Developing Behavioral Science for a Family Practice Residency

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The development of behavioral science in a family practice residency has first to be structured around a statement of purpose and adequate goals. These goals can only be implemented when the purely custodial function of the medical profession is rejected and the ethical responsibility of the physician to society is allowed to direct the role innovations that must be incorporated. It is the person of the physician as a diagnostic and therapeutic tool that must be cultivated. The curriculum presented has included behavioral science conferences, a one-month behavioral science rotation, a two-month orientation program, behavioral science clinical attendings, and a personal counseling program for each resident throughout the three years of training. To be complete, such a program requires the further refinement of behavioral objectives that allow reliable evaluation and redefinition by residents and faculty.

Behavioral science has a significant contribution to make in the education of a family physician. Too often it is assumed that sensitive, attending family physicians, with a few extra moments in consultation, will effectively reshape the young medical graduate. By scattering a few behavioral science lectures through the residency, many programs hope they have discharged their responsibility to the new profession and the young resident. The Department of Family Practice at the Medical University of South Carolina, and its Division of Behavioral Science, have not accepted such a minimal philosophy of behavioral science. Rather, the Behavioral Science Division contends that the person of the family physician is the primary diagnostic and therapeutic tool of family practice. If this be true, behavioral science must significantly refine the perceptions of the resident in viewing the physician, the patient, his/her family and the social context in which they meet. The growth and development of teaching programs of the Behavioral Science Division over the past five years will be outlined in this paper, including the educational objectives, curriculum, and evaluation methods which have been formulated.

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Goals and Curriculum in Behavioral Science

In order to define goals, objectives, and methods for teaching behavioral science in the residency program, a Behavioral Science Committee was formed in the Department of Family Practice early in its development. This Committee, together with residents who were interested and who could participate during free moments in their rotations, developed the following statement of purpose and goals.

The purpose of behavioral science in the family practice residency training program is to enable the future family physician to grow in awareness of his/her ongoing involvement in a social context and to incorporate this sensitivity to self, to others, and to the culture which shapes their mutual interaction in decision-making, corroborative relations, and patient care.
Behaviorally, we expect the realization of this purpose to be manifest in more discriminating, feeling, and thinking responses that facilitate self-fulfillment in a healthy and meaningful life for those persons involved.

The following *goals* were formulated in 1972 for behavioral science teaching in the family practice residency program.

1. The resident will acquire an understanding of the dynamics of family life and their effect on each family member.
2. The resident will possess a working knowledge of psychodynamics and their relation to mind and body in caring for patients. We anticipate that this knowledge would permeate all interpersonal relationships.
3. The resident will develop patterns of interprofessional and interagency collaboration and cooperation which enhance patient care.
4. The resident will be exposed to experiences and information that will enable him/her to function as teacher and advocate both to family members and to the community at large.
5. The resident will learn to be sensitive to the role that the patient, the family, and the community expect him/her to play, and to the way in which these role expectations condition the therapeutic relationship, com-

Table 1. 1973 Family Practice Orientation Program

Topics and experiences	Time (hours)	% of Total Time	% Time Devoted to Behavioral Science
Orientation to family practice (FP)	12	4	
Orientation to the FP unit	15	5	
Orientation to community resources	27	9	9
State and local mental health program	14	4	4
Medical ethics	30	10	10
Interviewing skills, personality inventories, and group dynamics laboratory	45	15	15
Patient care in the FP unit	164	53	
Totals	307	100	38

munity responsibilities, and his/her self-understanding.

6. The resident will grow in consciousness of his/her sensations, emotions, and feelings. We expect this consciousness to contribute to patient care and personal satisfaction, and also to prevent the disabling effects of the stress commonly experienced in family practice on the resident physician and his/her family.

7. The resident will clarify his/her own value system as it relates to the modes, means, and ends of the medical profession, and relate these values to his/her basic beliefs which have an overriding influence in life.

With only slight editorial modifications in 1975, the above stated purpose and goals have continued to serve the Behavioral Science Committee as the standard against which new curricula and programs are assessed. (The Behavioral Science Committee was recognized in February 1976 as one of the six divisions in the Department.)

After the Behavioral Science Committee had developed a purpose and seven goals, it set about to outline a curriculum that would effectively allow the resident to experience the desired growth articulated in the statement of purpose. The outline of that curriculum follows.*

Required Courses
- Communication
- Community
- Life span development
- Family life
- Drug effects
- Professional orientation
- Research
- Mental retardation

Elective Courses
- Group dynamics laboratory
- Ethics
- Mental health
- Humanities and the Behavioral Sciences
- Community

Under each of the above subheadings, the topic was divided into "experiential" and "informational" headings. Within each of those headings, a "goal" was defined as well as the "implementation" to achieve that goal. The curriculum outlined above assumed the availability of more conventional academic time schedules which were not then negotiable because of previous commitments to hospital services through June 1974. The work to create the curriculum, however, was not lost. It was the occasion for those on the Committee to move closer to understanding what needed to be taught and what relevance each subject had to the stated purpose and goals. It is important to note that the residents were part of the Committee's deliberations. Following the completion of the curriculum outlined above, all residents and faculty received the detailed copy along with a questionnaire soliciting their particular and general comments. Thus, the thinking of all the residents was stimulated and alerted to areas of expected future growth.

Teaching Approaches in Behavioral Science

1. Resident Orientation Program

The first formal restructuring of the Family Practice Residency Program that provided input from the behavioral sciences was the 1973, two-month orientation program for new residents (July through August 1973). A weekly, voluntary, noonday, video tape conference had been scheduled to allow a resident to review with peers and faculty a tape that had been made during a scheduled office visit. Prior to this time, behavioral science faculty served only in a consulting capacity. This had significantly limited the initiative they could take in directly intervening in the resident-patient relationship. Table 1 gives a general outline of the topics and experiences that composed the first orientation program. It is significant to note that behavioral science filled roughly 38 percent of the orientation program. With minor changes in the percent of the time allocated to the general topics in Table 1, the orientation program for the first-year residents for 1974, 1975, 1976, and the anticipated program for 1977, are quite comparable.

With each succeeding year, the orientation program has grown more differentiated and refined due to experience and feedback from the residents. The residents were asked to evaluate the amount of time devoted to 36 component experiences of the orientation program, and to identify the most useful and least useful experiences. The behavioral science curriculum that required a time structure incompatible with one-hour noon conference segments, could be incorporated into the more flexible time

*For a detailed outline of the 1972-1973 Behavioral Science Curriculum, write to Dr. Alan H. Johnson at the reprint address.

schedule of a two-month orientation program or a one-month behavioral science rotation.

2. Behavioral Science Rotation and Personal Counseling

In September 1973, the Behavioral Science Committee recommended that, effective July 1, 1974, a one-month rotation for all second and third-year residents would be required. Approval by the Department Chairman and faculty followed. Each class could be divided into approximately equal groups, allowing one month's work with small groups of five to eight residents. It has proved extremely helpful to residents to insure that a family physician is present for all sessions throughout the one-month behavioral science rotation. This policy became operative in November 1975.

Concurrently, the Committee decided to initiate the program in personal and professional self-appraisal immediately. This program recommended that all second and third-year residents spend at least one hour a month with a medical faculty advisor and two hours a week for eight consecutive weeks with a behavioral science counselor. The purpose was to allow the resident to work through particular problems, frustrations, or ambitions that relate to assuming the role of the family physician and becoming an adult human being.

The residents have been asked to complete a detailed evaluation form* following the completion of their personal self-appraisal program. A comparable form is used to evaluate the professional self-appraisal program. Due to the feedback of the residents in 1974 and 1975, the Behavioral Science Committee instituted a personal self-appraisal program for all first-year residents effective September 1975. This program allows each first-year resident to select a behavioral science faculty member to work with for at least one hour a month throughout the first year of residency training.

3. Behavioral Science Conferences

During the period September 1973 through June 1974, every other Tuesday noon hour and every Wednesday noon hour was set aside for behavioral science conferences. Some weekends and evenings were used when convenient to both residents and faculty to accommodate experiences that could not be structured in a one-hour period. The following outline indicates the topics covered and the time allotted to each during the interim plan.

Communication
- Basic interviewing (Microcounseling), Basic encounter group, Transactional analysis (32 hrs, 2 weekends)
- Team approach (6 hrs)
- Doctor/patient interaction conference (16 hrs)

Professional orientation (8 hrs)
Drug information and substance abuse (16 hrs)
Family life and family medicine (11 hrs)
Human sexuality (12 hrs)

From October 1973 through April 1974 first-year residents and spouses of all residents were invited to participate in a noon discussion on "Human Behavior in Literature." Eventually this program included all residents and spouses, incorporated films, and became a monthly, evening affair in the home of a resident or faculty member. Usually the discussion is preceded by a potluck supper.

Specific Behavioral Science Objectives

Since spring of 1973, two consultation rooms had been equipped with one-way glass so that live monitoring or television taping was possible. During November 1975, television monitoring facilities that allowed simultaneous observation and recording were installed in each consultation room. Soon thereafter the Behavioral Science Committee set up an attending schedule whereby each Committee member spent one half-day a week in the clinic observing doctor-patient interactions and consulting with residents. With these data inputs and the experience and feedback from one year's behavioral science rotation (1974-75), one year's behavioral science interim plan (1973-74), and three orientation programs (1973, 1974, and 1975), the Committee began to focus on more specific objectives for the behavioral sciences in the family practice residency. Objectives together with instructional methods and time allocations by year in the residency were defined in January 1976 in the following six major areas: (1) The Family, (2) Community, (3) Resident Self-Awareness and Understanding, (4) Ethics and Value Systems, (5) Role and Function, and (6) Psychotherapies and Counseling Skills. The objectives, together with time allotments by year, are presented below.

The Family†

I. The resident will understand why people form domestic units and how "family life" meets the needs of the individual, the household, and society. (I yr, 1 half-day; II yr, _ III yr, _)

II. The resident will have several methods of assessing each family's unique resources and dysfunctional patterns of living. (I yr, 1 half-day; II yr, 2 half-days; III yr, _)

III. The resident will know normal and variant development of the individual from birth to death. (I yr, _; II yr, 5

*Resident evaluation forms are available on request.

†For a detailed outline of the Family Curriculum write to Dr. Leatrice Mankin Sherer at the reprint address.

Table 2. 1976 Behavioral Science Objectives

Topics	Time in Half-Days I yr	II yr	III yr	Totals
The family	2	8		10
Community	8	2	2	12
Resident self-awareness and understanding	6	6	4	16
Ethics and value systems	7	4	5	16
Role and function	8	8	13	29
Psychotherapies and counseling skills	12	10	16	38
Totals	43	38	40	121

half-days; III yr, _)

IV. The resident will be able to relate the individual's development, at each stage of life (birth, childhood, adolescence, early adulthood, middle age, old age, death), to its effect on the family unit. (Same as objective III)

V. The resident will know which life events are potentially distressing and will know how to educate the family to take preventive action. (I yr, _; II yr, 1 half-day; III yr, _)

Community *

I. The resident will demonstrate a working knowledge of the principle social, health, and welfare facilities and services available in the Charleston area. (I yr, 5 half-days; II yr, _; III yr, _)

II. The resident will demonstrate his/her understanding of the levels of care provided in different nursing homes; and, he/she will also demonstrate understanding of arrangements regarding nursing home admissions, ie, the role of the patient, the role of the family, the role of the family physician. (I yr, 2 half-days; II yr, _; III yr, _)

III. The resident will gain understanding of health/social resources and services within the community which are available to assist him/her in maintaining a patient in his *own* home. (I yr, 1 half-day; II yr, _; III yr, _)

IV. The resident will demonstrate his/her ability to identify patient needs, gather relevant family/social data, and make appropriate referrals to community resources. (I yr, _; II yr, 2 half-days; III yr, _)

V. The resident will be able to identify and discuss strategies of planned change. (I yr, _; II yr, _; III yr, 2 half-days)

Resident Self-Awareness and Understanding†

I. The resident will achieve a growing awareness of him/her self in a group setting, his/her effect on others, and the group process and norms that have contributed to that interaction.[1] (I yr, 4 half-days; II yr, _; III yr, _)

II. The resident will develop increased self-awareness through feedback from objective and subjective data. (I yr, 2 half-days; II yr, _; III yr, _)

III. The resident will learn the strengths and weaknesses of his/her professional, interpersonal skills. (I yr, _; II yr, 4 half-days; III yr, 4 half-days)

IV. The resident will examine and clarify his/her personal life and professional values. (I yr, _; II yr, 2 half-days; III yr, _)

V. The resident will achieve increased personal growth, by experiencing with a counselor an opportunity to examine how he/she *as a person* feels about his/her life, including his/her profession. (I yr, _; II yr, _; III yr, _)

Ethics and Value Systems‡

I. The resident will come to a critical awareness of values which he/she holds, especially moral values, elucidating those values in relation to personal life and professional practice. (I yr, 1 half-day; II yr, 2 half-days; III yr, _)

II. The resident will be able to identify value orientations of real or simulated patients, which have a bearing upon the patient's behavior or upon the management of the patient. The resident will be able to recognize and handle conflicts between his/her values, attitudes, or customs, and those of the patient. (I yr, _; II yr, 2 half-days; III yr, _)

III. The resident will demonstrate that

*For a detailed outline of the Community Curriculum write to Mrs. Louise J. Guy at the reprint address.

†For a detailed outline of the Resident Self-Awareness and Understanding Curriculum write to Dr. James A. Keith at the reprint address.

‡For a detailed outline of the Ethics and Value Systems Curriculum write to Mr. Albert H. Keller at the reprint address.

he/she has comprehensive understanding of the nature of four moral values, and that he/she can use them in making clinical decisions. The values are: respect for human life, faithfulness in covenant relationships, individual freedom, and justice in allocating medical resources. (I yr, 5 half-days; II yr, _; III yr, _)

IV. The resident will demonstrate skill in using a methodology to make an ethical decision in a clinical case. (Same as objective III)

V. The resident will be able to evaluate the structural factors in the provision of medical care in a particular setting, with reference to normative moral values which he/she holds. The resident will be prepared to take responsibility in shaping some part of the medical care system in accord with those values. (I yr, 1 half-day; II yr, _; III yr, 3 half-days)

VI. The resident will show understanding of the many levels of interaction between the institution of medicine and its socio-cultural milieu. He/she will articulate awareness of the impact which both the structure and the function of medicine have upon the lives of individuals and societies. (I yr, _; II yr, _; III yr, 2 half-days)

Role and Function *

I. The resident will formulate the means to achieve and maintain professional competence. (I yr, 5 half-days; II yr, 5 half-days; III yr, 5 half-days)

II. The resident will conceptualize his/her identity as a family physician. (I yr, 1 half-day; II yr, _; III yr, 1 half-day)

III. The resident will explore and discuss the needs, expectations and responsibilities of each member of his/her family and determine how these shape his/her role and function as a spouse, parent, and sometimes as a child (I yr, 1 half-day; II yr, _; III yr, 1 half-day)

IV. The resident will demonstrate his/her ability to assume the advocacy role for patients/families which will enable them to make optimal use of the health-care system. (I yr, _; II yr, 1 half-day; III yr, 1 half-day)

V. The resident will explore, discuss and formulate criteria for professional behavior. (I yr, _; II yr, _; III yr, 1 half-day)

VI. The resident will demonstrate his/her understanding and application of sound and effectual patient education. (I yr, 1 half-day; II yr, 2 half-days; III yr, 2 half-days)

VII. The resident will demonstrate the quality of empathetic and compassionate care in patient/family management. (I yr, _; II yr, _; III yr, _)

VIII. The resident will discuss his/her application of the role and function of advocacy, conduct, compassion, and magistral (patient/family education) at the community level. (I yr, _; II yr, _; III yr, 1 half-day)

IX. The resident will explore and discuss the non-professional, citizen role of the family physician. (I yr, _; II yr, _; III yr, 1 half-day)

Psychotherapies and Counseling Skills †

I. The resident will be able to characterize the qualities of his/her interaction with a patient or family. He/she will use either Porter's or Carkhuff's schema in characterizing their interactions. (I yr, 4 half-days; II yr, 2 half-days; III yr, _)

II. The resident will be familiar with the theoretical basis and techniques of the following psychotherapies: (a) Adlerian psychotherapy, (b) behavior modification, (c) client-centered therapy, (d) Gestalt therapy, (e) transactional analysis. (I yr, 4 half-days; II yr, _; III yr, _)

III. The resident will develop and effect a therapeutic management profile with a patient in his/her unique family setting. (I yr, _; II yr, 4 half-days; III yr, 4 half-days)

IV. The resident will learn appropriate applications of counseling techniques for problems attendant to sexual behavior. (I yr, 4 half-days; II yr, _; III yr, 4 half-days)

V. The resident will learn the basic principles and techniques of crisis intervention. (I yr, _; II yr, _; III yr, 8 half-days)

VI. The resident will demonstrate that he/she understands characteristic responses of people suffering loss, terminal illness, or the death of a significant other. (I yr, _; II yr, 2 half-days; III yr, _)

VII. The resident will articulate the kinds of skills needed in caring for a dying patient in childhood, adolescence, middle age, and old age, and in caring for the grieving family. (I yr, _; II yr, 2 half-days; III yr, _)

Table 2 indicates the time allotted to each of the six major areas of the curriculum. Total half-days by year in the residency are indicated on the last row of the table under appropriate columns. In all, approximately 121 half-days are formally structured in the family practice residency to teach behavioral science. Additional time is devoted to behavioral science as a matter of individual resident choice. From experience, the writers have observed that one half-day provides approximately three contact, experience, or teaching hours. Thus, we have found that 363 formally structured hours of behavioral science in a family practice residency program constitute the minimum time allotment if that aspect of the resident's education is to be "treated" adequately.

*For a detailed outline of the Role and Function Curriculum write to Dr. Joseph V. Fisher at the reprint address.

†For a detailed outline of the Psychotherapies and Counseling Skills Curriculum write to Dr. Alan H. Johnson at the reprint address.

Evaluation in Behavioral Science

To this point we have described an ongoing dialogue over a period of three and a half years between behavioral science faculty and family practice residents in creating the goals and objectives for this particular phase of residency training. When experience is coupled with feedback, learning may occur. Thus, the continual feedback to residents from behavioral science faculty about their clinical performance, their professional frustrations and ambitions, as well as their personal struggle for individuation, sets the stage for the growth of each resident.

Following the completion of the behavioral science rotation in both the second and third years, each resident's professional performance is to be reviewed by the Behavioral Science Division and the resident's professional advisor. Detailed evaluation forms are used to assess each resident's knowledge, skills, attitudes and performance.* Following this professional review, data are shared with the resident and appropriate alternatives are considered which are mutually acceptable to the resident and faculty, and which are likely to facilitate the resident's more complete professional development.

The area of resident evaluation is much broader and more detailed than one might infer from this article. However, it has been the purpose of this report to describe, only briefly, the development of some of the major aspects of the Behavioral Science program. For a more comprehensive picture of resident evaluation, the reader is encouraged to consult the book by John Corley, *Evaluating Residency Training, An Operational Prototype.*[2] Corley's book reviews the behavioral as well as the medical aspects of resident evaluation.

Discussion

The materials presented in this article reflect the testing and refinement of behavioral science concepts in a living, dynamic social system. We believe these concepts have a general or universal relevance. The format in which they may be presented most probably will vary significantly from program to program. The validity of the material presented here when tested against future performance of the resident outside the training setting is yet to be established. The subjective and objective evaluation of the residents and faculty has confirmed that the behavioral science program outlined above has contributed substantially to achieving the purpose and goals initially developed in 1972.

The theoretical constructs that underlie much of the curriculum have been tested and have survived the critical review of broadly experienced family physicians and the pragmatic ideals of eager young residents. Hopefully, the "custodial" function or role of the medical profession has not been abandoned. We believe that there are innovative areas of content and role expectation in this curriculum. Resident physicians in the Department are being held responsible for the new areas of knowledge in the behavioral sciences; they are also being asked to cultivate a new style of professional behavior in direct patient contact, in relation to their profession, and in relation to their community.

Hopefully the curriculum outlined above will promote "role innovation" of the kind outlined by Edgar H. Schein in his paper, "Occupational Socialization in the Professions: The Case of Role Innovation."

> The essence of role innovation is a basic rejection of the norms which govern the *practice* of the profession combined with a concern for the role of the professional in society. The role innovator redefines: (a) who is a legitimate client; (b) who can or should initiate the contact between client and practitioner; (c) what is an appropriate setting for conducting professional practice; and (d) what are the legitimate boundaries of the professional's areas of expertise. Underlying each of these is a concern with making the profession more relevant to the pressing problems of society.[3]

Behavioral science in family practice has broadened the definition of "legitimate client" to include "the person in his social setting," the family, and is training the resident to understand its processes and dis-ease. "Contact" made by any one person in the family should automatically alert the family physician to the other members in that family constellation and should also prompt questions concerning outlying social systems such as the school, dormitory, factory, or office. The "appropriate setting for conducting professional practice" has shifted from an office visitation room or the hospital exclusively, to include the social setting (home, apartment, etc) where the doctor, or one of the primary health-care team, may meet and interview or "treat" the "patient."

The "legitimate boundaries of the professional's area of expertise" have been extended to include a knowledge of the psychological, social, and cultural aspects of the patient and the doctor. In other words, the patient has been removed from the restricted category of a disease-carrying organism and the physician has been removed from the confining category of a medical scientist who must, on occasion, listen to patients to gather diagnostic data. Each is now seen as a person who functions within a social system and is responsive to, and responsible for the press of his cultural environment. Direct treatment of either medical or behavioral conditions may not be the physician's professional choice at any one point in time. However, a knowledge of the behavioral aspects surrounding the individual or family must be sufficiently developed so that the family physician knows when referral is appropriate, and where symptoms treated only medically deny the human, existential problem presented by the patient or family.

*Evaluation forms are available on request.

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