subject to peer review in the conference. Nurses in the BIAC practice have their own peer review session and thus far have chosen not to act as reviewers in the meetings. Thus, they have a less well defined role in the conferences. The peer review conference is an untested method of improving patient care. Nevertheless, it helps complete the feedback loop that Weed has described (11) by setting standards for a system, auditing performance within the system, and auditing the system.

Conclusions and Implications

The peer review conference serves many functions. The frequently noted objections to peer review among physicians (12), by large and large, have not been a problem because of the conviction that feedback is important for both the monitoring of care and for faculty and resident education. Other primary care practices and educational programs may wish to consider using this model, as opposed to more coercive peer review measures or more didactic teaching conferences.

References


Attitudes of Physician Faculty Members and Residents Toward the Pregnant Medical Resident

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Residents are taught that pregnancy and childbirth are significant developmental events in the life cycle of their patients (1, 2). Yet residency programs are generally silent on the subject of pregnancy of their own residents, who are often treated on an ad hoc, crisis basis. The result is additional stress for both faculty members and residents (3).

The study reported here sought to explore further the issue of pregnancy among residents. While considerable attention has been devoted to describing issues specifically relevant to the pregnant psychiatric resident (4, 5), few articles have considered the pregnant resident in other areas of medicine. Given that issues of role balance and role conflict for women in medicine appear to apply to the spectrum of medical specialties (6, 7), the author felt it appropriate to examine attitudes toward pregnant residents in general and so conducted a survey at the
University of California, Irvine, Medical Center to gather information about resident and faculty attitudes toward pregnancy during residency, as well as about existing departmental policies toward the pregnant resident. The survey also elicited recommendations for change.

Method
A questionnaire that had been pilot-tested on 10 family practice residents was mailed to 187 faculty members and 581 residents. It asked respondents to express their agreement/disagreement with a series of statements about pregnancy during residency and to respond to open-ended questions about practices in their own departments toward the pregnant resident. Four months later a second mailing was sent to those persons who had not responded. The overall response rate was only 35.5 percent, despite several informal mechanisms that were used to promote the completion of the survey. The number of subjects cited in the results section refers to actual respondents and not to the total number surveyed. The subjects were 76 male faculty members, eight female faculty members, 143 male residents, and 44 female residents.

The mean ages of the male and female faculty members were respectively 41.2 and 41.8 years. The mean ages of male and female residents were respectively 29.9 and 30.1 years. A great majority of male faculty members were married. Among the female faculty members, larger numbers were single, divorced, or separated. Male residents also were more likely to be married than were female residents. Fifty-four male faculty members had children; 24 had three or more children. Four female faculty members reported having no children, although this may have been an artifact of their marital status. The resident group reported somewhat lower numbers of children than the faculty; however, one-third of the residents (males and females) had at least one child each. Approximately half of the resident respondents planned on children in the future.

Among the faculty members there was a fairly even distribution between primary care and other specialties. Among the residents, there was a definite skew toward primary care specialties. The resident sample spanned the spectrum of years in residency training.

Results
Three scales were formulated from the questionnaire statements, which were rated on a five-point scale by respondents. The scales were (a) personal attitude toward pregnancy during residency, (b) perceptions of prevailing attitudes in the professional environment (that is, attitudes of patients, house staff, faculty, and departments) toward the pregnant medical resident, and (c) attitudes toward the perceived desirability and feasibility of balancing a family and a career. Both male and female respondents had a somewhat positive personal attitude toward pregnancy during residency. When comparing the resident and faculty groups using a two-way analysis of variance, faculty members tended to have a slightly more positive attitude, but this difference was not significant. However, a significant effect due to sex was found ($F = 14.5; p < .001$). The attitude of the males was significantly more negative than the attitude of the females toward pregnancy during residency.

Male and female respondents both perceived the professional environment as somewhat positive toward the pregnant resident. However, male respondents tended to have a significantly more negative perception of the environmental support available for the pregnant resident than did females ($F = 5.0; p < .03$). Faculty members also had a slightly more negative perception of the environment than residents, but this was not a significant difference. However, when the faculty members and the residents were questioned specifically about whether they felt their own department was favorable to the pregnant resident, the opposite pattern emerged. Residents felt their departments to be significantly less supportive of the pregnant resident than did the faculty (chi-square = 11.8; $p < .001$). Both male and female respondents agreed that it was fairly difficult to balance a family and a career. Again, male residents had a more negative attitude than females toward combining family and career in their own lives ($F = 4.2; p < .04$). No significant difference was found between faculty members and residents, al-
though the mean for the faculty group was higher (indicating a more positive attitude) than it was for the resident group.

In both the faculty and resident groups, considerable confusion appeared as to whether any formal departmental policies existed concerning pregnancy during residency. The vast majority of all respondents (94.3 percent) believed that no such policies existed or simply did not know. In terms of what provisions could be made at the departmental level for the pregnant resident, confusion again reigned. The largest number of faculty members and male residents (37.4 percent) reported vaguely that the pregnant resident could get "some time off." However, women residents in general did not agree. Instead, almost a third of the women residents and a quarter of the male residents believed that their departments made no provision whatever for the pregnant resident. Beyond this, the range of options believed available to the pregnant resident varied widely. It included accrued time, vacation leave, unpaid leave, negotiated time, sick leave, paid maternity leave, and flexible scheduling.

The thinking of both faculty members and residents on possible policy changes was somewhat vague and surprisingly conservative in contrast to innovative possibilities reported in the literature (8–10) addressing the needs of the pregnant resident. Most faculty members and residents (85.9 percent) agreed that there should be some special provisions for the pregnant resident. The vast majority of respondents in both groups (80.7 percent) also supported the idea of flexible scheduling. Women faculty members and residents tended to favor the idea that the pregnant resident should receive emotional support and encouragement from her department significantly more than men did in both groups, although a majority of the men were also in favor of this statement ($p < .05$; two-tailed test).

Little support was found among either group for financial aid, special counseling, or support groups aimed at the pregnant resident.

Spontaneous policy suggestions from all the respondents ranged from not permitting pregnancy at all to providing medical benefits, three months of leave, extended unspecified leave, and day care for children. A need for formal policy statements by the department in support of the pregnant resident also was cited. Women residents in particular stressed the importance of negotiating individually with their departments and a guarantee of a specified amount of leave together with the option of a part-time residency.

**Discussion**

Although in general both males and females and both faculty members and residents appeared to have somewhat favorable attitudes toward the pregnant resident, consistent sex differences in terms of all three scales did emerge. On the whole, the men, whether faculty members or residents, appeared to have an attitude toward pregnancy significantly more negative than the women. Similarly, the men perceived the medical environment as more hostile toward the pregnant resident than the women themselves. Finally, their views of balancing family and career were significantly more negative than were those of women in either group.

In a profession still clearly dominated by men in terms of numbers and influence, the consistency of these sex differences was a disturbing finding. It was also clear that most individuals in both the faculty and resident groups were ill-informed and confused about the options available to the pregnant resident. Moreover, it was clear that in general there were few well formulated policy recommendations to offer beyond flexible scheduling and greater emotional support. With an increasing number of women entering medicine and given the reality that many will choose to become pregnant during residency, there clearly should be more education in this area for both faculty members and residents.

**References**

A New Tool for Problem-Based, Self-Directed Learning

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The Problem-Based Learning Module (PBLM) has been developed to facilitate the acquisition and practice of clinical reasoning skills through exposure to real patient problems. Its design features are based on formal studies of the clinical reasoning process; the need for a flexible, portable, patient simulation tool for problem-based learning; and the technology represented in its forerunner, the Portable Patient Problem Pack (P4) deck (1–5). Its format is based on the premise that a simulation should present the patient problem as it appears in the clinical setting and give the student the opportunity (a) to perceive initial cues; (b) to generate early hypotheses and subsequent hypotheses if necessary; (c) to inquire freely of the patient, asking any questions and performing items of physical examination in any sequence in an attempt to resolve these hypotheses; and (d) to continue with the process until he can make diagnostic and therapeutic decisions.

Printed case histories, patient management problems, and sequential management problems have limited value as simulations because certain components of the clinical reasoning process, particularly free inquiry, cannot occur. Computers can permit free inquiry in simulations, but they are expensive, are limited in access, and present problems in interactive language. The P4 deck was developed as a convenient, portable, and inexpensive unit that allowed all the stages of clinical reasoning described above to be learned and evaluated, and it has had increasing use (6). A recent study of the P4 demonstrated that students performed the same actions with this printed simulation and came to the same diagnostic decisions as they did with a simulated patient (7). The results of that study suggest that the P4s are a feasible and effective method for stimulating problem-solving. However, increasing experience with the P4 has revealed several shortcomings. Each deck is comprised of about 300 cards that must be handled individually; the unit requires a large table space for use; space for patient responses, physical findings, and laboratory results is limited by the size of the card; and the deck as a printed format is expensive to produce. Besides these functional constraints, the specialty area of the patient problem is known in advance because of the actions, such as psychiatric or cardiovascular, that are available. Thus, the user begins hypothesis generation with a significant piece of information

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