# Support Services for Family Practice Residents

Norman B. Kahn, Jr, MD, and Richard B. Addison, PhD
*Sacramento and Santa Rosa, California*

*Background.* Internship and residency are stressful experiences for physicians in training. Residency programs vary in their provision of supportive services for residents.

*Methods.* A random sample of 50% of the nation's family practice residency programs was surveyed to determine the prevalence of 19 support services, 10 of which were assessed a decade previously. Programs were also asked about on-call frequency, vacation benefits, and program size.

*Results.* Approximately 91% of the programs responded. The surveys indicated that residents were on call an aver-

age of once every four nights, a 10% decrease from a decade ago. The prevalence of three support services had increased over the last decade: seminars and speakers on the stresses and conflicts of being a physician, support groups for residents, and child care services. "Night-float" rotations and part-time residencies are the least offered support services of those studied.

*Conclusions.* Support for family practice residents is increasing, yet in many cases remains inadequate.

*Key words.* Family practice; internship and residency; stress; professional-family relations. *J Fam Pract 1992; 34:78-85.*

Internship and residency are intense periods of professional socialization during which attitudes, values, and behavior patterns are established that may extend beyond training. Residents work long hours, are overloaded with information, and often struggle with uncertainty and issues of responsibility and control. Frequently, physicians begin their residency training in a new community, with few friends and little family support. Most residents perceive their training experience as stressful.[1-36] Residency-sponsored support services attempt to counter the stress of training and assist in the development of productive behavior patterns.[37-41]

A comprehensive survey of support services for residents was performed during the 1979–80 academic year and published by Berg and Garrard in 1980.[42] Subsequent to that publication, the subject of residency stress gained notoriety through the death of Libby Zion in a New York hospital in 1984.[43-48] In response, by the end of the 1980s, 16 specialty residency review committees of the Accreditation Council on Graduate Medical Education had incorporated language in their requirements for house staff working hours and conditions.[49] The Special

Requirements for Residency Training in Family Practice, effective July 1989, recommend:

1. Permitting residents to spend, on average, at least 1 day out of 7 away from the residency program;

2. Assigning on-call duty no more frequently than every 3rd night on the average;

3. Ensuring adequate backup if sudden and unexpected patient care needs create resident fatigue sufficient to jeopardize patient care during or following on-call periods.

In light of these developments, this study was undertaken to assess which support services are currently in place in family practice residency programs, and what changes in support services have occurred since 1980.

## Methods

To determine the prevalence of support systems for residents, the authors surveyed a random sample of 50% of the nation's family practice residency programs as listed in the 1988 Directory of Family Practice Residency Programs. After carrying out a pilot survey at local residencies, the survey was sent to 196 family practice programs. The survey consisted of questions addressing the prevalence of 19 specific support services (Appendix).

In addition, the questionnaire specifically asked for

information on the number of first-year residents, the length of paid vacation, the average frequency of night call, the total number of residents in the program, and the type of residency program (community-based unaffiliated, community-based university-affiliated, community-based university-administered, university-based, or military). Finally, an open-ended question was added to allow respondents to identify other support services provided.

Programs that did not respond to the first mailing were sent a second and then a third questionnaire over a 3-month period in the first half of the 1988–89 academic year.

Response rates by program type were 88.9% for community-based unaffiliated; 93.4% for community-based university-affiliated; 83.3% for community-based university-administered; 89.3% for university-based; and 100% for military. The overall response rate was 91.8%. Examining the list of nonrespondents revealed no differences in program size or geographic region when compared with the respondents.

## Statistical Methods

Responses were analyzed to compare types of programs with regard to the availability of support services in 1988–89 and, where applicable, between the present survey and the one conducted by Berg and Garrard.[42] Comparisons were carried out using Kruskal-Wallis and Mann-Whitney paired-group tests, depending on whether responses were ordinal- or interval-scaled. Comparisons between ours and the survey by Berg and Garrard were difficult because only summary data were available for the earlier study. While it is quite likely that overlap exists between programs surveyed in both samples, it is not known which programs were part of both. For our purposes, the samples were assumed to be independent, and comparisons were made using chi-square tests. If the results of both surveys were positively correlated, then these inferences were more conservative than their nominal significance would indicate.

## Results

The average number of first-year residents per program ranged from 5.3 in the community-based, university-administered programs to 8.6 in the military programs. Community-based, unaffiliated programs averaged 5.5 residents; community-based, university-affiliated programs averaged 6.5; and university-based programs averaged 8.0 first-year residents.

More programs reported that their residents were on call every 4th night than any other frequency. Resi-

dents in community-based, university-affiliated and university-administered programs were on call an average of every 4.1 nights; those in community-based unaffiliated programs, an average of every 4.0 nights; those in university-based, an average of 3.8 nights; and those in military programs, an average of every 3.6 nights. The length of paid vacation for first-year residents averaged 3.2 weeks in university-based programs, 2.5 weeks in community-based and university-affiliated and unaffiliated programs, and 2.4 weeks in community-based, university-administered programs. All military programs offered first-year residents 2 weeks of vacation.

While more than 88% of all types of family practice programs offered residency-sponsored social activities, only approximately half offered residency retreats (Table 1). Of note, from 12% to 31% of programs did not offer an orientation week or month. Nearly all programs identified formal gripe sessions (92% to 100%), and resident participation in decision making (88% to 97%).

In all program types, seminars or speakers dealing with emotionally charged medical issues were more prevalent than seminars or speakers dealing with the stresses and conflicts of being a physician. Balint-type seminars, defined generically as "ongoing problem patient seminars focused on the doctor-patient relationship," were less prevalent than either of the other types of seminars, but were offered in 38% to 56% of program types (average 44%).

In all program types, ongoing support groups were offered more often for residents than for residents and spouses together or for spouses alone. Of the 25 university-based programs responding, none identified a support group for spouses alone. Unaffiliated, community-based programs offered significantly more support groups for residents and spouses together than any other program type ($P < .025$).

Few programs offered a "night-float" system; military and university-based programs were most likely to have such a system (13% and 12%). Fewer than one program in five offered residents postcall time off; however, "mental health" days were the most likely of those mechanisms surveyed to afford residents time off (20% to 31%).

Twenty percent of community-based, university-administered residencies offered a part-time residency. Military programs offered no such alternative schedule. From 6% to 12% of the other three program types offered part-time residency. Child care services were offered in 4% to 25% of program types.

## Discussion

Our results enabled us to compare program types, as well as to compare over time with Berg and Garrard's re-

Table 1. Psychosocial Support Services by Residency Program Type, 1988–89 (%)

| Support Service | Community-Based Unaffiliated (n = 16) | Community-Based University Affiliated (n = 99) | Community-Based University Administered (n = 25) | University-Based (n = 25) | Military (n = 15) | Total |
|---|---|---|---|---|---|---|
| Social activities sponsored by residency | 94 | 95 | 92 | 88 | 100 | 94 |
| Retreat for all residents | 50 | 49 | 60 | 40 | 60 | 51 |
| Orientation week or month | 69 | 87 | 88 | 88 | 87 | 86 |
| Formal gripe sessions | 100 | 94 | 92 | 92 | 100 | 94 |
| Resident participation in program and institutional decision making | 94 | 97 | 88 | 96 | 93 | 95 |
| Seminars or speakers on emotionally charged medical issues | 100 | 91 | 88 | 100 | 93 | 93 |
| Seminars or speakers on stresses and conflicts of being a physician | 88 | 87 | 76 | 84 | 87 | 85 |
| Balint-type seminars | 38 | 41 | 56 | 44 | 53 | 44 |
| Support groups for residents | 75 | 73 | 56 | 68 | 93 | 72 |
| Support groups for residents and spouses | 63* | 31 | 20 | 12 | 13 | 28 |
| Support groups for spouses | 44 | 32 | 20 | 0† | 27 | 27 |
| Night float | 0 | 3 | 4 | 12 | 13 | 5 |
| Postcall time off | 13 | 18 | 8 | 12 | 13 | 15 |
| Mental health days (off duty) | 31 | 26 | 20 | 24 | 27 | 26 |
| Part-time residency | 6 | 12 | 20 | 8 | 0 | 11 |
| Child care services | 19 | 25 | 4 | 20 | 20 | 21 |
| Professional counselors in the program | 81 | 75 | 56 | 76 | 93 | 86 |
| Counseling benefits as part of health coverage | 81 | 57 | 52 | 56 | 80 | 60 |
| Financial advisors on staff | 56 | 46 | 40 | 32 | 27 | 43 |

*Significantly higher than all other program types (P < .025).
†Significantly lower than all other program types (P < .05).

sults.[42] On-call frequency decreased while vacation time increased slightly over the decade. During the 1979–80 academic year, on-call frequency for first-year family practice residents averaged once every 3.64 nights. During the 1988–89 academic year, on-call frequency averaged once every 4.01 nights, a 10% decrease. The aver-

age length of paid vacation for first-year family practice residents increased 8.3%, from 2.4 to 2.6 weeks per year.

Statistically significant changes over the decade were noted in 6 of the 10 support services queried in both surveys (Table 2). University-affiliated, community-based programs significantly increased their offering of

Table 2. Residency Programs Providing Psychosocial Support 1979–80 Compared with 1988–89 (%)

| Support Service (n) | Community-Based Unaffiliated | | Community-Based University-Affiliated | | Community-Based University-Administered | | University-Based | | Military | | Total | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | 1979 (49) | 1988 (16) | 1979 (173) | 1988 (99) | 1979 (52) | 1988 (25) | 1979 (57) | 1988 (25) | 1979 (16) | 1988 (15) | 1979 (347) | 1988 (180) |
| Social activities sponsored by residency | 92 | 94 | 88 | 95 | 88 | 92 | 96 | 88 | 100 | 100 | 90 | 94 |
| Formal gripe sessions | 92 | 100 | 88 | 94 | 75 | 92 | 77 | 92 | 100 | 100 | 85 | 94 |
| Seminars or speakers on emotionally charged medical issues | 92 | 100 | 91 | 91 | 90 | 88 | 95 | 100 | 94 | 93 | 92 | 93 |
| Seminars or speakers on stresses and conflicts of being a physician | 74 | 88 | 69 | 87* | 67 | 76 | 77 | 84 | 94 | 87 | 72 | 85† |
| Support groups for residents | 55 | 75 | 60 | 73‡ | 56 | 56 | 68 | 68 | 69 | 93 | 61 | 72† |
| Support groups for residents and spouses | 20 | 63* | 19 | 31‡ | 13 | 20 | 35 | 12 | 31 | 13 | 22 | 28 |
| Part-time residency | 20 | 6 | 12 | 12 | 15 | 20 | 30 | 8‡ | 0 | 0 | 16 | 11 |
| Child care services | 4 | 19 | 7 | 25§ | 6 | 4 | 7 | 20 | 25 | 20 | 7 | 21§ |
| Professional counselors in the program | 88 | 81 | 82 | 75 | 79 | 56‡ | 88 | 76 | 81 | 93 | 83 | 86 |
| Financial advisors on staff | 47 | 56 | 51 | 46 | 48 | 40 | 46 | 32 | 25 | 27 | 48 | 43 |

NOTE: *Percentages given were not significant at* P < .05 *unless otherwise indicated.*
*P < .002; †P < .01; ‡P < .05; §P < .001.

seminars or speakers on the stresses and conflicts of being a physician, from 69% to 87% (P < .002). Overall, the prevalence of such seminars in all program types increased from 72% to 85% (P < .01). The lack of a significant change in any type of program offering seminars or speakers on emotionally charged medical issues reflects the high prevalence of these seminars over the decade.

Support groups have been identified as one of the most effective mechanisms to support residents in coping with the stresses of residency training.[50–59] Not surprisingly, support groups for residents are one of the more prevalent support services offered by family practice programs. Only university-affiliated, community-based programs increased their offering of support groups for residents (from 60% to 73%, P < .05) sufficiently to reach statistical significance. Overall, the prevalence of support groups for residents in all program types increased from 61% to 72% (P < .01).

While residency training can also be stressful for

spouses or significant others,[60–62] programs are much less likely to organize and offer support groups for spouses. Two program types significantly increased their offering of support groups for residents and spouses: community-based, unaffiliated programs, from 20% to 63% (P < .002), and community-based, university-affiliated programs, from 19% to 31% (P < .05). We believe this demonstrates an increased recognition of the importance of balancing residency training and family life.

The significant decrease in the offering of part-time residencies by university-based programs is consistent with decreases in other specialty training programs.[63] The administrative and scheduling problems of shared positions may be the most important deterrent to residency directors. Part-time residencies may be more attractive to women residents, especially those with children. The percentage of women residents in family practice is steadily increasing.[64,65] Whether more pressure to reverse the trend away from part-time residencies will be felt in the future remains to be seen. Creative

alternatives may become more prevalent, such as spreading 1 year's residency requirements over 2 calendar years, or alternating months of traditional inpatient rotations that include being on call with months in the family practice center without being on call.

Residents in community-based, university-affiliated programs have increased access to child care services ($P <$ .001). The overall trend, however, of increasing child care services (7% to 21%, $P < .001$) is consistent with similar social trends in other sectors of the work force as more families have both parents working.

An explanation for why Balint-type seminars[66-70] in our survey appear more prevalent than in other reports[71] may be found in our broad definition of these seminars as "problem-patient seminars focused on the doctor-patient relationship." Nonetheless, even with this broad definition, the prevalence of such seminars is lower than the seminars or speakers either on emotionally charged medical issues or on the stresses and conflicts of being a physician (Table 1). The authors speculate that it may be easier to arrange episodic speakers for a curricular element (emotionally charged medical issues, stresses and conflicts) than to maintain ongoing seminars (Balint-type), given the conflicting and somewhat unpredictable demands on residents' time.

The low prevalence of night-float systems[72] in family practice (0% to 13%) occurs in contrast to obstetrics/gynecology, pediatrics, and internal medicine programs, in which night-float systems exist in 21%, 24%, and 27% of programs, respectively.[63] The highest prevalence among family practice program types occurs in military (13%) and university-based (12%) programs. This may reflect utilization of other specialty departments in the teaching hospital that have night-float rotations. Community hospital-based programs, especially those in which family practice is the only training program in the institution, may not perceive sufficient manpower to implement a night-float rotation. Family practice residents regardless of program type may be unwilling to relinquish the continuity of care that is often necessitated by a night-float system. Anecdotal feedback regarding night-float systems leads us to believe that the stress-reducing value may be great, while continuity of care may be minimally disrupted, or even enhanced by the presence of consistent physicians day and night.

The authors were frankly surprised at how few programs of all types offered postcall time off (8% to 18%). In contrast, mental health days were offered by 20% to 31% of programs. We speculate that perhaps some respondents who do not officially offer postcall time off do allow residents mental health days or half days that may not be directly linked to the call schedule.

Conclusions drawn from this study may be limited

by its design. While care was taken to define each question, the possibility exists that the respondent meant something different from the intended meaning of the question posed. In addition, differences in degree of response may be significant, though these were not elucidated. For example, both support groups held weekly throughout 3 years of residency, and those available monthly for only the first half of the first year may yield a positive response in the survey, but differ substantially in effect.

Who responds may also affect responses. While 90% of respondents were program directors, a few department chairs, administrative staff members, and chief residents filled out questionnaires. A review of responses to a similar survey[73,74] reveals that program directors may identify more support services than residents, either because they are more familiar with the scope of services offered or because they overestimate the availability of such services.

The authors chose questions that they believed were relevant based on a review of the literature and personal experience. Additionally, some respondents identified resident advisors, the availability of short-term loans, and the level of financial compensation as important in reducing resident stress.

## Conclusions

Many support services are found in nearly all family practice residency programs, regardless of program type, including residency-sponsored social activities, seminars or speakers on emotionally charged medical issues, formal gripe sessions, and resident participation in decision making. Moreover, while the latter was not previously studied, the first three have consistently been highly prevalent over a decade. Community-based, unaffiliated programs are more likely ($P < .05$) to offer support groups for residents and spouses than other program types. University-based programs are less likely ($P < .05$) to offer support groups for spouses alone than other program types.

Among the ten support services studied both in the 1979–80 and the 1988–89 academic years, family practice programs overall and community-based, university-affiliated programs in particular significantly ($P < .001$ to .05) increased their offering of three services: (1) seminars or speakers on the stresses and conflicts of being a physician, (2) support groups for residents, and (3) child care services. Two program types significantly ($P < .002$ to .05) increased their offering of support groups for residents and spouses.

There has been increased attention paid to resident

working hours and conditions, and to the potential negative consequences to both patients and physicians. Although all program types have made some progress in supporting residents, family practice residency education can improve. Programs may choose to implement support services based on the experiences of others, or may be required to implement changes by accreditation regulation or state law. Our hope is that this study will facilitate the implementation of support services for residents and the humanization of family practice residency training.

## References

1. Addison RB. Grounded interpretive research: an investigation of physician socialization. In: Packer MJ, Addison RB, eds. Entering the circle: hermeneutic investigation in psychology. Albany, NY: State University of New York Press, 1989:39–57.
2. Addison RB. Surviving the residency: a grounded, interpretive investigation of physician socialization [Doctoral dissertation]. Berkeley: University of California, 1984 (University Microfilms No. 84-268-89).
3. Alexander D, Monk JS, Jonas AP. Occupational stress, personal strain, and coping among residents and faculty members. J Med Educ 1985; 60:830–9.
4. Asken MJ, Raham DC. Resident performance and sleep deprivation. J Med Educ 1983; 58:382–8.
5. Bates GW. Stress in graduate medical education [Editorial]. J Med Educ 1987; 62:443.
6. Blackwell B. Prevention of impairment among residents in training. JAMA 1986; 255:1177–8.
7. Borenstein DB, Cook K. Impairment prevention in the training years: a new mental health program at UCLA. JAMA 1982; 247:2700–3.
8. Brent DA. The residency as a developmental process. J Med Educ 1981; 56:417–21.
9. Colford JM, McPhee SJ. The ravelled sleeve of care: managing the stresses of residency training. JAMA 1989; 261:889–93.
10. Cooke M. Stress and coping in internal medicine residency. West J Med 1985; 142:547–8.
11. Cousins N. Internship: preparation or hazing? JAMA 1981; 245: 377.
12. Leitzell JD, Turkewitz LJ, Ratnoff OD, et al. Internship: physicians respond to Norman Cousins. JAMA 1981; 246:2141–4.
13. Ford CV. Emotional distress in internship and residency: a questionnaire study. Psychol Med 1983; 1(2):143–9.
14. Ford CV, Wentz DK. The internship year: a study of sleep, mood states and psychophysiologic parameters. South Med J 1984; 77:1435–42.
15. Friedman RC, Bigger JT, Kornfeld DS, et al. The intern and sleep loss. N Engl J Med 1971; 285:201–3.
16. Girard DE, Sack RL, Reuler JB, Chang MK, Nardone DA. Survival of the medical internship. Forum Med 1980; 3:460–3.
17. Hurwitz TA, Beiser M, Nichol H, Patrick L, Kozak J. Impaired interns and residents. Can J Psychiatry 1987; 32:165–9.
18. Koran LM, Litt IF. House staff well-being. West J Med 1988; 148:97–101.
19. Lemkau JP, Purdy RR, Rafferty JP, Rudisill JR. Correlates of burnout among family practice residents. J Med Educ 1988; 63:682–91.
20. Loes MW, Scheiber SC. Stress faced by residents. J Med Educ 1981; 56:682–3.
21. Loes MW, Scheiber SC. The impaired resident. Ariz Med 1981; 10:777–9.
22. McCue JD. The distress of internship. N Engl J Med 1985; 312:449–52.
23. Pugno PA. Psychologic stresses encountered by resident physicians. Fam Med 1981; 13:9–12.
24. Reuben DB. Psychologic effects of residency. South Med J 1983; 76:380–3.
25. Rizzo JA. Residents' dissatisfaction with training programs. J Med Educ 1986; 61:596.
26. Rotbart HA, Nelson WL, Krantz J. The developmental process of residency education: issues of stress and happiness. Am J Dis Child 1985; 139:762–5.
27. Rueben DB. Depressive symptoms in medical house officers. Arch Intern Med 1985; 145:286–8.
28. Small GW. House officer stress syndrome. Psychosomatics 1981; 22:860–9.
29. Smith JW, Denny WF, Witzke DB. Emotional impairment in internal medicine house staff. JAMA 1986; 255:1155–8.
30. Taylor AD, Sinclair A, Wall EM. Sources of stress in postgraduate medical training. J Med Educ 1987; 62:425–8.
31. Uliana RL, Hubbell FA, Wyle FA, Gordon GH. Mood changes during the internship. J Med Educ 1984; 59:137–9.
32. Valko RJ, Clayton PJ. Depression in the internship. Dis Nerv Syst 1975; 36(1):26–9.
33. Winer JA, Ferrono C. Residency training and emotional problems of physicians. Ill Med J 1984; 166:23–6.
34. Wolfe ES, Jones HW III. Problems experienced by residents in internal medicine training. West J Med 1985; 142:570–2.
35. Young EH. Relationship of residents' emotional problems, coping behaviors, and gender. J Med Educ 1987; 62:642–50.
36. Ziegler JL, Strull WM, Larsen RC, et al. Stress and medical training (Medical Staff Conference, UCSF). West J Med 1985; 142:814–9.
37. American Academy of Family Physicians Committee on Mental Health. Resident mental health: a resource pamphlet for residents and residency program directors. Kansas City, Mo: American Academy of Family Physicians, 1988.
38. Berg JK, Garrard J. Psychosocial support in residency training programs. J Med Educ 1980; 55:851–7.
39. Ferris LA, Griffith RF. Stress, impairment and the resident, model orientation booklet for house staff. Chicago: University of Illinois Press, 1984.
40. Rudner HL. Stress and coping mechanisms in a group of family practice residents. J Med Educ 1985; 60:564–6.
41. Tokarz JP, Bremer W, Peters K. Beyond survival. Chicago: American Medical Association, 1979.
42. Berg JK, Garrard J. Psychosocial support of residents in family practice programs. J Fam Pract 1980; 11:915–20.
43. Asch DA, Parker RM. The Libby Zion case: one step forward or two steps backward? N Engl J Med 1988; 318:771–5.
44. Glickman RM. House-staff training—the need for careful reform. N Engl J Med 1988; 318:780–2.
45. Hemenway CG. Voluntary policies gaining on resident work limits, the debate continues. Physicians Financial News 1990:3–4.
46. Levinsky NG. Compounding the error. N Engl J Med 1988; 318:778–80.
47. McCall TB. The impact of long working hours on resident physicians. N Engl J Med 1988; 318:775–8.
48. Thorpe KF. House staff supervision and working hours: implica-

tions of regulatory change in New York State. JAMA 1990; 263:3177–81.

49. Directory of Graduate Medical Education Programs (1989–1990). Chicago: American Medical Association, 1989.

50. Addison RB. Covering-over and over-reflecting during residency training: using personal and professional development groups to integrate dysfunctional modes of being. In: Little M, Midtling JE, eds. Becoming a family physician. New York: Springer-Verlag, 1989:87–110.

51. Brashear DB. Support groups and other supportive efforts in residency programs. J Med Educ 1987; 62:418–24.

52. Burra P, Bryans AM. The helping professions group: interpersonal dimensions in health sciences education. J Med Educ 1979; 54: 36–41.

53. Johnson AH. Resident self-awareness through group process. J Fam Pract 1977; 4:681–4.

54. Kahn NB, Schaeffer H. A process group approach to stress reduction and personal growth in a family practice residency program. J Fam Pract 1982; 12:1043–7.

55. Kaplan C, Marshall M. Sources of resistance to an intern support group. J Med Educ 1988; 63:906–11.

56. McCulloch M. Coping as a group with the first year of residency. Fam Med 1984; 16(6):227–9.

57. Siegel B, Donnelly JC. Enriching personal and professional development: the experience of a support group for interns. J Med Educ 1978; 53:908–14.

58. Weiner PS. A social-discussion group for first-year residents. J Med Educ 1984; 59:137–9.

59. Ziegler JL, Kanas N, Strull WM, Bennet NE. A stress discussion group for medical interns. J Med Educ 1984; 59:205–7.

60. Contreras R, Scheingold L. Couples groups in family medicine training. J Fam Pract 1984; 18:293–6.

61. Gerber LA. Married to their careers: career and family dilemmas in doctors' lives. London: Tavistock, 1983.

62. Nelson EG, Henry WF. Psychosocial factors seen as problems by family practice residents and their spouses. J Fam Pract 1978; 6:581–9.

63. Kahn NB, Addison RB. A comparison of support services for residents in six specialties. Acad Med. In press.

64. Residency data. Division of Education, American Academy of Family Physicians. Kansas City, Mo: American Academy of Family Physicians, 1990.

65. Medical student graduate questionnaire. Washington, DC: Association of American Medical Colleges, 1989.

66. Balint M. The doctor, his patient and the illness. New York: International University Press, Inc, 1957.

67. Brock CD. Balint group leadership by a family physician in a residency program. Fam Med 1985; 17:61–3.

68. Gazda TD, Gallagher RM, Little DN, Sproul MS. The group practice seminar: a Balint-type group in the setting of a family medicine training program. Fam Med 1984; 16:54–8.

69. Scheingold L. Balint work in England: lessons for American family medicine. J Fam Pract 1988; 26:315–20.

70. Scheingold L. A Balint seminar in the family practice residency setting. J Fam Pract 1980; 10:267–70.

71. Brock CD, Stock RD. A survey of Balint group activity in US family practice residency programs. Fam Med 1990; 22:33–7.

72. Elwood JM, Barr RJ. A new work schedule for interns: aimed at reducing sleep deprivation. Lancet 1973; 2:371–2.

73. Survey of residents and program directors. Kansas City, Mo: American Academy of Family Physicians, 1989.

74. Resident student newsletter. Kansas City, Mo: American Academy of Family Physicians, April 1989.