment, thereby eliminating the problems inherent in a return-by-mail procedure.

## Results

The questionnaire responses were analyzed in two ways. The first was to calculate relative percent frequency of responses for each psychosocial problem (Table 1).

The second analysis used weighted means. This collapsed the responses for each psychosocial problem into one number, making it possible to view the data in a simplified fashion. The means were calculated by assigning one point to level 1, two points to level 2, and so on.

The problems could then be grouped according to the level closest to the calculated means (Table 2). The problems in level 1 (no involvement) were clearly thought to be outside the domain of a family physician. Not only would patients seek no involvement from their physicians, but they also would not ask for a referral. Clusters of a similar nature could be seen: (1) job-related problems such as unemployment, financial problems, work problems; (2) family adjustment problems of a nonmedical nature, such as family-moving adjustment, divorce, marriage problems, elderly relative living at home; and (3) religious or church problems. The latter, with a mean of 1.2, was rated lowest of all of the 45 items.

The items in level 2 were those for which subjects desired a specialist and so would involve their family physician only minimally for referral information. Five of the eight items were parenting problems of a predominantly nonmedical nature—adoption, child school problems, child discipline problems, child temper tantrums, and toilet training. The other three items (death in the family, spouse abuse or neglect, and sexual problems) had a strong “family” orientation.

Level 3 contained 25 of the 45 items. For these problems patients apparently expected that their family physician should show concern by asking questions, being sympathetic, providing some help, and not making a referral for further care. The emphasis was on caring rather than specific therapeutic maneuvers. The problems in level 3 covered a wide range, resulting in less clear methods for clustering. Certain similarities were apparent in the groupings of common problems: (1) physical health and health maintenance problems, such as lack of exercise, diet, and obesity; (2) problems related to hospitalization and death, such as a dying family member, suicide, or hospitalized family member; (3) childhood-related problems of a chronic or serious nature, such as child abuse and neglect, bed wetting, child development problems, and childhood handicaps; (4) substance abuse problems, such as alcoholism and drug problems; (5) problems of a chronic nature, such as mental retardation and long-term emotional illness; (6) problems of living, such as depression, tiredness, headache, difficulty sleeping, nervousness and tension, and worries about health; and (7) problems more relevant to women, such as rape, abortion, and menopause.

The final category, level 4, represented the highest level of involvement that the patient could choose. In selecting this level, patients desired that their family physician be very involved and competent to give whatever specialized treatment or medication was necessary. The four problems most often selected—long-term pain, long-term physical illness, child illness, and pregnancy—were of a predominantly medical nature, although the first is generally treated behaviorally.

## Discussion

The significance of the results of this study range from trivial to remarkable. As do all studies of a pilot nature, this study suffers from certain limitations: modest sample size ( $n = 316$ ), bias and self-selection of the patient sample (all from established family practices located in the Salt Lake City metropolitan area), researcher bias in the selection of both the psychosocial problems and the choices of level of involvement offered to the patient, a lack of correlation to demographic and socioeconomic data, and lack of any data on physician responses to corollary questions.

Many of these limitations were self-imposed and will be turned into questions for future study. Despite these limitations, however, several interesting conclusions can be drawn of both a general and a specific nature.

The level in which the mean of many items fell could be reasonably anticipated. This study has confirmed the anecdotal opinions of experienced clinicians. The presence of religious, work, and financial problems in level 1 is not surprising. Neither is the presence of problems thought to be primarily medical in level 4. Of great surprise is the presence of both divorce and marriage problems in level 1. Apparently, patients in this study population with marriage problems are not nearly so interested in consulting family physicians as are family physician educators interested in emphasizing this topic in training, as indicated by its frequency of appearance in curriculum lists from accrediting organizations. Perhaps this result reflects some bias in the patient population, but this seems unlikely, since the results confirm the work of Hyatt.<sup>22</sup> However, both of these patient popu-

Table 1. Frequency of Responses for Level of Involvement Desired for 45 Psychosocial Problems

	Level 1: No Involvement (%)	Level 2: Referral (%)	Level 3: Some Help/ Concern (%)	Level 4: Expert Help (%)
Abortion	9	16	20	54
Adoption of child	36	36	20	8
Alcoholism	10	31	24	33
Bed wetting	8	19	31	40
Birth control counseling	5	12	29	54
Child abuse or neglect	13	28	22	35
Child development problems	5	24	28	41
Child discipline problem	35	37	21	6
Child illness	1	6	12	80
Child school problems	35	38	18	7
Child temper tantrums	24	39	26	10
Child with handicap	2	29	26	41
Death in the family	33	23	30	12
Depression	8	29	29	32
Diet problems	8	28	26	36
Difficulty sleeping	5	21	32	42
Divorce	61	26	8	3
Drug problem	5	24	18	53
Dying family member	19	18	31	31
Elderly relative living at home	43	36	17	4
Family hereditary problems	7	21	24	48
Family moving adjustment	59	24	15	2
Financial problems	71	18	8	2
Headache	13	16	27	44
Hospitalized family member	7	15	31	45
Lack of exercise	18	22	35	23
Long-term emotional illness	4	27	21	48
Long-term pain	1	9	22	68
Long-term physical illness	1	7	15	77
Marriage problems	50	33	12	3
Menopause	5	15	28	52
Mental retardation	4	36	21	37
Nervousness and tension	4	17	33	46
Overweight	6	19	28	46
Pregnancy	3	5	6	84
Rape	7	22	23	48
Religious or church problem	82	12	3	1
Sexual problems	16	38	26	18
Spouse abuse or neglect	22	30	24	23
Suicide attempt	12	32	21	34
Tiredness	8	23	33	34
Toilet training	23	33	31	12
Unemployment	78	14	5	1
Work problems	57	27	12	4
Worried about health	2	14	33	49

**Table 2. Problems Grouped According to Their Levels of Involvement**

Level 1 No Involvement (mean = 1.2-1.5)	Level 2: Referral (mean = 1.6-2.5)	Level 3: Some Help/Concern (mean = 2.6-3.4)	Level 4: Expert Help (mean = 3.5-4.0)
Divorce Elderly relative living at home Family moving adjustment Financial problems Marriage problems Religious or church problems Unemployment Work problems	Adoption Child discipline problems Child school problems Child temper tantrums Death in the family Sexual problems Spouse abuse or neglect Toilet training	Abortion Alcoholism Bed wetting Birth control counseling Child abuse or neglect Child development problems Child with handicap Depression Diet Difficulty sleeping Drug problem Dying family member Family hereditary counseling Headache Hospitalized family member Lack of exercise Long-term emotional illness Menopause Mental retardation Nervousness or tension Overweight Rape Suicide attempt Tiredness Worried about health	Child illness Long-term pain Long-term physical illness Pregnancy

lations were from urban areas, and perhaps rural patients think differently.

Of equal surprise is the strong rating received by "long-term pain," a topic which in training is not usually emphasized commensurate with this score. The consequences of inadequate treatment of this problem are many, including iatrogenic substance abuse, and would seem to deserve greater attention in family practice education.

The items listed in level 2 are essentially all of an emotionally charged nature, with a particular emphasis on emotional problems of children. Apparently, for such difficult problems as violence in

the family and sexual problems, patients are willing to raise these in their family physician's office, but only for purposes of receiving referral. This again may reflect the greater availability of a mental health care network in an urban setting. In a similar fashion, urban patients may desire pediatric specialty referral from their family physician because it is known to be available. Given the limited nature of help requested by patients for the problems in level 2, emphasis on teaching specific management skills or even extensive understanding would seem unwarranted. Of greater value would be the teaching of ways to efficiently use

auxiliary services and consultants.

The majority of problems fell in level 3, a level of involvement in which the physician must be interested but not definitive, supportive but not directive, concerned but not expert. This would seem to some a vague role lacking in value. On the contrary, the "professional handholding" function of a physician is often the paramount one, and its value should not be underestimated. The presence of a wide range of problems (eg, lack of exercise, rape, suicide attempt, family hereditary counseling) in this group reflects the patient's image of a family physician as a compassionate, sensitive generalist who is capable of demonstrating genuine concern for a patient with a wide range of problems.

In its zeal to establish its value in the medical care delivery system, the specialty of family practice has made many offerings of behavioral science expertise. Thus there was created a mandate for family practice trainees to become expert in treating all the many problems of living, life style deviations, and specific behavioral diagnoses that afflict civilized man. When the trainees fail to become expert in treating such a vast array of problems, the discrepancy noted by Cassata and Kirkman-Liff<sup>6</sup> occurs: family physicians who, despite much training, are so uncomfortable in providing expert mental health care that they provide little or none. If the training objectives were limited and therefore more likely to be accomplished, family physicians would be encouraged to increase their sensitivity to the presence of psychosocial problems because they would be confident of their ability to provide the compassionate, only slightly expert care requested by patients. It is known that physicians are unlikely to pursue patient problems for which they have no help. One solution is to become expert at solving more and more problems. Another is to redefine the concept of "help." In this case, the latter seems more productive.

In conclusion, the patient's needs have been too infrequently considered in the design of behavioral science training for family physicians. This exploratory study has attempted to take into consideration their needs, providing results that are interesting and provocative enough to (1) demonstrate the need for research in this area, and (2) provide a basis upon which further research can be directed in a more refined and focused manner, including the replication of this study in other patient populations.

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