Family Practice Residents' Perceptions of Behavioral Science Training, Relevance, and Needs

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Fifty-six family practice residents representing programs in 23 different states were surveyed concerning their training experience in behavioral science. Questions covered three basic areas of concern: experiential content, subsequent relevance to family practice, and suggestions for curriculum improvement at the residency level. The results point out definite deficits in predoctoral training, especially with regard to knowledge of medical psychology, psychiatric consultation to medical patients, and practical intervention skills. Suggestions are made concerning curriculum development in behavioral science which (1) emphasize some new areas of concern raised by the residents, (2) recommend a more practical, integrated approach beginning in the medical school training, and (3) emphasize a dual approach requiring skills in medical psychology and skills more traditionally subsumed under the "mental health" field.

There has been increasing interest in the development of behavioral science curriculum for family practice residencies.[1,2] The interest has been pointed towards developing the most relevant behavioral science courses for the training of family practice residents, and more generally, the integration of these curricula into the total family practice residency experience. It has been suggested that the best way to develop a curriculum is by consulting those involved in the administration, teaching, and learning of the material.[1] Without a doubt, this would mean including the residents in the development of their own curriculum. Some individual programs have attempted to do this.[2] Nevertheless, a general survey of family practice residents in the United States has not yet been done to determine how they view different aspects of both their medical education and residency education with respect to relevant aspects of behavioral science for their family practice training. Therefore, the present study was undertaken to determine the degree to which training in behavioral science-related areas has been obtained and how the residents have viewed the relevance of this training to their family practice experience. It is assumed that with this greater degree of input from family practice residents, more relevant course work and practical experience could be arranged in their training programs.

Method

Residents' views of their behavioral science needs were solicited through the use of a survey questionnaire designed to provide information in a

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Table 1. Rank Order of Areas Most Relevant to Family Medicine

Rank Order	Area	Number of Residents
1	Counseling skills	38
2	Family dynamics and family therapy	18
3	Psychosomatics and understanding psychosomatic medicine in the relationships between psychosocial and physical aspects of disease	13
4	Behavioral techniques and interventions in patient problems	8
5	Physician-patient relationships	5
6	Intra and interprofessional growth	5
7	The management of anxiety and depression	5
8	Drug abuse	1
9	Alcohol abuse	1
10	Adolescent psychology	1

variety of areas. Residents were asked to do the following:

1. Describe behavioral science courses taken in medical school.
2. Describe clinical behavioral science/psychiatry experiences during medical school.
3. Describe the predominant theoretical orientation of this education (eg, psychoanalytic, behavioral, etc).
4. Rate the relevance of this education on a five-point scale from extremely useful (5) to irrelevant (1).
5. Describe any videotape experience in medical school.
6. Rate the usefulness of having been videotaped during training (videotape experience) on a five-point scale from extremely beneficial (5) to irrelevant (1).
7. Describe any experience with medical psychology (which was defined as psychosomatic medicine, psychological reactions to illness, inter and intra professional relationships, etc).
8. Describe any consultation liaison psychiatry experience.
9. Describe any advanced training in behavioral science skills (eg, marital counseling, sexual counseling, etc).
10. Rate how useful behavioral science is for (a) the family practice residency, and for (b) the practice of family medicine.
11. Indicate what aspects of behavioral science are most relevant to (a) the family practice residency, and (b) the practice of family medicine.
12. Rate the relevance of medical psychology to (a) the family practice residency, and (b) the practice of family medicine.
13. Suggest ways to make behavioral science more relevant to the family practice residency and the practice of family medicine.

The questionnaire was administered at the most recent National Conference of Family Practice Residents which 120 residents, from all parts of the country and at various levels of training, attended. The questionnaire was distributed to as many attending residents as possible by a third year resident from Harrisburg Hospital. Most surveys were completed at the conference, some others were returned by mail.

Results

A total of 56 family practice residents representing 23 different states were surveyed during the course of this study. Of the 56, 11 were first year residents, 28 were second year residents, and 17 were third year residents.

With respect to the number of required behavioral science courses taken in medical school, first year residents averaged 2.2 courses, second year residents averaged 1.8 courses, whereas third year residents averaged only 1.4 courses. The overall mean for residents was 1.8 courses.

With respect to the number of individuals taking an elective behavioral science course while in medical school, the first year residents again showed the greatest percentage with 45 percent of them taking elective courses; 36 percent of the second year residents and 38 percent of the third year residents elected to take an additional course in behavioral science.

The most common instructor of behavioral science in medical school teaching was the psychiatrist, with a total of 40 residents indicating that psychiatrists taught them behavioral science courses. Psychologists were the next largest group, with 15 residents indicating psychologists as instructors. Eight residents indicated a multidisciplinary approach; three residents had courses from social workers; and 20 residents reported being taught by more than one type of professional.

The largest percentage of behavioral science teaching during medical school took place within inpatient psychiatric units, with a total of 34 residents indicating that this was their primary training facility. This was followed in frequency by outpatient psychiatric units, where 12 residents said they had been trained. Six residents stated that they had worked in VA hospitals, one indicated that he had been in a community mental health center, and four residents indicated other types of facilities for training. With respect to the theoretical orientation of behavioral science training, many residents indicated exposure to more than one orientation, with relatively equal exposure to psychoanalytic, psychodynamic, and behavioral approaches in behavioral science. There was lesser emphasis placed on such techniques as transactional analysis, humanistic psychology, and gestalt approaches.

Table 2. Rank Order of Suggestions for Improving Behavioral Science Training

1. Integrate the behavioral science training into the total experience of the family practice residency.
2. Use videotapes as a feedback and supervisory mechanism.
3. Maintain staff psychologists rather than having consultants or psychiatrists.
4. Make the material more practical and applicable.
5. Provide for a consultation-liaison psychiatry rotation.
6. Provide for resident support and growth groups.
7. Provide preceptors who are better role models when behavioral science issues arise.
8. Emphasize the effect of physician reactions upon treatment of patients.
9. Provide residents with individual counseling and support during stress periods.
10. Increase the case conference model.
11. Minimize psychiatric techniques while maximizing behavioral techniques.
12. Expand the knowledge of psychopharmacology.
13. Make behavioral science more relevant in medical school so there is better understanding at that point.
14. Improve the resident selection procedures so that residents who have greater interests in behavioral science end up in family practice.

The residents' ratings of the relevance of their behavioral science training in medical school averaged 3.5 on a five-point scale. With respect to experience with videotaping, 72 percent of the first year residents, 77 percent of the second year residents, and only 50 percent of the third year residents had had this experience. The mean rating for relevance of being videotaped was 3.6 on a five-point scale for all residents.

With regard to medical psychology, 50 percent of the first year residents indicated some experience in this area, 56 percent of the second year

residents had had this experience, whereas 45 percent of the third year residents responded positively to the question on learning in this area. The overall percentages for consultation-liaison experience were less, as 33 percent of first year residents, 28 percent of second year residents, and 23 percent of third year residents stated that they had been on this type of service.

The residents indicated that they felt the relevance of behavioral science to residency training was at an average of 4.6 on a five-point scale. Concerning the relevance of behavioral science to the practice of family medicine, the ratings were very similar with an overall rating of 4.5 on a five-point scale. With respect to medical psychology in residency training, six residents saw this as extremely relevant, 29 residents saw it as very relevant, whereas only four saw it somewhat relevant. Similarly, residents felt that the relevance of medical psychology to the practice of family medicine was extremely relevant for seven residents, very relevant for 27 residents, and only somewhat relevant for four residents.

Table 1 presents the residents' view of areas of behavioral science which they have found most relevant to their family practice residency, while Table 2 outlines their suggestions for improving the teaching and formulation of behavioral science curricula.

Discussion

It is felt that this short questionnaire brought several important factors to the forefront. Before mentioning these, however, it should be noted that the sample of residents responding to these questions may not be truly representative of all family medicine residents, in that, although it represents a cross-section of geographic areas and the years of residency training, it may be biased by the fact that these particular individuals were interested in coming to this type of professional meeting. With this restriction in mind, several tentative conclusions may be offered.

Because of the relatively small numbers of behavioral science courses required in medical school and given the usual orientation (psychodynamic) and location (inpatient-psychiatric facilities), it may not be surprising the residents see little applied practicality in much of their training. There is little argument among family physicians that the typical psychiatric model, or orientation, seems too cumbersome and time consuming to be of practical value to the busy family physician. Furthermore, the typical patient with which the family physician comes into contact is usually dissimilar to the psychiatric population which is dealt with in inpatient facilities.[3]

With respect to the number of courses offered in medical school, it certainly seems that for the purpose of family practice residents, this amount of training may be somewhat inferior to what would be ideally expected.[4] This brief exposure may leave a tremendous void with respect to quality and quantity of material that can be presented in behavioral science, especially since many residents seem somewhat ill-prepared for the type of behavioral problems that their patients present within the clinic population. Resident awareness of this fact is apparent in their suggestion to make behavioral science more relevant in medical school. Coincidentally, it is suggested that improved resident selection procedures be employed so as to tap medical students who have an appreciation for the value of behavioral science training for the family physician.

The increased rating of the relevance of behavioral science from the medical school years to resident training leads to the alternate hypothesis, however, that a greater understanding of the import of this particular area is generated through the direct experience of the family practice resident. It would probably be interesting to compare ratings of family practice residents on the relevance of behavioral science in medical school to those ratings by other disciplines, especially non-primary care disciplines.

Another possible reason for the lower relevance ratings during medical school experience may be attributed to the apparent lack of experience in the areas of psychiatry-consultation and medical psychology. These areas are certainly very pertinent to the experience of the family practice resident who is likely to come into contact with behavioral problems in patients who have actual organic disease. It is felt that the tools to deal with the patient with problems of this nature are somewhat different from those needed to deal with patients who have a strictly functional basis for their symp-

toms.[5] In fact, both in terms of areas which the residents themselves see as important, and in terms of suggestions for changing present curricula, the residents indicated that they see medical psychology as extremely relevant and perceive the need for practical, behavioral means to understand and deal with medical patients who exhibit difficulties in coping with their present condition. Actually, such a perspective is in agreement with a recently completed study in which family physicians and family practice residency program directors rated areas of relevance, usefulness, and practical utility for the practice of family medicine.[4]

Another interesting point in the questionnaire responses was that the use of videotape as a training mechanism within the medical school is apparently on the rise. Over the last three years, there has been a 25 percent increase in the number of residents being exposed to videotaping of their training experiences. Ratings of relevance of these experiences would seem to validate this medium as useful in the residency training program and should lead to greater acceptance of this technique at the residency level.[6,7]

Another finding of the survey indicates that with respect to counseling, interviewing, and psychotherapeutic skills, the mode of teaching seems to be directed more towards specific behavioral skills rather than towards a general approach. That is to say, the residents perceive themselves as having had specific experience in sexual counseling, marital counseling, or individual counseling, but not in the general training of interviewing skills. Nonetheless, the particular areas of behavioral science which the residents found most relevant to their future practice were certainly related to abilities to counsel, support, and understand their patients from a psychological standpoint. This certainly coincides with the efforts of those responsible for many behavioral science curricula to emphasize counseling skills for the family physician.[2]

The residents' recommendations for the use of behavioral technology seems coincidental with their concerns for making the behavioral science curriculum more practical and integrated in their overall training (Table 1). Behavioral methodology is a well-documented means of supplying a practical tool for the family physician.[8] It should be kept in mind, however, that operant psychology can not, and should not, be expected to meet all the demands for intervention skills of family practice residents.

Finally, an important area in the survey was the residents' awareness of their own need for support during the residency years. Support apparently should be available on both an individual and a group basis. Residency programs may need to make a concerted effort to supply this for their residents on a regular, easily obtainable basis, if it is not presently being done.

The results of this particular questionnaire and the possible ramifications of these results may lead to some rethinking in the design of curricula for family practice residencies. It seems apparent from these results that the basic behavioral science curriculum needs a dual focus with mental health aspects of psychology and medical psychology being integral parts in the development of the family physician. Although the specific nature of this curriculum may vary to meet the individual needs of a given family practice program, it seems that both areas need adequate treatment in order to prepare the family physician to meet the needs of his/her practice. In conclusion, the residents, through their responses to this questionnaire, have certainly outlined many important areas, that if not presently included, might be considered for inclusion in a flexible, broad-based curriculum.

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