PERSPECTIVES

Stress in Residency:
A Challenge to Personal Growth

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Postgraduate residency training requires young physicians to make the difficult transition from student to doctor. Recent evidence suggests that this period is associated with significant depression, anger, cynicism and emotional withdrawal, and there are concerns about its effect on the attitudes and future functioning of physicians. The perceived stresses are not unique to physicians and represent, in part, a need for personal growth that is common in the human service professions. Training programs can be more helpful to residents as they move through this transition. More attention must be paid to needs for sleep and time away from the hospital. Residents require more support and guidance in the personal aspects of becoming a physician, and programs can do much better at helping residents develop the communication skills needed to be an effective physician. The benefit of these efforts may be the development of physicians less likely to become impaired and more likely to give competent humane care to their patients. Key words: residency; stress. J GEN INTERN MED 1986;1:252-257.

POSTGRADUATE RESIDENCY TRAINING is one of the most demanding and stressful periods in a physician's life, requiring both physical and emotional strength and causing profound changes in a person's role, responsibility, self-image and attitudes. Its ordeals have been popularized, sometimes sensationally,[1-3] and criticized, sometimes vehemently.[4]

Unfortunately, it is increasingly clear that the influence of residency is not always positive. Studies show that house officers frequently suffer from depression, chronic anger, cynicism, marital difficulties, and cognitive impairment related to sleep deprivation.[5-10] Residents stereotypically learn to suppress their needs for sleep, exercise, recreation, family support and care of their own health. If, as many believe, the attitudes and behavior learned early in professional life are crucial to the patterns that continue throughout one's career,[11, 12] then residency may provide the seeds for the high incidences of drug abuse, suicide and marital discord seen among physicians.[13-16] If this is so, we must seriously ask ourselves whether the pressures experienced by residents enhance or hinder the development of humane, compassionate physicians.

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Stress in residency is not simply the result of long hours and fatigue. Becoming a physician requires major personal growth, and the development of attitudes that facilitate meeting the demands of the profession while retaining a sense of perspective as a person. Unfortunately, residency training is oriented to developing cognitive and technical skills and provides little time or support for personal development. These problems are not unique to physicians. The transition from student to worker is characteristically difficult for people who enter all human service careers.[12] Frequently, they enter their field idealistically, with high expectations for helping people, only to become disappointed by the fact that their training does not prepare them to meet the demands that they encounter or to work in inherently stressful positions. They often feel that the demands are too great, that they are not appreciated, and, as a result, they withdraw emotionally, become apathetic or angry, and lose interest or investment in their work.[12, 17] Trainees seldom receive direct help in learning ways to make these jobs less emotionally stressful or help in developing skills that will allow them to be more successful in *managing* the demands of their profession in the future.[18]

The following observations are based on personal contact with residents and a review of the expanding literature on this subject. Included are four sections: observations about current problems; a view of the challenges encountered in residency; a discussion of common dysfunctional beliefs held by physicians; and suggestions for improving training programs.

OBSERVATIONS OF CURRENT PROBLEMS

For most, internship is the most physically and emotionally demanding of the residency years. The majority of trainees find their growth in medical competence and confidence during the year the most satisfying aspect of internship.[19, 20] Residents are dramatically more knowledgeable and technically skilled at the end of the internship year, than when they began. In contrast, concurrent emotional changes are not as positive. Significant depression is prevalent. One study reported that 30% of interns met clinical criteria for major depression, based on

psychiatric interviews, and several were potentially suicidal.[5] A second study documented similar rates of depression by means of written depression screening instruments collected monthly from house officers.[6] Feelings of depression increase significantly over the course of the year in most interns,[6, 19] and many interns reported fits of crying and despair.[11, 20] As might be expected, depression occurs most commonly while the interns are working on the most intense rotations when interns may be working over 100 hours per week and during intensive care rotations.[5, 6] Sleep deprivation negatively affects mood and attitude and causes difficulty completing tasks and an increased number of errors.[10] None of this is surprising to anyone who has completed a residency.

The changes that occur during internship follow a predictable cycle. Girard suggested initial stages of excitement and anxiety followed by self-doubt and then, later in the year, periods of depression, fatigue and defeat.[19, 21] Major depression occurs early in the year if the trainee is overwhelmed by the internship experience, but more commonly it develops during the mid to latter half of the year.[5, 6, 19] Typically, mood turns up again as the year ends and the challenges of the next stage of residency are anticipated.

Depression is not the only emotion experienced during internship. Interns express increased anger,[22] along with more negative attitudes towards patients,[23] towards their associates, and about the quality of their life.[20] Cynicism about the future and doubts about the wisdom of their choice of a medical career are also more prevalent.[20]

Very little is known about the remainder of the residency cycle. Depressive symptoms may decrease with time,[6] but there are almost no published observations describing the evolution of attitudes and feelings after internship. While many residents seem to move past their feelings of depression, cynicism and anger, for those who do not there is continued alienation, emotional withdrawal, self-centeredness and lack of professional satisfaction.[12, 24] Unfortunately, the latter attitudes are common, and I believe may be the forerunners of more serious impairment.

There is also little known about the variability of the experience among residents or what attitudes and coping styles seem to protect them or to predict difficulty. It seems likely that personal background contributes to adjustment. Family history of depression is a predictor for developing depression during internship.[5] Vaillant observed that physicians who had the least stable childhoods and poorer adjustment to college appeared to be at greater risk of psychological problems in their careers.[25] Others have suggested that physicians who repress their feelings and identify less with their patients survive internship better then the more sensitive physicians.[26] It has been my observation also that interns who begin most idealistic about their role as physicians and most concerned about their relationship to patients suffer the most disappointment and despair during the year. Determining factors that contribute to better or worse adjustment is an important area for future research.

THE CHALLENGES OF RESIDENCY

Residency presents young physicians with a series of challenges. It is important that they are mastered or they can become a source of difficulties for the remainder of the physician's career. Challenges encountered by most residents include meeting time and organizational demands; managing uncertainty; dealing with emotional discomfort; and working effectively with people. Women in medicine have additional challenges that are unique to them.

Time and Organizational Demands

Limited time to complete seemingly endless work is a problem that troubles physicians at all stages of their careers.[27] In school, work is presented at a pace that most find manageable and what needs to be known is that required to pass an examination. The clinical work place does not set such limits. Responsibility for patients brings with it responsibility for any information needed to provide good care. It is essential to learn to meet that responsibility by organizing and appropriately using all of the available resources, including consultants, colleagues, other professionals and the medical literature. Many physicians err in trying to do it all alone, at great personal cost. In addition to meeting the needs of many patients, residents have their own needs and the needs of others in their lives outside of medicine.[20] Periods available for recreation, family life and rest are never sufficient. Learning to set priorities and to use time well is a major task of residency.

Managing Uncertainty

Uncertainty is inherent in medical decisions, and the responsibility for decision-making confronts all physicians with the limits of their knowledge and wisdom. Interns, in particular, express difficulty feeling authentic when making medical decisions, given their limited experience. Uncertainty and anxiety can lead to oversimplification and dependence on rules or protocols that do not encourage real learning. The burden of responsibility can also cause an inability to make decisions and excessive tests use in the hope that more tests will provide the answer.

Uncertainty makes it very difficult for residents to maintain a sense of control over their circumstances.[28] Medical uncertainty is compounded by the lack of control over schedules and work load, by the inescapable paging beeper, and by uncertainty about their status as respected professionals. Residents are asked to make mature and difficult decisions, yet they are caught in the extended adolescence of a trainee, with limited ability to be the final authority. The challenge is to find a balance between the need to reach conclusions and be authoritative and the need to be intellectually honest and responsive to the ultimate task, being of service to patients.

Emotional Discomfort

Residents are confronted by many emotional challenges. They are frequently the ones who must deal most directly with dying patients and their families, and they learn that patients remain sick and die despite their best efforts. There is little coaching on how to manage the personal and ethical issues raised by the terminally ill.[29] The death of a patient scarcely receives notice in the hectic activities of residency, unless the case is deemed "interesting" and presented at a conference. Yet, learning to cope with death is one of the major challenges and concerns of any physician.[26] Similarly, residents frequently learn on their own how to deal with patients whose problems or behavior evoke strong emotional reactions such as guilt, anger, fear, disgust, sadness. Learning to manage these feelings in a fashion constructive to patient and physician requires considerable skill, and timely coaching can be of great assistance.

Working Effectively with People

Residents must overcome what many perceive as a mismatch between the content of medical training and the content of clinical practice. It has been noted that medical students are selected for attributes that may not be the most important for a career of patient care.[30-32] Many have come with extensive scientific backgrounds and have been successful because of attributes of competitiveness and obsessive attention to detail. Physicians starting residency are prepared to logically diagnose and treat disease, but they find themselves dealing with administrative problems or with patients who are noncompliant, dependent or demanding. They may be frustrated by the day-to-day tasks that face them and by the sense that they really are not doing that for which they were trained. These attitudes are common to many young professionals.[12] Learning to work effectively with people and becoming skillful as a communicator are major challenges.

Women in Residency

Women in residency training have a special set of challenges.[33-36] Most easily recognized is the inherent conflict between the role of physician and that of wife and mother. Because the most intense period of medical training falls during the childbearing years, women are forced to choose between postponing a family and the difficult task of raising children during residency.[37] Women may interrupt their training or work part time when they do have children, an occurrence often met by resentment from their male counterparts.[37, 38] Beyond the issues of bearing children is the long-term difficulty of functioning in a demanding profession while maintaining the expected female roles in the household.

It is difficult for women to find mentors or role models among the predominantly male faculty of most medical schools, which makes less accessible the informal network of support that facilitates future academic or specialty training. Women also face conflicts adapting themselves to what have been male-oriented physician roles. Success in medicine has often been related to assertiveness, competitivenss and independence, whereas traditional women's roles emphasize compassion, cooperativeness and emotionality. Women who succeed in becoming "one of the boys" run the risk of threatening their own sense of femininity, not to mention the feelings of their male counterparts. Unfortunately, there are few women faculty to guide the woman as student or resident physician in these professional relationships.

DYSFUNCTIONAL BELIEFS

The challenges would be difficult enough, but they are made more difficult by the dysfunctional beliefs that physicians bring to or acquire in training programs. Dysfunctional beliefs relate to self expectations that physicians have about knowledge, about responsibility, about self care and communication.

Physicians' extraordinarily high self-expectations make limitations in knowledge seem like a personal failing. Physicians act as though instant recall of facts is of particular importance. Medical training emphasizes knowledge over the process of learning, and residents frequently express the belief that they don't read or know enough. Most find themselves disheartened when others quote articles they do not know on rounds or at morning report. They have not yet realized that learning is lifelong, facts change, and the ability to solve problems or find needed information is more important than remembering.

A second dysfunctional belief is that responsibility is to be borne alone by physicians. Even beginning interns are reluctant to ask for advice. Learning to share responsibility and use the knowledge of others is crucial, given the complexity and uncertainty of many clinical situations. However, physicians are concerned with appearing indecisive if they admit to being unsure, even with colleagues. The belief that a physician is responsible for solving every patient's problems is particularly troublesome. In some cases, there are no clear medical solutions, and the answer lies more with patient preference than with the physician's wisdom. Physicians sometimes bear direct responsibility for curative or life-saving decisions. But more frequently, they provide advice; and sometimes they have nothing to offer. An overdeveloped sense of responsibility may lead to anger with patients that cannot be helped. It is important for physicians to appreciate their own limitations and to encourage patients to play a role in their own care.

Residency encourages most physicians to adopt unhealthy attitudes about their own health and needs. It is common for physicians to respond to their own needs with denial and reaction formation, that is, by altruistic devotion to their work and denial of self.[39] Unfortunately, this kind of altruism may be a forerunner of subsequent depression, alcoholism, and drug abuse as they meet personal needs in self-destructive ways.[40] Physicians are notorious for not seeking help when they, themselves, are sick,[41] and it is common for residents to feel they cannot leave the hospital when ill because of the burden it will, in fact, place on others. Residency does not encourage people to recognize when they are reaching their limits or to seek help from others. It is the beginning of a pattern of self-denial that severely affects many physicians throughout their lives.

Finally, there are dysfunctional beliefs about communication, with other physicians and with patients. These beliefs or attitudes may be fundamentally related to a sense of what it means to be a professional. Many physicians believe that it is "professional" to keep one's emotions or uncertainties to oneself, to remain detached. However, medicine confronts physicians, young and old, with issues that generate discomfort, issues that are often lifelong problems for physicians. Typically, residents do not discuss their discomfort with anyone; or if they do, it is a masked behind a bland professional appearance, or discussions of "great cases," or often, sardonic humor. Residents do no necessarily realize that their reactions are normal and shared by others. The cost of non-communication is emotional withdrawal from colleagues, friends and family.[24]

Withdrawal from patients is also common. Physicians must deal with dying patients and those who may be regressed, frightened, demanding and angry. One way of handling this is to narrow the arena for discussion to technically important areas. It may be easier to talk about symptoms and diagnoses than feelings. One may not know how to deal directly with a patient's fear, and so offers bland reassurances. Expressing one's displeasure or conflict with a patient may seem unfamiliar; so one becomes aloof or distant. The detachment from real involvement in the relationship is felt by both patient and physician. The patient feels abandoned or unattended. The physician may be resentful of the patient's demands and emotional reactions, but focuses his attention on searching for "pathology" rather than dealing with the reactions. However, in many instances, the main issue is the patient's reaction, and by failing to deal with it, the physician makes the relationship meaningless. It is often the aspects of medicine that are emotionally demanding that may also be the most meaningful and satisfying. Without including attention to relationships and the tools for dealing with them in the training program, physicians are cut off from many of the satisfactions that brought them to medicine in the first place.

SUGGESTIONS FOR CHANGE

Clearly, there are not simplistic solutions for problems so complex. I would suggest stress in residency is a result of both developmental issues that must be faced by residents and failings in the structure of most residency programs. Residents, when asked, focus most attention on the need for structural change, shorter hours, more vacation time, and more clerical help.[19, 20, 32] Though nights on call are less frequent than they used to be, it is very likely that the intensity of caring for patients in the hospital has increased significantly.[42] Memories of the "good old days" notwithstanding, structural changes seem overdue, and training to provide coping skills is unlikely to help until attention is given to the necessities of adequate rest and time for self-care. Interns cannot be expected to be concerned with their patients' human needs, or to be attentive to their own personal development, if the program treats their physical well-being and family or recreational life as irrelevant.

In some programs, the intern year has been made more bearable by the development of a "night float" system in which a resident is assigned to receive admissions after some hour, such as midnight, so that the intern can complete work and obtain some sleep. Rotations can be arranged so that groups of people remain together for much of

the year, allowing natural supports and working relationships to develop. Attention can be given to interspersing difficult rotations with easier ones or with vacation time. Computers should make it possible to relieve interns of some of the time-consuming work of tracking and collating test data.

Residents suggests that their greatest support comes from their peers.[19, 20] It is well known that social support is a significant moderator of life stress.[43] Therefore, it is not surprising that many programs have used support groups as one approach to learning.[26, 44-46] Support groups have many potential benefits. First, they allow residents to begin to know each other as people and to develop a network of support within their own institution. As issues are discussed, participants begin to realize that their feelings are normal and are shared by others. The group allows the acknowledgement and the expression of feelings, either those about patients or feelings of anxiety, fatigue and anger that at some point are invariably present. The sharing of feelings within the group provides some relief, but just as importantly begins to model the behavior of communicating distress rather than hiding it. The group becomes a way of testing solutions and finding more constructive approaches to problems as well as learning coping strategies from each other. A major difficulty is finding time to meet, given busy resident schedules and the fact that such meetings are not given priority. Meeting infrequently, with varying attendance, never allows time for a sense of the group to develop or for discussions to build over time.

Opportunities for informal socialization with resident colleagues and with faculty are also important. Social events, away from the hospital, that include spouses or significant others helps the development of personal relationships and the sense of group support.

As important as support groups are regular and frequent meetings between the program director and the resident group. Problems and irritations invariably occur, and if there are opportunities to discuss them and find solutions, they seldom need to become major issues. House staff can be given more control over schedules and administrative matters, with regular meetings to provide direction in constructive problem solving. Residents should also be given regular feedback about their performance, so that they are aware when they are performing well and are given suggestions to correct areas of deficiency. Career counseling and direction in how to go about interviewing and looking for jobs can alleviate a major source of anxiety for many residents nearing completion of training.

A final suggestion is to improve training of residents' skills for interacting with patients. Residents become highly skilled in eliciting medical histories, but little attention is given to helping them deal more effectively with the other aspects of doctor–patient interaction. Several authors have noted that medical training focuses principally on scientific learning, but the problems of patient care often hinge on communication.[20, 23, 24, 26, 30-32] Physicians are asked to address social, psychological and ethical issues, and those issues can be a source of considerable frustration and discomfort for anyone. On the other hand, if some degree of mastery is achieved, then the same problems can be an opportunity to have a significant impact on a patient's life and can be a source of great satisfaction to the physician. To impart these skills, residency programs will have to devote much more attention to the non-medical aspects of training.

Residency can be a source of negative emotions and habits that carry over to subsequent years of medical practice, or it can be an opportunity to grow and change in ways that are enormously fulfilling. Successfully mastering the challenges of residency contributes not only to the resident, but to patients. Chronically stressed or impaired physicians are not able to provide competent or humane care. The problems are challenging and require the best of both the programs and the participants to be successful.

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REFLECTIONS

Technicians are concerned with what they know; scholars are more interested in what they don't know.

MACK LIPKIN

Care of Patients: Concepts and Tactics