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Cultural Differences between American and Israeli Medical Students Regarding Their Perceptions of the Medical Profession and Satisfaction with Studies

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Abstract

Background: Cultural differences have been discussed as a potential factor influencing students' perception and motivation towards their studies. At the Sackler Faculty of Medicine, Tel-Aviv University, two separate programs coexist for American and Israeli medical students. Both are taught at the same sites and by the same faculty, thus enabling cultural comparisons. Our aim was to examine the differences of two medical student groups, American and Israeli, regarding their satisfaction with studies, view of the educational workload, and their perceptions of physician characteristics.

Method: During the academic year 2007-2008 we administered an anonymous questionnaire to the two groups immediately after their first clinical clerkship in internal medicine. The response rate was 82% (90 out of 110) for the Israelis and 93% (53 out of 57) for the Americans.

Results: Americans, compared to the Israelis, are significantly more satisfied with their medical studies, consider fewer alternatives to future careers in clinical medicine, feel less of a workload, and hold a more positive opinion of physician characteristics.

Conclusions: Cultural differences affect students' perception of their studies, mentors and future careers. Medical educators should be sensitive to the effects of students' background which influence academic and professional attitudes and find ways to strengthen their commitment to the profession.

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Introduction

Clinical studies are an important socialization stage for medical students. Students receive direct exposure to their future working environment and immediate contact with their mentors, the physician-teachers. This experience provides the first meaningful opportunity to shape their perceptions regarding satisfaction with their career choice and to formulate feelings about the interpersonal skills and attitudes of their clinical teachers who are serving as their role models.[1]

Before the 1980s, the public, as well as people entering the field of medicine, generally perceived that physicians had virtually unlimited autonomy in clinical decision making, freedom to select their clientele, held the power to determine their working conditions, and enjoyed considerable financial rewards. In the ensuing healthcare reform environment, career satisfaction became a serious issue among both American and Israeli physicians, as documented by a number of studies conducted since the late 1980s and early 1990s.[2-5] Data from recent years shows a continued decline in physicians' motivation and satisfaction with the medical profession.[6,7] Claims of stress and burnout are well documented as are outcomes such as physician dissatisfaction. In 1973, less than 15 percent of several thousand practicing American physicians reported doubts of having made the correct career choice.[8] In contrast, surveys administered within the past 15 years have shown that 22 to 40 percent of practicing physicians would not choose to enter the medical profession if they were deciding on a career again, and an even higher percentage would not encourage their children to pursue a medical career.[9,10] Similarly, in Israel, Bitterman and Shalev[3] found that 12% of graduates of Israeli medical schools between 1981-2000 would not choose medical studies again, and 23% are not sure of their choice. A survey of Israeli residents,[4] done between 2004-5, showed that their satisfaction with patient treatment and the level of self-fulfillment were high, but their satisfaction with the workload, income, quality of life and leisure time was low.

Despite that similar processes occurred in the medical profession of both the United States and Israel, there also are some differences, mainly related to employment conditions and, consequently, the social status of the physician. International comparisons show that the United States spends more on health care than any other industrialized nation.[11] Anderson *et al.*[12] suggested that the difference in spending is caused mostly by higher prices for health care goods and services in the United States. On the other hand, details from the Israeli Medical Association show that the average Israeli physician works nearly 60 hours per week, and the salary is lower compared to other sectors.[6] Medical students in their clinical studies have a close and unique vantage point of the profession. Little is known about their opinions and their perceptions, which may reflect the present-day dissatisfaction among physicians, and the decrease in the prestige of the medical profession as perceived by the mass media.[13,14] No data was available regarding medical students' satisfaction with career choice until recently. A study, done in Israel, showed a decrease in Israeli medical students' satisfaction with career choice after the beginning of their clinical studies.[15] Data regarding American medical students was also published only recently.[16] Among 1387 senior medical students in the class of 2003 at 16 US medical schools, 47% strongly agreed and 38% agreed that they were satisfied with their career choice.

The Sackler Faculty of Medicine runs two separate medical programs, one for Israeli students and one for Americans (The New York State/American Program). Although United States and Israel share many similar experiences related to the medical profession, we hypothesized that there would be clear cultural differences between the two groups in their satisfaction with their choice of the medical profession and in their perceptions of the educational workload and of physician characteristics.

Medical Programs in the Sackler Faculty of Medicine

The Israeli program comprises a 6-year program of studies plus 1 year of rotating internship. Israeli students enter medical school after completion of their compulsory three years army duty. They are selected for admission on the basis of high school grades, scores on standardized psychometric examinations and a simulation-based personality screening test. There are 120 students in each class on average. The New York State/American Program is a 4-year program patterned after US medical schools. American students enter after completing their bachelor's degree in the United States, and each class averages 60 students. They are selected for admission on the basis of college grades, MCAT scores, letters of recommendation and a personal

interview. Upon completion of their 4 years of training, all Americans return to the USA for their residency training and future medical careers.

Methods

Study Participants

The questionnaire was distributed to 110 Israeli students and 57 Americans, representing the total student cohorts being studied. A total of 90 Israeli students and 53 American students voluntarily completed the questionnaire. The response rate was 82% (90 out of 110) for the Israelis and 93% (53 out of 57) for the Americans. Data were collected during November 2007 for the Americans and during March 2008 for the Israelis. Both groups were studied after their first exposure to clinical work, which was the first 14 weeks of the clerkship in Internal Medicine. Both groups performed their pre-clinical studies in the same medical sciences building and were taught by the same preclinical faculty. Identical clinical facilities in 7 medical centers were utilized for clerkships and clinical electives for both the Israeli and the American students.

Questionnaire

The research tool was a questionnaire designed by the authors after consulting with students and colleagues. Some of the statements were taken from a published questionnaire.[17] The questionnaire was assessed for content validity and changed after piloting with a group of students prior to its application. Statements relating to each of the 3 subscales were first combined to produce means and standard deviations for each subscale. We looked at the distribution of scores to check that the students were using the full range of possible scores, that is, that they were not giving uniform responses. We also checked that the distribution of scores was roughly symmetrical about the mean and that the distributions were not too peaked or too flat. After bi-directional translation of the Hebrew questionnaire to English, it was administered anonymously to students in both programs by representatives of the Unit of Medical Education. An explanation of the aims of the study was given before its circulation. The questionnaire reflected three themes: students' satisfaction with their medical studies, their perception of the academic workload, and views on professional characteristics of physicians. It contained 16 statements scored on a 5-point Likert scale from 1 (strongly disagree) to 5 (strongly agree), and 3 (neither agree nor disagree). We added two open questions allowing free text responses in addition to demographic data. Two of the researchers individually reviewed all free text comments and grouped them qualitatively into common recurring themes. We then compared our groupings and agreed on the main common themes. We present certain individual comments that best reflected student feelings.

Statistical Analyses

Statistical analyses were performed using SPSS. All reported *p*-values are 2-sided and given to 3 significant decimal places. An independent samples t-test was used to compare the results of both groups of medical students and *p* values equal to or less than 5% were considered significant. We checked the internal consistency (reliability) of the subscales by investigating whether statements within each subscale correlated significantly with each other, using Cronbach's alpha statistics. We expected that each subscale would produce values of Cronbach's alpha 0.70 or above, indicating internal reliability.

Results

Demographic Background of the Participants

There were no significant differences in the sex composition between the two sample groups. The male to female ratio was 57:43 in the American group and 53:47 in the Israeli group, respectively. These ratios are similar to those that exist in the classes of the American and Israeli students The American students were one year older than the Israelis (26.6 ± 2.5 vs. 25.5 ± 2.8), but this difference was not significant. As foreign students, Americans do not hold work permits in Israel as opposed to the Israelis, of whom 60% work an average of 16 hours a week during their studies.

Satisfaction with Career Choice

The motivation of both groups increased since the beginning of clinical studies and they both were satisfied with the decision to study medicine (the mode was 4 on a 5-point Likert scale). Nevertheless, American students were significantly more satisfied and more proud to study medicine compared to Israelis ($p < 0.05$, Table 1 (A)). Among the Americans 62% strongly agreed and 25% agreed to the statement, "I am satisfied with my decision to study medicine". On the other hand, only 56% of the Israelis strongly agreed and 23% agreed to that statement, respectively. None of the Americans

compared to 9% of the Israelis were dissatisfied. The students were also asked regarding their career plans upon completion of medical school. 83% of the Americans were interested to work as a clinical doctor and only 7% considered other alternatives, compared to 72% Americans and 23% of the Israelis who were interested in a clinical career and considered other alternatives (p <0.05), respectively.

The Influence of Clinical Training on Lifestyle

As expected, both groups seemed to have more stress and less leisure time after the beginning of their clinical training. Israeli students, of whom 60% hold outside jobs, reported more difficulties getting used to the clinical studies load compared to the Americans, despite equivalent classroom and clinic time (Table 1 (B)). In their answers for an open question about the influence of the clinical studies on their lifestyle, a similar picture is seen, when comparing the Americans to the Israelis students (Table 2).

Student Perceptions of the Physician Characteristics

Overall, the perceptions of all the students of the lifestyle, satisfaction with their career choice, status in society and professionalism of their physicians were not as high (on the 5-point Likert scale) as their satisfaction with their medical studies (Table 1, part (A) compared to part (C)). The Americans, compared to the Israelis, believed that physicians generally are more content with their career choice, less embittered and have less workload in the hospital (Table 1(C)). 32% of the Americans strongly agreed or agreed to the statement, "Physicians lead well-balanced and rewarding lifestyles" compared to only 6% of the Israelis. American students also thought that the status of the medical doctor in society is higher and people appreciate more the contribution of doctors and give them more respect. Both Americans and Israeli students believed that physicians are compassionate to their patients and the Israelis thought that physicians are more professional compared to the Americans.

Discussion

Expression of dissatisfaction with the medical profession and a decrease in the physician's status in society are well documented in recent years. Currently many physicians seek defined practice hours, limited call, reasonable patient loads, and set vacations. If not satisfied, they will seek alternative settings that promote quality of life. Apparently, medical students as future physicians are likely to be influenced by this atmosphere. In this spirit, we undertook this study to determine what is the level of satisfaction and perception of academic workload of our medical students, and what their perceptions of physician characteristics are. A comparison of cultural influence on the perceptions of two student groups was drawn, utilizing the unique makeup of our school. Indeed, culture differences between these groups have been shown in other studies.[18]

Comparison of our findings regarding satisfaction of medical students in the two groups with those reported for practicing physicians indicates that the students' satisfaction is higher.[6,7] Our results are consistent with findings of a recent study conducted in the United States,[16] in which 85% of American medical students were satisfied with their career choice compared to 87% of the Americans in our study. These findings are positive, particularly since these students were in the midst of the emotional, physical, and financial sacrifices typically encountered during the training of a physician. Not surprisingly, despite the fact that the motivation towards medicine increased in both of the groups, we did find some cultural differences. Cronbach's Alpha of the questionnaire was 0.79, suggesting that the statements have relatively high internal consistency.

Overall, the American students are prouder and more satisfied to study medicine, feel less workload, and hold a more positive opinion of the medical profession and of physicians than their Israeli counterparts. A third of them believed that physicians lead well-balanced and rewarding lifestyles compared to only a few of the Israelis, who almost one fourth of them consider alternatives to clinical medicine already in this early stage of their clinical phase.

Medical students' dissatisfaction with their career choice and their negative impression of physician characteristics may have public health implications. Data suggest that dissatisfaction on the part of physicians breeds poor clinical management, as well as dissatisfaction and noncompliance among patients, and may lead to discontinuous, substandard medical care.[19,20]

There may be several possible sources for the cultural differences between the American and the Israeli students. Differences in employment conditions

between the United States and Israel, social prestige of physicians, the number of violent incidents against physicians,[21-24] and the extent of the malpractice crisis and its coverage in the mass media,[25] may be some of the factors.

An interesting finding is the Israelis' higher rating of physicians' professional behavior (4.0 (0.8) vs. 3.6 (0.9), p <0.01). Considering that the American students study with the same teachers and in the same hospitals, this difference of perception may be attributed to cultural differences. Also, partly it may be related to language difficulties, or perhaps different behavior of Israel physician compared to the American role models they are familiar with.

Among demographic background, no significant difference in the sex and the age of the Americans and Israeli medical students was noticed, but there was a major difference in their employment status. As opposed to the American students that as a rule do not work, 60% of the Israeli students do, on average 16 hours per week. In Israel, working as a student is a very common occurrence as no loans are available. In the United States, on the other hand, working during medical studies is not so well accepted and many students take loans that are repaid after the end of their training. Studies have shown that a controllable lifestyle with more leisure time enhances the satisfaction with medical studies.[26-28] One may attribute the differences to the level of workload students are feeling during their studies. Nevertheless, when we compared the Americans students to the group of Israelis that did not work, we still obtained similar results on students' professional perception (Table 1).

The fact that the participants of our research, both American and Israeli students, do not necessarily represent the American and Israeli medical student population is a limitation of our study. In order to generalize our finding, we suggest focusing on other international comparisons, such as American medical students in Israel compared with Americans studying medicine in other countries. We also suggest further research on the same student population during progressive stages of their studies and after completion of additional clerkships.

Conclusion

Our study indicates that the perceived characteristics of physicians and satisfaction with medical studies are influenced by the social culture of the medical students with higher rates given by the American medical students. We believe that as educators we should not shirk our responsibilities and accept an unsatisfactory situation that can negatively influence the healthcare system in Israel and other countries where fewer physicians choose to work as clinicians and prefer less demanding lifestyles. Our findings suggest that medical school faculty and speakers in the healthcare system in Israel should be made aware of these cultural differences and produce practical measures to prevent negative impact on clinical medicine and to ensure its future.

Table 1: Students' perceptions of the medical profession and satisfaction with studies

	Americans Mean (*SD*)	Israelisl Mean (*SD*)
(A) Students' satisfaction with their career choice (Cronbach's Alpha = 0.76)		
I'm proud with my choice to study medicine *	4.5 (0.8)	4.1 (1.0)
My motivation to be a doctor has increased since I started the clinical phase	4.0 (1.0)	4.1 (1.0)
I'm satisfied with my decision to study medicine *	4.5 (0.8)	4.2 (0.9)
(B) Students' lifestyle during the clerkship (Cronbach's Alpha = 0.72)		
I had difficulty getting used to the work routine in the clerkship ***	2.9 (1.2)	3.7 (1.2)
I experienced a great deal of stress in the beginning of my clinical training	3.1 (1.1)	3.2 (1.1)
I have enough time for leisure activities during the clinical training	2.4 (1.1)	2.2 (1.2)
(C) Student opinions of physician' characteristics (Cronbach's Alpha = 0.77)		
Physicians lead well-balanced and rewarding lifestyles ***	2.9 (1.0)	2.1 (1.1)
Physicians are generally content with their career choice ***	3.5 (0.9)	2.9 (0.9)
The workload of a doctor in the hospital is too high ***	3.6 (0.9)	4.6 (0.6)
I think that the status in society of a medical doctor is appropriate ***	3.8 (0.9)	3.0 (0.9)
I think that people appreciate the contribution of doctors **	3.7 (0.8)	3.2 (1.0)
I think that doctors are very professional **	3.6 (0.9)	4.0 (0.8)
Physicians are respected by their patients *	3.8 (0.8)	3.5 (0.9)
A lot of doctors are embittered *	2.8 (1.1)	3.1 (1.1)
Physicians respect their fellow physicians	3.7 (0.9)	3.8 (0.7)
Physicians are compassionate	3.9 (1.0)	3.7 (0.9)

(1= *strongly disagree*, 5= *strongly agree*). *p <0.05, **p <0.01, ***p <0.001

Table 2: Medical Students' Responses to: "How has the beginning of clinical training affected your life style?"

Responses	**Americans**	**Israelis**
Positive influence (*intellectual satisfaction with their studies, and feelings of fulfillment, happiness and inspiration*)	17%	4%
Negative influence (*a decrease in their sleep time and increased tiredness, less time to devote for their social and personal life and even becoming depressed*)	8%	17%
Complaining of less time for themselves (*more studies / more demand of time and energy / given up some of the hobbies / not going out for fun almost at all / less time for personal affairs / significant change - no free time anymore*)	38%	64%
A feeling of stress during the clinical training (*general feeling of stress caused mainly from the lack of knowledge and time*)	4%	8%

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Appendix

Why did I choose medicine? Did it affect my life?

Age: _____ Gender: M / F

Please answer the following questions:

1. Are you really planning to be a clinical doctor, or are you considering other alternatives?

2. How has the beginning of clinical training affected your life style?

Also, Please answer each of the following statements by circling your response on a 5-point scale (5=strongly agree, 1= strongly disagree; 0=cannot answer).

1.	Physicians are compassionate	0 1 2 3 4 5
2.	My motivation to be a doctor has increased since I started the clinical phase	0 1 2 3 4 5
3.	Physicians actively participate in medical student education	0 1 2 3 4 5
4.	Physicians lead well-balanced and rewarding lifestyles	0 1 2 3 4 5
5.	I'm satisfied with my decision to study medicine	0 1 2 3 4 5
6.	Physicians are generally content with their career choice	0 1 2 3 4 5
7.	I'm proud with my choice to study medicine	0 1 2 3 4 5
8.	The workload of a doctor in the hospital is too high	0 1 2 3 4 5
9.	I had difficulty getting used to the work routine in the clerkship	0 1 2 3 4 5
10.	I have enough time for leisure activities during the clinical training	0 1 2 3 4 5
11.	I think that the status in society of a medical doctor is appropriate	0 1 2 3 4 5
12.	I think that people appreciate the contribution of doctors	0 1 2 3 4 5
13.	A lot of doctors are embittered	0 1 2 3 4 5
14.	Physician respect each other	0 1 2 3 4 5
15.	I think that doctors are very professional	0 1 2 3 4 5
16.	Physicians are respected by their patients	0 1 2 3 4 5