Professional Satisfaction and Dissatisfaction of Family Physicians

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Background. Physicians' satisfaction with their professional life influences the quality of patient care they provide and helps to determine the number and type of students attracted to the various fields of medicine. In this study, we sought to delineate areas of satisfaction and dissatisfaction among family physicians.

Methods. A self-administered questionnaire was sent to all physicians in the state of Pennsylvania who were included in the 1990 directory of the American Board of Family Practice (N = 1944).

Results. Completed questionnaires were received from 1066 family physicians in full-time practice. Sixty-five percent were satisfied with their professional lives. Patient relationships, a sense of clinical competence, and their relationships with their partners were among the most satisfying aspects of practice for all family physicians. Problems identified included regulations by third-party payers and government agencies and the large amount of paperwork encountered in practice. There were significant ($P < .001$) differences in satisfaction between physicians in different practice arrangements. Significant differences between practice types were also found in the degree of dissatisfaction with third-party payers and government agencies, paperwork, isolation from other physicians, and the threat of a malpractice suit.

Conclusions. Almost two thirds of family physicians are satisfied with their general professional lives. Conversely, one third are not. Clear areas of satisfaction and dissatisfaction have been defined for family physicians in general as well as for family physicians in various practice environments. This information may be useful in the development of policy to structure a medical system that meets the needs of both patients and physicians.

Key words. Physicians, family; job satisfaction; personal satisfaction. (*J Fam Pract 1993; 37:257-263*)

Health care in the United States is in a state of crisis. The cost of health care continues to rise, and access continues to be inadequate.[1–5] One component that has been suggested as a part of any solution to improve problems with health care delivery in this country is to increase the number of primary care physicians providing medical care.[6] The Graduate Medical Education National Advisory Committee, the Council on Graduate Medical Education, the Health Resources and Services Administration, and the American Medical Association's Center for Health Policy Research have projected shortages of physicians in family practice and other primary care specialties.[7–9] Unfortunately, the number of students choosing medicine as a career has decreased in the last decade, and among those students choosing medicine, an even smaller number choose primary care fields.[10–16]

Physician satisfaction has been shown to influence quality of patient care, probably affects students' attitudes about medicine, and influences the choice of specialty that students wish to pursue.[17–19] In order to develop plans to increase the number of family physicians in the United States, it is imperative to delineate current areas of satisfaction and dissatisfaction among family physicians, so that as policy is formulated, attention can be paid to these areas in order to facilitate the delivery of

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optimal patient care as well as increase the number of students choosing primary care.

Physician satisfaction correlates with patient satisfaction, improved continuity of care, lower patient no-show rates, and more reasonable charges for routine follow-up visits.[17] Physician dissatisfaction is associated with greater turnover among physicians in group practices, leading to poor continuity of patient care.[18,19]

Professional satisfaction of physicians varies between specialties. Physicians as a group identify caring for patients, educational stimulation, diversity of patients cared for, relationships with patients and patients' families, a sense of helping others, and problem solving as satisfying areas of medical practice.[12,17,20,21] Full-time medical school faculty and surgeons are the most satisfied with their general professional lives, whereas general practitioners and pediatricians are the least satisfied.[20] Emergency physicians are less satisfied than internists with their level of professional autonomy, patient relationships, and status, although they are more satisfied than internists with their professional relationships.[18]

Practice environment can influence satisfaction. Family physicians in group practices of three or more physicians, when compared with physicians in practices with less than three physicians, report less dissatisfaction with the time demands of their practice, their opportunity for continuing medical education, opportunity for contacts with colleagues, and the amount of time they have available for their families and leisure activities.[21]

Areas of dissatisfaction also vary between different groups, and have changed over the last 20 years. In studies involving family physicians, emergency department physicians, internists, and neonatologists, the areas of dissatisfaction cited have included time pressures, lack of professional autonomy, loss of control over medical decision making, loss of control over the referral process, threat of malpractice suits, inadequate income, external regulation, maintenance of clinical competence, and status in the community.[18,20–27] The threat of malpractice suits and problems stemming from external regulation of medical practice have increased as problems in the last 20 years.[20,22,25,28,29] Recent anecdotal reports have suggested that levels of dissatisfaction have been increasing among primary care physicians.[22,28,30]

Professional satisfaction of family physicians has not been systematically assessed in over 10 years, a time during which many of the issues that physicians face have changed. Family physicians provide approximately one third of all primary medical care in the United States. Given the projected shortage of family physicians in the United States, the current problems with health care costs and access, and the possibility that increasing the numbers of family physicians may be an important part of any plan that addresses changes in the current health care system, we have delineated areas of satisfaction and dissatisfaction of family physicians and provided data that can be used in formulating policy to enhance professional satisfaction of family physicians, thereby improving patient care and attracting more students to enter primary care medicine.

Methods

A 31-item questionnaire that included information on 11 demographic variables, 13 aspects of practice satisfaction, and 7 areas of potential problems was developed based on the literature and focus group discussions. A 5-point Likert scale (ranging from very dissatisfied to very satisfied) was used to grade levels of satisfaction. A 4-point Likert scale (ranging from large problem to no problem) was used for the seven items that focused on areas of dissatisfaction. A pilot study was performed on 40 randomly chosen physicians in Pennsylvania, and the questionnaire was modified based on their responses.

All physicians in the state of Pennsylvania who were included in the 1990 directory of the American Board of Family Practice (N = 1944) were eligible to receive the questionnaire.[31] A numbered mailing system was used so that returned questionnaires did not have the name of the responding physician and confidentiality at data entry was assured. Three mailings were done, each successive mailing sent only to those physicians who did not return the previously mailed questionnaire. The numeric tracking system assured that no survey response from the same physician could be counted more than once, and that only physicians who did not respond to one mailing would receive a subsequent mailing.

A global satisfaction index was created by averaging all 13 items pertaining to satisfaction on the questionnaire. A score of 3.67 or higher on the satisfaction index was necessary for a physician to be classified as "satisfied" for this analysis. This meant that roughly two thirds of a physician's responses had to be 4 (satisfied) or 5 (very satisfied) for him or her to be included in the globally satisfied group. Full-time physicians were divided into four physician practice arrangements: solo, academic, small group ($\leq$3 associates), and large group ($\geq$4 associates).

All data were analyzed using the Statistical Analysis System (SAS, Version 6.03, 1988) for personal computers. The overall type I error was set at .05, and because of the number of statistical tests performed on the data set, the Bonferroni correction was used. The Bonferroni correction requires that individual items meet a more conservative statistical standard ($P < .001$) in order to con-

Table 1. Demographics of Full-Time Family Physician Respondents (n = 1066)

Variable	Practice Type: Solo n = 374	Private (≤3 physicians) n = 328	Private (≥4 physicians) n = 246	Academic n = 100	All Groups
Age, mean y	47	41	40	41	43
Male, %	89	89	87	82	88
Practice location, %					
Rural	35	38	39	17	35
Suburban	47	48	50	40	47
City	19	13	11	43	17

trol the overall type I error at .05. The objective of this study was to determine whether there was a difference in the ratings among the four practice types. The test of independence of the four practice arrangements and ratings was made using the chi-square distribution. No post hoc analyses were performed.

Reliability (internal consistency) of the questionnaire was estimated using Cronbach's alpha coefficient. A value of .85 was obtained for the 13 satisfaction items and .65 for the 7 problem items; both measurements were very acceptable for analysis of large group data such as that performed in this study.

Results

Demographics and Practice Characteristics

The physician satisfaction questionnaire was mailed in October 1990 to all 1944 family physicians listed in the American Board of Family Practice directory for the state of Pennsylvania.[31] One hundred eight questionnaires were returned because of incorrect addresses, reducing the number of potential respondents to 1836. A total of three mailings yielded 1250 completed questionnaires, for a response rate of 68%. Of these respondents, 1066 were practicing full time, with 63 practicing part time and 70 listed as other (emergency department or retired). Fifty-one forms were returned with missing information on type of practice. The results reported in this paper apply only to the 1066 respondents who were in the full-time practice of family medicine.

The demographic characteristics of the respondents (Table 1) were similar with regard to age, sex, and geographic distribution to those of family physicians registered with the American Academy of Family Physicians in Pennsylvania,[32] suggesting that there was no significant response bias to the survey. Physician age ranged from 29 to 78 years. Practice characteristics are reviewed in Table 2. Solo practitioners tended to be older than those in group practices, and when controlled for age, the effect of practice type on income was not significant. Of note is the large standard deviation in income. Over one half of all family physicians were involved in the teaching of medical students or residents, the amount varying between practice types. Approximately one half of the physicians were accepting patients in health main-

Table 2. Practice Characteristics of Full-Time Family Physicians (n = 1066)

Practice Characteristic	Practice Type: Solo n = 374	Private (≤3 physicians) n = 328	Private (≥4 physicians) n = 246	Academic n = 100	All Groups
Patients per week, mean (SD)	123 (51)	128 (64)	124 (44)	51 (46)	118 (58)
Cares for hospital patients, %	80	87	86	93	85
Income, mean (SD), $	98,560 (35,300)	86,970 (29,410)	92,160 (30,310)	83,700 (27,250)	91,780 (31,930)
Owns practice, %	95	75	58	13	72
Teaches, %	34	47	61	100	51
Accepts HMO patients, %	41	52	68	71	54
Accepts Medicare patients, %	96	97	98	98	97

SD denotes standard deviation; HMO, health maintenance organization.

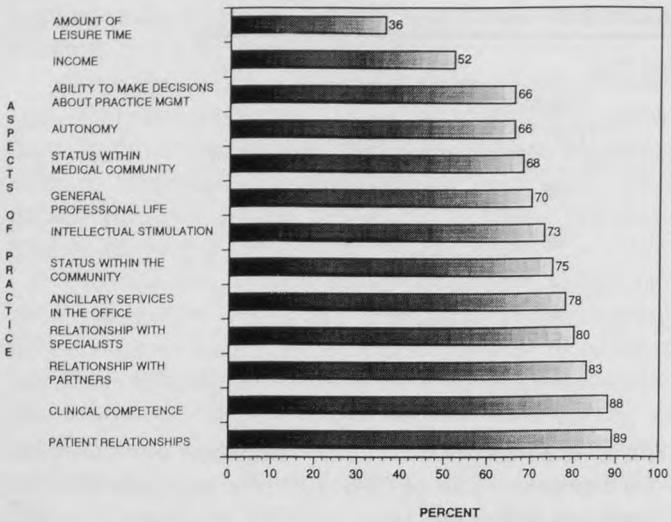

Figure 1. Level of satisfaction with aspects of practice. Each bar shows the percentage of physicians who indicated they were satisfied or very satisfied with that aspect of their professional lives.

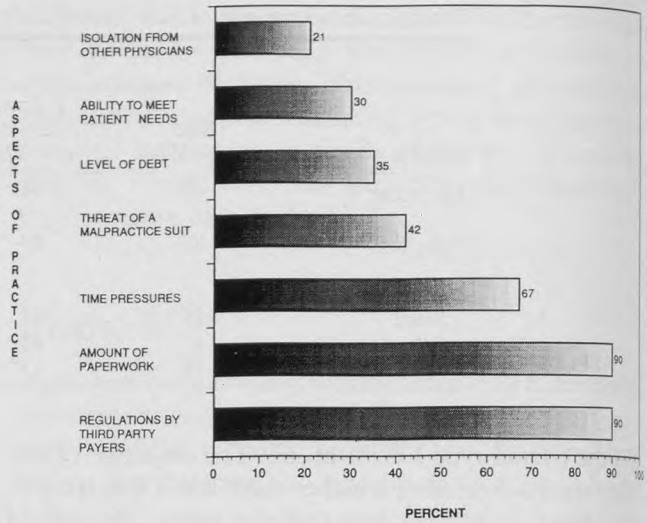

Figure 2. Problematic aspects of practice for family physicians. Each bar shows the percentage of physicians who indicated they had either a large or moderate problem with that aspect of practice.

tenance organizations. Although 97% of the physicians accepted Medicare, many noted at the end of the questionnaire that they were considering no longer accepting this method of reimbursement.

Satisfaction and Dissatisfaction of Family Physicians

The percentages of family physicians identifying themselves as satisfied or very satisfied (Likert rating of 4 or 5) with various aspects of their professional lives are shown in Figure 1. Of family physicians in full-time practice, 65% considered themselves satisfied (scored $\geq$3.67 on the global satisfaction index). There was no relation between global satisfaction and physician age or sex, location of practice, ownership of practice, physician income, or number of patients seen per week. The aspects of practice found most satisfying by family physicians included patient relationships, sense of clinical competence, relationships with partners, and relationships with other specialists. Low levels of satisfaction were indicated for income (52%) and amount of leisure time (36%).

The percentages of responding physicians who indicated that they had either a large problem or a moderate problem (Likert rating of 1 or 2) with certain aspects of their practice are indicated in Figure 2. Large problems were perceived by almost all physicians with regard to regulations by third-party payers or government agencies and the amount of paperwork. A moderate number of physicians perceived significant problems in the areas of time pressures of practice and the threat of a malpractice suit. When all problem areas were combined, there was no relation between physicians' responses and their sex, income, or age, or the location of their practice. There was a relation with ownership, with those having some ownership of a practice perceiving more problems than those who had no ownership. The number of patients seen per week was also positively related to overall perceived problems.

Differences Between Practice Arrangements

The analysis of satisfaction by practice type compared the four practice arrangements of solo, small group ($\leq$3 associates), large group ($\geq$4 associates), and academic practices. This included 84% of the total sample, the other 16% of the sample being made up of part-time physicians, emergency department or "other" physicians, and physicians with missing demographic information with regard to practice type. Of the physicians who indicated that they were working in group practices, 18 did not indicate what size group they were in and so they were not included in the data analysis by practice type.

When comparing physicians in different practice arrangements using the global satisfaction index, academic physicians were more satisfied (82%) than physicians in small-group and large-group practices (68% each), all of whom were more satisfied than solo practitioners (59% satisfied). The percentage of physicians in each of the four practice settings who indicated that they were satisfied or very satisfied with the indicated aspect of their professional lives is shown in Figure 3. Three areas showed significant differences between different practice types at a $P < .001$. These three areas were: intellectual

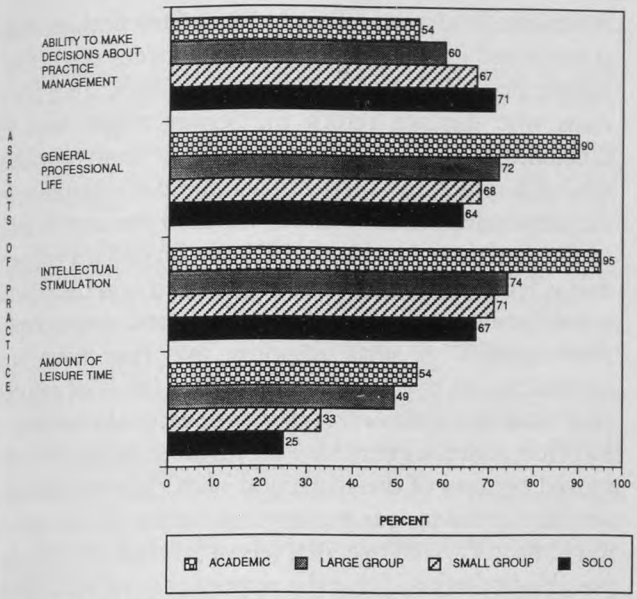

Figure 3. Level of satisfaction of physicians in different practice settings. Each bar shows the percentage of physicians in various practice settings who indicated that they were satisfied or very satisfied with that aspect of their professional lives.

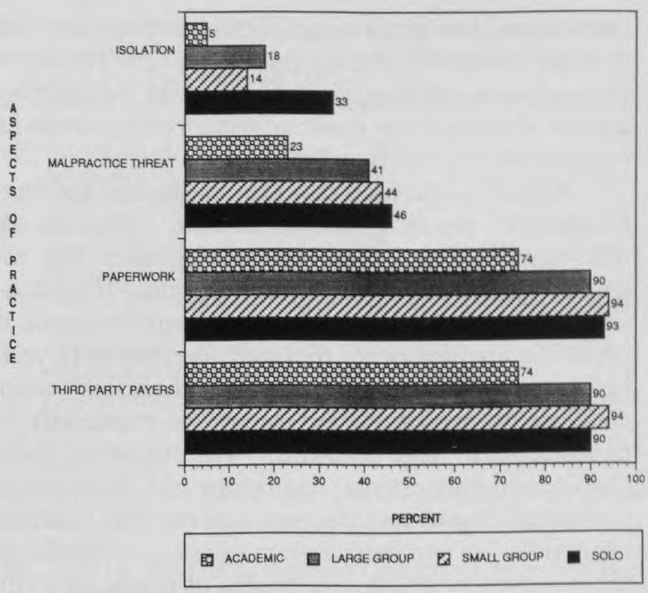

Figure 4. Problematic aspects of practice in different settings. Each bar shows the percentage of physicians in various practice settings who indicated they had either a large or moderate problem with that aspect of practice.

stimulation provided by the daily practice of medicine; amount of leisure time left after professional responsibilities were finished; and satisfaction with their general professional lives. Two other aspects of practice suggested differences between practice types that did not reach statistical significance. For level of income, physicians in academic practices appeared more satisfied (71%) than physicians in small group, large group, or solo practices (48%, 53%, and 50%, respectively). Regarding the ability to make decisions about management and policies of their practice, physicians in solo and small group practices were more satisfied (71% and 67%, respectively) than physicians in large group or academic practices (60% and 54%, respectively).

The percentages of physicians in the four practice settings who indicated they had either a large problem or a moderate problem (Likert rating 1 or 2) with the indicated aspect of their practice are shown in Figure 4. Four potential areas of problems yielded significant differences between the different practice arrangements at $P < .001$. These areas were: regulations by third-party payers or government agencies, amount of paperwork, feelings of isolation from other physicians, and the threat of a malpractice suit. Although not statistically significant, a suggestion of a difference between practice types was seen for time pressures, which were more of a problem for physicians in solo practice (73%) than for physicians in small group (62%), large group (66%), or academic (58%) practices.

Discussion

This study surveyed all board-certified family physicians in a large mid-Atlantic state, Pennsylvania, to determine their level of satisfaction with various aspects of practice. Response rate to the survey was very good at 68%. We attribute this to the concise nature of the questionnaire and the interest physicians had in this topic, which was often expressed in comments written on the back of the questionnaire forms.

Almost two thirds (65%) of family physicians are generally satisfied or very satisfied with their professional lives. Unfortunately, one third of family physicians (35%) are not satisfied with their professional lives. This is similar to the rates of satisfaction and dissatisfaction reported among internists in 1991 and among family practitioners in a managed care setting in 1992.[12,33]

Family physicians identified relationships with their patients as the single most satisfying aspect of their practice. This is what one would hope for from a primary care physician. Other consistent areas of satisfaction included family physicians' sense of clinical competence, their relationships with their partners, and their relationships with other specialists. These data suggest that family physicians feel they are providing competent care and are able to facilitate the care of their patients through cooperative work with medical colleagues. Low levels of satisfaction were observed for income level and availability of leisure time. To the degree that leisure time and income are important to students considering primary

care careers, low levels of satisfaction in these areas will dissuade students from entering primary care. The degree of satisfaction and lack of satisfaction with the described aspects of practice are consistent with previous results for both family physicians and internists.[12,17,20,21]

Aspects of practice that are problematic for large numbers of family physicians include regulations by third-party payers or government agencies and the amount of paperwork involved in practice. These areas were felt to be moderate to large problems by almost all (90%) family physicians. In a study conducted 11 years before ours, 54% and 57% of family physicians considered external regulations and paperwork, respectively, to be moderate to large problems.[21] The number of physicians considering external regulations and paperwork as problematic has increased from a bare majority to almost unanimity. This probably reflects physicians' reaction to the increased administrative burden of practicing medicine in the United States. From 1983 to 1987, the cost, and presumably the time, required for health care administrative activities increased by 37%.[34] Our results suggest that in addition to potential wastefulness, increased administrative work has had a severe impact on the satisfaction of family physicians with their careers.

Solo practitioners reported less satisfaction than physicians in other practice arrangements with the intellectual stimulation provided by their practice, their amount of leisure time, and their general professional lives. Solo practitioners experienced more problems with isolation from other physicians and time pressures than did physicians in other practice arrangements. Along with approximately one half of all family physicians, solo practitioners had low levels of satisfaction with their income, and along with most family physicians, solo practitioners reported large problems with paperwork and regulations by third-party payers or government agencies. The low level of satisfaction and high level of perceived problems among solo family practitioners support published essays that have questioned the viability of solo practice.[35,36] Since solo practices are often located in communities with low population densities where the need for family physicians is great, the particular needs of solo practitioners must be taken into account in policy formation.

This study has several limitations. The sample population of family physicians was from one state, limiting generalizability of the results to family physicians nationwide. A degree of generalizability is supported by the fact that Pennsylvania is a state with a mix of urban, suburban, and rural communities, and the distribution of our respondents with regard to sex, age, acceptance of health maintenance organizations, and practice type is similar to that of all family physicians with membership in the American Academy of Family Physicians both in Pennsylvania and nationwide.[32] Another concern is whether a sample bias was introduced into the results, since physicians who did not return the survey might have felt differently about the practice of medicine from physicians who did return the survey. That the demographics for our respondents closely match those of the membership of the American Academy of Family Physicians suggests that where response bias existed, its effect was distributed evenly among different practice types and demographic characteristics. A small response bias may have been introduced, in the direction of higher levels of satisfaction, since the 108 surveys that were returned because of incorrect addresses may have represented physicians who moved because of dissatisfaction with their professional activities prior to our mailing. Inclusion of this group might have lowered overall levels of satisfaction. Another possible limitation is that the responses to certain aspects of professional life, such as satisfaction with income and leisure time, may simply reflect the dissatisfactions that many people who work for a living have.

The results of this study have implications for the organization of the practice of medicine in this country. Given the current problems of escalating health care costs and poor access to medical care for many, there are going to be changes in the delivery of and payment for health care in the United States. If we hope to retain and recruit the number of primary care physicians needed under any new system of health care, we will have to devise a system that can effectively meet the needs of both patients and physicians.

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