



CAREER ISSUES

## Choosing a Career in Primary Care: The Road Not Taken

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**ABSTRACT** **Context:** *Despite a mission statement and curriculum that are unique in our country in proposing to direct physicians to primary care (PC), the proportion of doctors graduating from Ben Gurion University (BGU) who choose PC is similar to that of other Israeli medical schools.*

**Objectives, methods and study population:** *To investigate factors underlying our graduates' career choices we sent a questionnaire to six consecutive classes that had graduated from this medical school. We hypothesized that medical school was not the decisive factor influencing career choice.*

**Results:** *Returns were received from 135 graduates (54%). The nature of a specialty was the most important factor in choosing a career and in rejecting PC. Differences between primary care physicians (PCPs) and non-primary care physicians (NPCPs) were identified. PCPs emphasized factors relating to their personal lives. NPCPs emphasized the nature of a specialty in career choice. The most important factor in choosing PC was the physician–patient relationship and human aspects of medicine. Medical school was viewed as playing a minor role in career choice.*

**Proposed interventions:** *Graduates proposed methods to increase the proportion of doctors choosing PC. These included: economic incentives; changing work conditions; strengthening contact with tertiary care; continuing medical education; and changing PC clerkships in medical school.*

**Conclusion:** *The inherent nature of a specialty is central to career choice. In PC, the patient–physician relationship is central to physicians' career choice.*

### Introduction

Various factors have been studied as possibly influencing the choice of a career in primary care (PC) medicine. Among these, the candidate's personality, age,

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ethnic background and gender, and medical school admission policies and curriculum have been cited (Barnhart *et al.*, 1996; Martini *et al.*, 1994).

Some medical schools, such as our own, have created or changed their curriculum in order to augment education in PC medicine, based on the assumption that this may increase the proportion of graduates turning to PC careers (Kassebaum & Hayes, 1992; Verby *et al.*, 1991; Whitcomb *et al.*, 1992). There is, however, debate as to what extent the curriculum does in fact influence career choice (Pathman, 1996).

Our medical school was established in 1974, at a time when schools such as McMaster, Maastricht, Case Western Reserve and New Mexico had already established or were establishing pioneering, innovative curricula oriented to PC education.

In its mission statement (Antonovsky, 1987a), our school placed emphasis both on the selection process of new students (Antonovsky, 1987b) and on the curriculum (Segall *et al.*, 1987), as hopefully being influential in directing the graduates towards PC. Although the Beer Sheva graduate seems to differ from his counterparts graduating from schools employing traditional curricula (Friedberg & Glick, 1997a,b), the proportion of Beer Sheva graduates choosing PC careers is not markedly different from that of the three traditional Israeli medical schools (Margolis *et al.*, 1997).

Physicians' career choices are important to both individuals and society in the provision of health care and for the making of health policy. It is generally acknowledged that in Israel, as in some other Western countries, there are too many specialists and too few primary care providers.

Different strategies have been employed in different parts of the world to correct this imbalance, including recruitment policies to medical school, medical school curricula that direct toward primary care, and economic incentives. It is debatable to what extent these strategies have been successful. In the United States, increasing numbers of medical graduates have recently been turning to primary care, largely because of market forces, whereas earlier efforts to direct physicians to primary care were singularly unsuccessful.

Our school has made large investments of time and manpower in the selection process and in areas of the curriculum that differ from traditional curricula. This investment raises a relevant cost-benefit question. We, therefore, were interested in defining the factors that underlie our graduates' career choices, and hypothesized that their medical school education may not be the decisive factor. Comparison of these factors between primary care physicians and non-primary care physicians was a secondary objective of this study.

## **Methods**

A questionnaire, along with a self-addressed, stamped envelope, was mailed to all graduates of the most recent six consecutive classes that had completed

medical school. Graduates of the youngest class were in their internship year at the time of mailing. The majority of the other graduates were in the midst of residency training.

To increase face validity, the questionnaire was piloted initially to expert faculty members, including a statistician, a health care sociologist, the chairman of the department of family medicine, the vice-dean for curriculum and faculty members with an interest in PC and in medical education.

Their comments guided a revision of the questionnaire, which consisted of 48 items, 44 of which were closed or Likert-type items and four were open-ended questions. All closed or Likert-type items were followed by space allowing for comments. Twenty-four of the closed items and two of the open-ended items were addressed to non-primary care physicians (NPCPs) and related mainly to reasons for not choosing a career in primary care medicine. One open-ended question was addressed specifically to primary care physicians (PCPs) and related to reasons for choosing a career in primary care. The remaining items were addressed to both groups.

We defined primary care physicians as doctors who address the common problems of their patients, upholding the principle of holistic and continuous care while conscious of the patient's family, community and environment, and the majority of whose work is in the community. They are the doctors who patients would consult with ailments such as: fever, back pain, rash, dizziness, a baby with feeding problems, hypertension, and diabetes control. We chose this definition to emphasize the nature of the primary care physician's work rather than the physician's post-graduate training. The definition was revised and validated by the aforementioned faculty among whom the questionnaire was piloted. Non-primary care physicians were those who did not fit this definition.

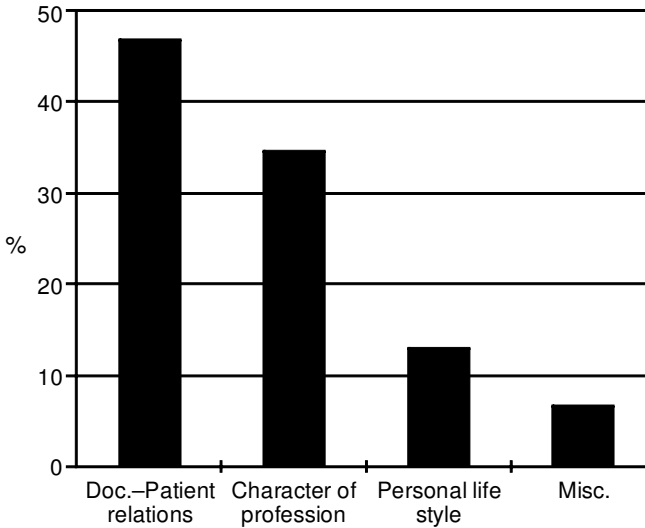
Graduates were asked to characterize themselves as PCPs or NPCPs by this definition and answered the questionnaire accordingly.

A code number identified responders, and two consecutive reminders were mailed to non-responders. No further use was made of this code number. After two reminders, we had received returns from 135 of 251 candidates (54%). We were unable to determine how many of the graduates actually received the questionnaire, as we lacked updated addresses for some.

Two-thirds of respondents were men. There was no difference in gender distribution between PCPs and NPCPs. Seventy-four percent of respondents identified themselves as NPCPs.

No difference in gender distribution or age was detected between responders and non-responders. There were more non-responders in earlier classes than in later classes. This difference is probably due in part to a lack of updated addresses for graduates of earlier years. We were unable to determine the distribution of non-responders between PCPs and NPCPs.

Results were analyzed by descriptive statistics. Further comparisons between PCPs and NPCPs were done using analysis of variance (ANOVA) and, where



**Figure 1.** Factors influencing PCP decisions in choosing primary care medicine.

appropriate, the Kruskal–Wallace test and chi-squared tests. A  $p$ -value of 0.05 or less was considered to be significant.

In the questionnaire we used five-rank Likert scales. When analyzing results, we chose to sum scores one and two and four and five to yield single percentages to allow statistical comparison between relatively small groups without losing opinion trends.

## Results

Three-quarters of respondents had made a career choice at the time of mailing. Thirty-five percent of PCPs made their career choice after completing their internship. Another 40% chose PC after the clerkship in family medicine or during the course of their internship.

In contrast to their PC counterparts, NPCPs made career decisions earlier in their studies. A third had decided on NPC careers in the pre-clinical years of medical school, or during the clinical studies before the family medicine clerkship. Another 41% made their decision after the family medicine clerkship and only a minority deferred their decision to the internship year or thereafter. Forty-eight percent of PC graduates cited reasons relating to the nature of the physician–patient relationship as being the major factor in their choice to practice PC. Another third of PCPs cited the type of work and the professional milieu as their major reason for choosing a PC career (Figure 1).

Among all respondents (PCPs and NPCPs), the following positive statements about PC were cited: human contact with the patient (92%), contact with the patient is not episodic and transient (84%), familiarity with the patient's

**Table 1.** Positive features of primary care medicine

	Don't agree	Middle choice	Agree
Human contact	0	7.6	92.4
Long-term contact	3.8	12.2	84
Familiar with patient's environment	6.9	16	76.3
Convenient work hours	12.3	17.7	70
Contact with healthy people	13	21.5	65.4
Professional independence	13.1	24.6	62.3
Want to earn well	13.9	28.5	57.7
Diagnostic challenges	21.4	25.2	53.4
Prevent hospitalization	23.8	24.6	51.5
Broad field	21.3	31.5	47.2
Minimal use of ancillary tests	45.4	27.7	26.9
Compatible atmosphere	51.5	26.9	21.6

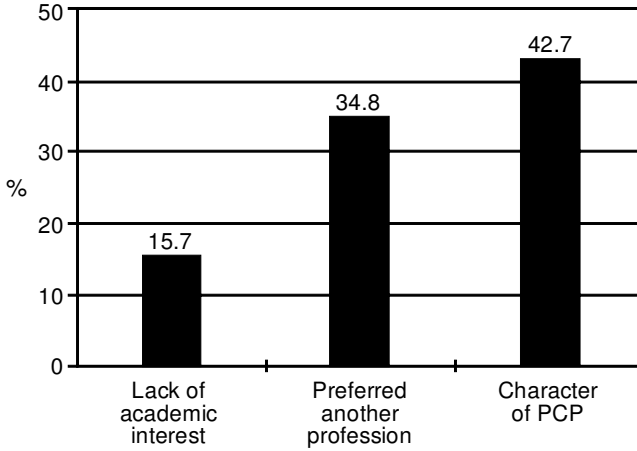
environment helps in clinical decision making (76%), comfortable work hours (70%), contact with healthy people is important and pleasant (65%), independence in decision making and therapeutics (62%), reasonable income (58%), PC presenting diagnostic challenges (53%), and satisfaction in preventing hospitalization (52%) (Table 1). Items where PCPs were significantly more positive than NPCPs were: contact with the patient is not episodic and transient ( $p = 0.03$ ), there is satisfaction in preventing hospitalization ( $p = 0.04$ ), contact with healthy people is important and pleasant ( $p = 0.002$ ), the ambience in a clinic suits me ( $p = 0$ ), and independence in decision making and therapeutics ( $p = 0.006$ ).

Forty-three percent of NPCPs cited negative features regarding the inherent nature and the professional milieu of PC medicine as their major reasons for not choosing such a career. Positive preference for another medical discipline was the major reason cited by another third of NPCP respondents for not choosing a PC career. Sixteen percent cited a lack of academic or professional interest in PC medicine as their main reason for not choosing PC medicine (Figure 2).

Interestingly, 50% of NPCP respondents, at some stage, had contemplated a career in PC.

Other factors that NPCPs cited for rejecting PC were: an interest in a more "action-packed" environment (78%), a preference for team work (69%), limitation in the type of interventions the PCP can undertake (64%), seeing a different patient every 10 minutes is tiring (52%), a large proportion of the PCP time is spent doing referrals and paperwork (49%), limitations in therapeutic decision making (48%), and PCPs encounter too many trivial problems (36%) (Table 2). Factors that were reported as not influential for either PCPs or NPCPs in making their career choice were: a lack of opportunity to specialize in a chosen discipline (80%), and influence of the medical school (49%). These and other factors in career decisions are presented in Figure 3.

We further questioned NPCPs as to the reasons that medical school had not

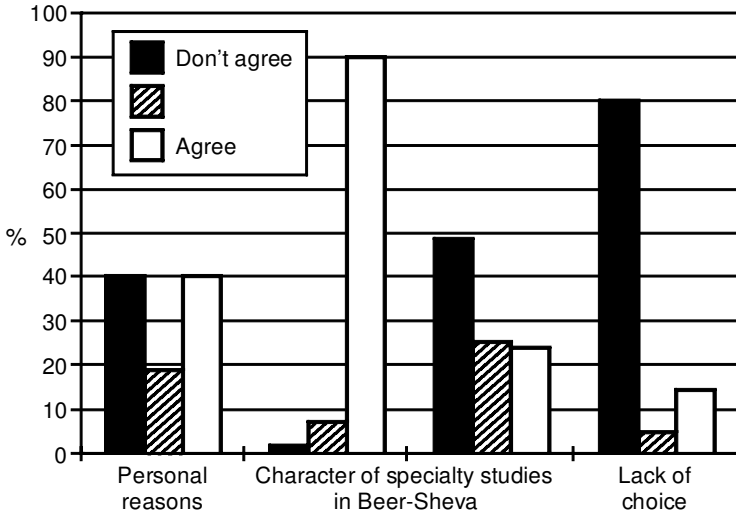


**Figure 2.** Factors in rejecting a career in primary care medicine.

succeeded in directing them to PC (Figure 4). Forty-one percent agreed with the statement that there was a lack of appropriate role models. Thirty-five percent of NPCPs agreed that there had been too much preaching on PC in medical school and that it was a hackneyed subject. Twenty seven-percent thought that the PC clerkships were poor, while 43% of NPCP respondents stated that medical school did not influence their career decision. Only 7% of NPCP respondents thought that there had been too little exposure to PC in the course of their studies.

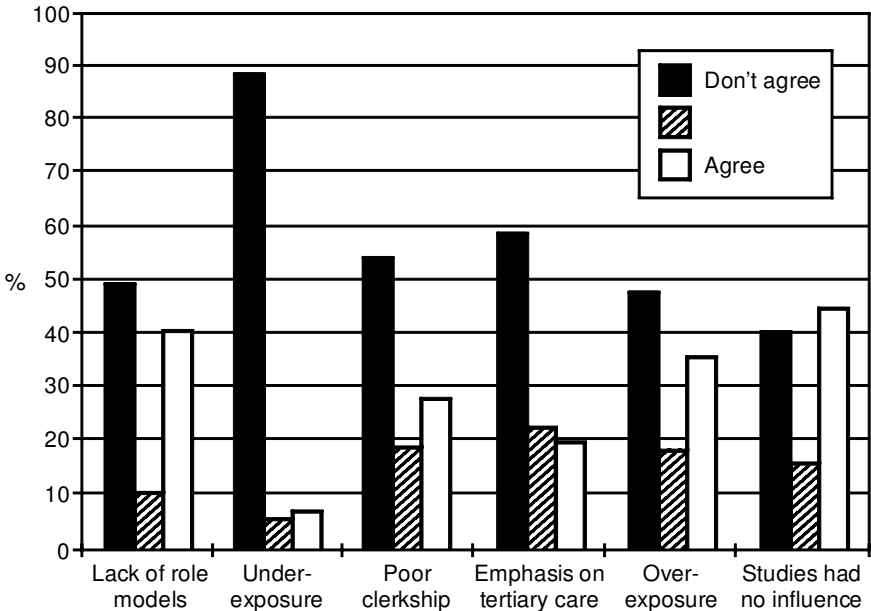
**Table 2.** Reasons for rejecting primary care medicine

	Don't agree	Middle choice	Agree
Specialize in a specific field	11.8	9.8	78.5
Want more "action"	15.6	6.8	77.7
Lack of team work	18.5	12.6	68.9
Limited in interventions	19.8	15.8	64.4
Having to see a patient every 10 min.	24.5	23.5	51.9
Too much referral work	29.1	22.3	48.5
Limited in therapeutic options	32.7	19.8	47.5
Estrangement from academia	29.4	26.5	44.1
Cannot feel competent in wide field	31.4	25.5	43.2
Trivial problems	39.2	24.5	36.3
Many psychosocial problems	46.1	23.5	30.4
Poor professional image	47.6	24.3	28.1
Lack of intellectual stimulus	53.9	21.6	24.5
"Stuck" with problematic patients	61.7	20.6	17.6
Want to earn well	70.3	16.8	12.8
Repeat visits of some patients	82.8	7.1	10.1
Too many hours	91.1	6.9	2



**Figure 3.** Factors in making a career choice.

We found significant differences between PCPs and NPCPs in their reasons for career choice. PCPs placed more emphasis than their NPCP counterparts on factors relating to their personal lives (time for family, making a living, etc.) ( $p = 0$ ). Both PCPs and NPCPs were influenced by the nature and qualities of the specialty, but NPCPs were more so ( $p = 0.01$ ). There were no significant



**Figure 4.** Why didn't medical school succeed in directing you to primary care medicine?

differences between the two groups regarding the influence of medical school on their career choice.

To elicit further reasons for career choice and possibly suggest ways to increase the number of graduates turning to PC, we asked graduates what they would do if they were appointed dean of the medical school or minister of health, to attract more medical school graduates to PC. Many different suggestions were proposed. Fifty-eight percent of respondents suggested various forms of economic incentives as their first choice. Other suggestions included decreasing the PCP's workload, increasing contact with hospitals, and introducing continuing medical education in specialty areas.

Suggestions concerning medical school related to decreasing the emphasis placed on PC in the curriculum (22%) on the one hand, but others suggested increasing awareness of PC during studies (19%). Other respondents (18%) thought that better role models and better teaching environments should be provided. Sixteen percent of respondents thought that the clerkship in family medicine should be changed. These suggestions related both to content and structure of the family medicine clerkship.

## **Discussion**

As we hypothesized, the results of this study show that, as perceived by our respondents, medical school was not the major factor influencing career choice. This was true both for PCPs and NPCPs. Rather, the inherent nature and milieu of the specialty seemed to be more decisive in career choice, while personal factors were important as well. Our results are similar to those of Barnhart *et al.* (1996), who also questioned the influence of medical school on career choice.

Most NPCPs report having made a career decision before the required clerkships in PC, and did not change their decision following the clerkship. In fact, as implied by some respondents, over-exposure to PC might even have been detrimental to their choosing a career in PC. In a previous study in which graduates evaluated the curriculum (Friedberg & Glick, 1997a), 44% of our graduates had suggested a decrease in the time allocated to the clerkship in family medicine. Forty percent called for a decrease in the amount of time allocated to ambulatory pediatrics.

We should not, however, completely dismiss medical school's influence on career choice. Twenty-five percent of respondents indicated that medical school did have a substantial influence on their career choice. Furthermore, as this study suggests, there might have been a problem with appropriate teaching locations and role models, and thus negative educational experiences. This was found to be one of several factors by Ellsbury *et al.* (1996) as well. Effective faculty development programs (Stone *et al.*, 1999) might alleviate a lack of appropriate role models. Had outstanding, charismatic role models been available, the picture might well have been different.

As reported by PCPs, a major factor influencing their career choice was the nature of the patient–physician relationship in PC. Our school emphasizes and teaches communication skills. Although not researched in this study, this emphasis might have had some influence on PCP career choice. It should be noted that 93% of all respondents, both PCPs and NPCPs, thought that the human contact with the patient was an important factor when choosing PC. These results might also suggest a greater emphasis on seeking candidates for medical school who enjoy contact and interaction with people.

Personal factors were also prominent in choosing a PC career. This is not surprising, because in Israel work hours and night duties are generally easier in PC, especially during residency training.

When trying to increase the proportion of graduates turning to PC, the target population would be those students contemplating a non-PC career. In this study, NPCPs chose not to pursue PC because of the inherent nature of PC as well as because of their preference for another specific discipline. Part of this potential population will not be persuaded to choose PC. However, our results indicate that NPCPs do see positive points in PC, and many suggested ways to attract more people to PC. Some of these physicians might have been persuaded to choose a career in PC if provided with the option of a training track that integrates family medicine with another discipline (Dixon *et al.*, 1999).

Although our results indicate only a relatively minor role for medical school in career choice, further research is warranted to investigate the influence of specific interventions, both in and out of medical school, to increase the proportion of graduates choosing a PC career.

Such interventions might include: recruiting candidates to medical school whose primary source of satisfaction comes from contact with people; providing quality learning experiences in PC using highly regarded role models and appropriate teaching environments; changing the type of work the PCP does so as to lessen the amount of bureaucracy, allowing more time for contact with patients; providing economic incentives to physicians turning to PC; and providing continuing medical education in specific areas.

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