

Viewpoints of the interns on their future career in Qazvin University of Medical Sciences

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ABSTRACT

Background The imbalance between the public needs and the number of the medical graduates has created problems in recruitment of young physicians who are trained to provide medical and health services in the country.

Purpose To assess the attitudes of interns at Qazvin University of Medical Sciences towards their future profession in 2001-2002.

Methods This descriptive study assesses the viewpoints of all 120 interns through a self-administered questionnaire.

Results The findings indicated that 77.5% of the students were in the age range of 22 to 27 with the average of 26.4 years. Of all cases 67.5% wished to continue their training to become a specialist and 6.7% decided to work as a general practitioner. Of all students, 95.8% expected their future income to be low, to an extent which will not provide a comfortable life for them. Of all cases, 89.2% believed that the present system of medical education does not give them the necessary capabilities and skills to practice efficiently in the future.

Conclusion. The students' viewpoints on fulfillment of their economic needs and provision of a comfortable life for them and their families were negative; however, regarding fulfillment of their mental and emotional needs and participation in a scientific field, they were positive.

Keyword INTERN, MEDICAL PROFESSION

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Introduction

Medicine has been recognized as a science since Hippocrates' time; however, it appears to be as old as the human being. The history of medicine goes back to the time when the humans decided to relieve themselves from pain and affliction. All over the world, doctors are considered the most important providers of health care services.

In the recent years, our country has

provided its health care services through a network system in which the most important and the most active elements are the general practitioners who act as managers and leaders in health provision services, both in urban and rural areas (1).

Two decades ago, there was a considerable lack of physicians in the country. According to official statistics, in some parts of the country, there was only one doctor for every 18000 individuals at that time; meanwhile, most of the practicing doctors were foreigners.

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Thus, training expert or specialized manpower was considered the primary goal of the Ministry of Health, Medical Education. In 1969, only 7 medical schools, 3 dentistry schools and 3 pharmaceutical schools existed in Iran. These figures increased to 38 medical, 13 dentistry and 9 pharmaceutical schools by 1993 (2).

During the same period, the number of medical students increased from 5,621 to 32,870. Consequently, there was a 10% increase in the number of practicing physicians, with more than 37,700 general practitioners and 18300 specialists in 1997.

Materials and Methods

A survey was conducted in 2001-2002, to obtain interns' viewpoints at Qazvin Medical University through a self-administered questionnaire. The questionnaire was designed by the researchers and validated by getting experts' views. It was pre-tested on 12 students and necessary changes were carried out. The questionnaire consisted of two parts: the first part included demographic data such as the student's age, sex, marital status and date of registration as a medical student, and the second part consisted of 23 questions addressing the students' viewpoints on different aspects of medicine and their future career. The number of participants in the study was 145 interns, who were working in the teaching hospitals of Qazvin during 2001-2002. The students answered anonymously and their participation was optional.

Five options (very good, good, moderate, poor, very poor) were provided for the evaluation of each item according to the Likert scale and the answers were classified into positive or negative according to the prevalence of responses. If the "very good" and "good" responses were more than the "very poor" and "poor" ones, the students' viewpoint was considered positive. The data were analyzed using SPSS software, and chi-square test was used to compare the subgroups.

Results

Of a total of 145 interns, 120 (82.7%) filled out the questionnaire. The majority of the respondents had enrolled in Qazvin Medical University between 1990 and 1995. Of all respondents, 57.5% were male and the rest were female, and 35% of the male and 65% of the female students

were married. The majority of the students were in the age range of 22 to 27 (77.5%) with the average age of 26.4 ± 0.8 years.

In response to the question "What is your decision about your future career after graduating?", 67.5% had decided to continue their studies in specialty medical fields. Of these students, 55% wished to continue their studies in Iran and 12.5% had decided to continue their studies abroad. Of all the interns, 6.7% had decided to work as a general practitioner, 22.5% had not made any clear decision, and 3.3% had chosen non-medical careers.

In a general view, 13.3% wished to work in the public sector, 19.2% in the private sector, and 67.5% wanted to work in both sectors. Those who chose to work in the public sector decided to participate in health services (32.5%), educational centers (24.2%) and research centers (5%), and of those students who wanted to work in private sector, 72.5% preferred to work in their own office, 17% tended to practice as family physician and 7.5% intended to establish a medical cooperation to provide health services.

In response to the question "To what extent can a medical career meet your economic needs, the welfare of you and your family, job security and emotional needs, and provide opportunities to work in a scientific field?", 95.8% chose moderate, poor and very poor for satisfaction of economic needs, and 95.8% selected the same options for self and family welfare. Of all respondents, 86.7% selected moderate, high and very high for moral and emotional satisfaction and 76.7% believed that medicine can meet their needs to work in a scientific field. About 40% of the interns had a negative viewpoint on their future job security (Table 1).

More male students have positive viewpoints on having welfare in their future life (85.75%, $P=0.0002$) yet, male or female viewpoints on other factors such as financial and job security, the opportunity to work in a scientific field and the satisfaction of moral and emotional needs did not show any significant difference.

The students' attitudes regarding the status of the medical profession in the future, specifically its economic and scientific aspects, are summarized in Table 2.

The interns were asked whether there was any change in their viewpoints on the medical profession from the time they enrolled as a

medical student. Of all answers, 64.2% were negative.

They were asked to give a score, in the range of 1 to 10, to medicine in comparison with other available jobs; the average score was 7.

Discussion

Of all the respondents, 67% wanted to continue their studies to become a specialist and only 6.7% had decided to remain as a general practitioner. In Tehran Medical University, only 4.1% of the interns wished to practice as a general practitioner (6). However, other studies found that even in those medical schools which place heavy emphasis on community-based practice, the students prefer to have a job in a hospital or to have a specialty degree. It seems that the difference between the financial status of a general practitioner and that of a specialists, lack of

opportunity to open an office, and extensive referral of the patients to the specialists due to the lack of a proper referral system, are the main factors (67.5%) influencing the tendency to continue medical training.

This fact brings about a problem in the medical training and health service system of the country. The problem is that the increasing number of graduating students aiming to continue their training must face the limited capacity of the residency program to accept these newcomers.

This survey revealed that 22.5% of the respondents did not have any clear picture of their future career, which may be attributed to the following factors: the frequent changes in the residency entrance exam, and the duration of compulsory military services and governmental restrictive regulation.

TABLE 1 THE STUDENTS' VIEWPOINTS ON THEIR FINANCIAL SECURITY, THE WELFARE AND COMFORT TO THEMSELVES AND THEIR FAMILY, JOB SECURITY, MORAL AND EMOTIONAL SATISFACTION AND OPPORTUNITIES TO WORK IN A SCIENTIFIC FIELD (N=120)

	Very good	Good	Moderate	Poor	Very poor	Total
Financial security	0.8	3.3	60	21.7	14.2	100
Self welfare and comfort	-	4.2	42.5	31.7	21.7	100
Family welfare and comfort	-	5.8	42.5	31.7	20	100
Job security	5.8	10.8	43.3	30	10	100
Satisfaction of the moral and emotional needs	17.5	27.5	41.7	5.8	7.5	100
Opportunity to work in a scientific field	9.2	27.5	40	13.3	10	100

TABLE 2 THE STUDENTS' OPINIONS ABOUT THE ECONOMIC AND SCIENTIFIC ASPECTS OF THE MEDICAL PROFESSIONS (N=120)

	Very high	High	Moderate	Very poor	Poor	Total
Economic aspects of medical profession in the future	0.8	5	50.8	26.7	16.7	100
The scientific value of medicine in the future	15	36.7	35	10	3.3	100

The attitudes of interns regarding the provision of financial security through a medical profession were more positive in this survey compared to those of Sadr's (6).

Most of the students indicated that the medical profession does not have the potential to provide welfare and comfort for them and their families in near future. It seems that the high expectations of the students and their families, as well as the lack of appropriate occupational opportunities, flawed programs for the employment of young physicians, incongruous income, and the tight competition for residency programs, may directly or indirectly make fulfillment of self and family welfare impossible. In Cambridge University, 64% of the medical students felt ill-informed about medical training and practice before they had entered the medical school (7). The fact is that students must have realistic expectations when they enter medical school (8).

In our society, the professional, economic and social responsibilities of females are growing rapidly in addition to their other responsibilities at home. This results in more anxiety among females, causing them to have more negative views about their professional career and financial security. However, other researchers found that in general, the females' attitudes are more optimistic than those of males (9).

No significant relationship was observed between the students' marital status and their attitude, probably because the single students face the same potential conflicts as the married students actually confront. Student burnout is a significant challenge for medical schools. Personal problems are more common reasons for medical student than academic problems (10). Some students changed their mind about medicine as a career, some had problems with their future role, and some had family problems (11). These findings are in agreement with the findings of a similar survey performed in Kerman Medical University (9).

One of the most important points of the research was that 89.2% of the students believed that the present medical education system does not provide the necessary skills for their future career. The medical education system has remained rigid and unchanged for years and a revision based on occupational needs seems necessary. The main responsibility of physicians is to serve the public in all health problems from birth to death. Physicians play a central role in most decision-making processes concerning the quality of life in community. They are increasingly involved in preventive and

promotional activities aiming to improve education, nutrition, proper lifestyle and even housing. Many different factors may influence policy-making. One factor is the changing demographic characteristics of the society. In the industrialized world, the controlled low birth rate and greater life-expectancy have resulted in an older population, and the same pattern is observed in the developing countries. Another factor that should be considered in the medical education system is the emergence of new epidemics, such as that of AIDS.

Finally, one needs to consider the balance between national and international health efforts. The eradication of viral diseases, is indeed of international benefit. Succeeding in these endeavors will benefit all nations, particularly the developing countries. Medical education needs to consider all the above aspects while considering national and international policies (12).

Most medical students in the third-world countries are trained in urban hospitals and have no experience in working in rural areas. Community-oriented medical education is generally accepted as a way to train doctors who could then participate in primary health care programs, especially in rural areas (13).

In conclusion the authors suggest:

- 1) Since the increasing number of doctors has brought about the present problematic condition, bringing a balance to the output of medical students and the community needs seems to be one of the major priorities. This adjustment should be undertaken in long-term and with respect to the society's needs and future opportunities.
- 2) Along with decreasing and balancing the number of students, the quality of medical education should also be reconsidered. Revising the teaching patterns in order to train doctors familiar with family medicine seems to be of great importance.

The changes occurring in the attitude of undergraduate medical students toward their future career compared to their earlier views demonstrate the need for a proper information service in the late high school years before they choose their line of future study.

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