
Communications

Mastery of Performance Objectives During Residency Training: Faculty vs Resident Ratings

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Lists of performance objectives are becoming increasingly available for use as explicit goals in primary care residency training. It has been reported, however, that although faculty and residents appear to agree on the broad goals for residency training,¹ considerable disagreement has occurred when the specific objectives of residency training are discussed.^{2,3} The present study was designed to examine, first, the degree to which faculty members agree upon the specific objectives that should be mastered by a resident at the completion of each residency year; secondly, the degree to which residents at each level agree among themselves regarding these objectives; and thirdly, the degree of agreement that exists among the faculty and residents.

Methods

The study was conducted in a department of family medicine at a major medical school in the southwestern United States. All of the full-time faculty (5) and residents (24) participated. Four residents were completing the third year (Level III), six were completing the second year (Level II), six were completing the first year (Level I), and eight were entering the training program (Level 0).

Performance objectives compiled by a national task force to describe the diagnosis, treatment,

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and management of a patient with hypertension⁴ were evaluated by the participants in the study. The 123 objectives were organized into the following five major categories: medical interviewing, physical examination, evaluation of laboratory and special studies, treatment and patient education, and follow-up and evaluation.

Each participant was given a set of 123 index cards, with one performance objective typed on each index card. Each objective was to be rated independently of the others according to the importance for a resident to have mastered it at the entry into training and upon the completion of each year. Importance was defined in terms of the degree to which the skill contributed to the resident's ability to deliver quality patient care. Each card contained a 12-point Likert scale with five labeled points (0 = no importance, 3 = low importance, 6 = moderate importance, 9 = high importance, 12 = critical importance), with the additional option of "don't know."

Results

The ratings of each performance objective were examined for each resident group and for the faculty group to determine the degree of agreement within each group. Agreement was said to exist when the ratings of all members of a group were within a range of four points on the Likert scale. This range contained two of the descriptive labels on the scale (eg, low importance and moderate importance). This liberal definition tends to inflate the number of objectives for which there is agreement, and to decrease the number of objectives for which there is disagreement within a group. When

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Table 1. Agreement Among Faculty Regarding Importance of Mastery of 123 Specific Objectives	
Mastery at End of Training Year	Faculty Agreement Number of Objectives (%)
Level 0	11(8.9)
Level I	25(20.3)
Level II	64(52.0)
Level III	85(69.1)

Table 2. Agreement Within Each Resident Group* Regarding Importance of Mastery of 123 Specific Objectives	
Mastery at End of Training Year	Agreement Within Residency Group Number of Objectives (%)
Level 0	0(0)
Level I	11(8.9)
Level II	10(8.1)
Level III	65(52.8)

*Each group evaluated the objectives relative only to their own level of training

any member of a group marked "don't know," the group was considered to be in disagreement for that objective.

As indicated in Table 1, the degree of agreement among faculty members increased substantially from their ratings of objectives that should be mastered by Level 0 residents (8.9 percent) to their ratings of objectives that should be mastered by Level III residents (69.1 percent). A review of the objectives for which there was disagreement did not reveal a consistent pattern of disagreement, either by type of objective (ie, knowledge, skill, or attitude) or by the content area which the objective described.

The number of objectives for which there was agreement within each of the four resident groups was compiled. Each group rated the importance of mastering the objective at their current level of learning (Table 2). These data indicate that low agreement exists among residents at Levels 0, I, and II and that moderate agreement exists among residents at Level III.

The degree of agreement between the faculty members as a group and each of the four resident groups was also examined. Agreement was de-

finied to exist between the faculty members and a resident group if the ratings for the objective by all members of both groups were contained within a four-point range. The data from this analysis indicate that the faculty did not agree on any of the objectives with Level 0 and Level I residents; agreed on only nine objectives with Level II residents; and agreed on 47 objectives with Level III residents.

Discussion

The finding that the faculty's ratings were in low agreement for Level 0 and Level I residents, and in moderate agreement for Levels II and III, coupled with low agreement observed among the ratings by residents at Levels 0, I, and II and only moderate agreement among Level III residents, suggests that the group of residents and faculty studied have very different views regarding the stage at which performance objectives for the diagnosis, treatment, and management of hypertension should be mastered. Further support for this conclusion is found in the observation that the faculty did not agree that certain of the objectives should be mastered by the end of residency train-

ing. More than 30 percent of the objectives were not agreed upon as necessary for the resident to have mastered by the end of the residency.

The results of this study indicate that no uniform, commonly shared view exists among residents or among faculty regarding the natural progression of the acquisition of knowledge, skills, and attitudes in the area of hypertension. The extent of disagreement among the faculty and residents is surprising, since specific, written objectives were used in which the abilities, knowledge, and attitudes were clearly described as those needed to care for a disease that is commonly encountered in primary care.

If these results may be extrapolated to other areas of training, then no "natural" level of agreement on objectives among faculty or between faculty and residents should be assumed. Performance objectives that are developed outside a local residency training program should receive careful review and discussion before they are

applied in the specific program. The faculty in an individual program must agree upon the importance of each objective, identify when the residents are expected to have mastered it, and then directly communicate these goals to the residents.

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Family Practice Research Day

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As the family practice movement leaves its adolescence and matures as a medical specialty, many authorities (eg, Geyman¹ and Fry²) are calling for family practice to examine itself, to more precisely determine what it has to offer patients, the consumers of health care. This has become an important and necessary ingredient of family practice, just as it is in any other medical specialty. There is a need to give people involved in family practice more direction and a greater knowledge base in research techniques. First, interest must be kindled. An interested physician, who knows how to do research, will ask the questions, develop the hypotheses, and carry out the studies that will give rise to high quality research in family practice. If these premises are correct, then surely

some university based mechanism could be developed to begin addressing this need.

Methods

Two statewide research day conferences have been organized by the Department of Family Practice in the College of Human Medicine at Michigan State University, in collaboration with the Michigan Academy of Family Physicians. These conferences, it was hoped, would encourage the use of family practice oriented research as an educational tool in medical schools, residencies, and private practices.

The format of each research day conference consisted of three parts. First, there was a morning competitive forum for the presentation of original research papers. This provided for the communication of results of completed investigations, fairly judged and critiqued by a team of research experts. Each paper approved (as a result of a preliminary judging of abstracts held one month prior to the conference) was allowed ten minutes for

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presentation and five minutes for questions. Two simultaneous forums were held, each containing eight to ten papers and its own judging team. Each paper was independently evaluated by an interdisciplinary panel of three judges. Then, the written evaluations were returned to the authors of the research papers, as a form of feedback, following their presentations. This element of competition, judging, and evaluation under common rules provided much of the motivation and feedback vital to any researcher.

The second component of each conference was a symposium on research, held in the afternoon. This symposium was designed as an educational experience, to complement the competition of the morning forum. Topics pertinent to all kinds of family practice research were touched upon during this symposium.

Each research day conference concluded with a keynote speech and awards banquet. The presentation of plaques recognizing the best papers in each of several categories brought the business of the morning session to a close, and the afternoon keynote address became a summary of the educational symposium.

Results

Sixty-two people attended the first research day conference, held in 1977. Attendance rose by 55 percent at the second research day conference held in 1978, when 97 people participated. The biggest proportionate increases in attendance were among allied health professionals, practicing family physicians, and family practice residents. The repeat attendance rate was 47 percent.

A similar number of papers (15 in 1977 and 16 in 1978) were read at the two simultaneous forums each year. It is intriguing to note that in both years all practicing family physicians who read papers reported on clinical research. The family practice residents and medical students, who will be the practicing physicians in the future, showed a much wider span of research interest, involving such additional topical areas as medical education and medical economics.

To assess each of these research day conferences, the participants were asked to fill out evaluation questionnaires. In the estimation of the participants at both conferences, the research embodied in the competitive papers read during the morning forum was considered "good." More-

over, the papers presented at each of the research day conferences compared "favorably" with presentations heard at other medical conferences.

The research day conference held in 1977 seems to have been important mainly as a stimulus to those who were already engaged in research activity. Attending this conference encouraged researchers to carry on and improve their work or to present it at a medical conference. The anticipated impact of the 1978 research day conference indicates an increased effect of the conference on the participants in the areas of initiating research, improving ongoing research, presenting research, and preparing research for publication.

Seventy-two percent of those who completed the evaluation items on the afternoon symposium said that it had presented new and interesting information, and 93 percent said that the conference was helpful. The interdisciplinary character of the afternoon symposium was endorsed by most participants.

Comment

The concept of a research day conference devoted to family practice is still new. To the best of our knowledge, Michigan's research day conferences are the first such to be held in the nation. The innovation appears to have been well accepted, as indicated by the surge in attendance at the second research day conference. It appears that the conferences are addressing a need in family practice heretofore unmet.

In only one major respect did conference evaluations fall short of expectations. The organizers of both conferences had anticipated that those attending would be stimulated to start new research projects in family practice. Only two of the "repeat attenders" said they had initiated research as a consequence of their attending the first conference. A larger number stated, at the conclusion of the second conference, that they expect to start family practice research projects. We do not know whether that enthusiasm will be sustained.

While the research day conferences have yet to prove themselves as mechanisms for promoting the initiation of family practice research, they have clearly shown themselves to be an important source of support and encouragement to those who are already doing research in family practice. Active researchers have been motivated to im-

prove their research, present their findings at medical conferences, and submit articles for publication.

The combination of a *competitive forum* for the presentation of original research with an *educational symposium* on research methodology proved to be an excellent format for each of the research day conferences. Participants, in evaluating these two conferences, have stated that: (1) they provided an excellent vehicle for the presentation of original research; (2) they constituted a good educational experience for teaching research design and methodology—a knowledge base

which many thought to be unobtainable elsewhere; (3) they motivated participants to examine their own setting for research projects; and (4) they provided an opportunity for the sharing of ideas and for the possible evolution of cooperative efforts between groups of researchers.

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Repeated Trauma as the Presenting Symptom of a Pathological Grief Reaction

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It is widely accepted in medicine that a patient's complaint may at times represent a "ticket of admission" to see the physician when the patient's real concern lies elsewhere. In like manner, the following case illustrates an instance in which a serious surgical problem requiring excellent specialized technical care was, in fact, the presenting symptom of an underlying psychosocial problem.

Case Report

The patient is a 25-year-old man who presented to the office with extensor tendon lacerations of the right hand which were acquired by impulsively striking and breaking a window when he found himself locked out of his house. He appeared angry and somewhat withdrawn. He gave a history of having injured his ankle that same day by dropping an automobile part on it at work. In fact, he was returning home from the hospital Emergency Department when the hand laceration occurred. Upon further questioning he related other accidents. One month prior to this visit he had injured his shoulder at work while unloading a truck. About six weeks prior to this he had fractured his

left index finger in a fight, and one month prior to that he had lacerated his hand at work and required several stitches.

I had cared for the patient's father who had died at home with lung cancer seven months prior to this encounter.

Because of the multiplicity of the injuries and the knowledge of recent family changes, the patient was given an appointment to return to the office in 24 hours for further discussion. He was referred to an orthopedic surgeon for repair of his wound.

On his return he related that he had not been feeling well since his father's death. He described symptoms of anxiety, multiple diffuse aches and pains, insomnia, and lack of interest in and enjoyment of activities both at home and at work. He spoke of feeling trapped, and wanting to "run away from everything." In addition he described episodes of seeming to hear his father's labored agonal breathing, and seeming to smell the odor of his father's terminal pulmonary infections. He stated that he felt very guilty for having evaded, on two occasions, his father's attempts to discuss his impending death and his wishes for the future of the family.

He was encouraged to ventilate his feelings, and at this point was reassured on two counts. The first of these was that his father had been able to

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discuss his fears and plans with me and with others. The second was that his own reactions were not unexpected and were probably related to feelings of guilt and loss surrounding his father's death.

The patient failed to return for a scheduled follow-up appointment, but seemed more relaxed and happier when he came in with another family member soon afterwards.

When interviewed ten months later, he related that his symptoms had all promptly resolved after the above noted discussion and that he had not been to the doctor or Emergency Department because of any accident since that time. He further volunteered that the day after this discussion he had gone to visit his father's grave for the first time since the funeral several months earlier.

Discussion

Since the initial work of Freud,¹ and the pioneering clinical studies of Lindemann,² much has been written about the grieving process, both normal and abnormal. The sense of personal guilt regarding unresolved interactions with the deceased, the re-experiencing of the presence of the deceased, and the resolution of symptoms accompanied by a new ability to visit the grave site after many months of avoidance lend some specificity to the diagnosis of pathological grief reaction as opposed to the general syndromes of depression and stress-related anxiety.

A search of the research literature on bereavement, including recent reviews by Clayton³ and Epstein et al⁴ failed to reveal a comparable case. Murphy and Robins,⁵ in investigating suicides of alcoholics, noted that there was an extraordinarily high (32 percent) rate of loss or disruption of an "affectual relationship" within six weeks prior to the suicide. No such excess could be demonstrated in a group of suicides associated with depression without alcoholism. Frost and Clayton⁶ more recently, in studying a group of 249 psychiatric inpatients, found no excess of deaths of family members as compared with a control group of general hospital patients. They did, however, comment on one alcoholic patient who was admitted to the hospital because of trauma associated with increased drinking. Three of the four alcoholics in that study who had recent loss of family members reported increased drinking. Thus, while there is some evidence of impulsive self-destructive

behavior among alcoholics suffering from bereavement, the patient presented here, normally a moderate drinker, reported a decrease in enjoyment of alcohol and a decrease in consumption around the time that his accidents occurred.

The field of life events research recently reviewed by Rabkin and Struening⁷ and Smith et al⁸ provides a method of identifying antecedent (and possibly causal) events in a variety of clinical syndromes. The Social Readjustment Rating Scale,⁹ a method of identifying and quantifying recent stressful life events, lists loss by death or by separation of a spouse or a close family member as four of the five most stressful events in life.

With regard to trauma specifically, Selzer and Vinokur¹⁰ noted a strong association between recent stressful life events and traffic accidents. Recently, reports by Padilla et al¹¹ and Brown and Davidson¹² note a significant association between recent stress and accidents in children, but do not comment specifically on death of a family member as a stress.

The needs of patients with problems such as that presented above lend support to the widely accepted belief that family physicians must treat the whole patient, not merely the acute presenting complaint. Knowledge of specific family structure and stresses, in this case of repeated trauma, led to a more successful outcome than appropriate technical treatment alone would likely have achieved.

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