



## Social Factors Influencing Career Choice in a Medical School in the United Arab Emirates

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### ABSTRACT

**Objective:** The goal of this research was to identify familial and non-familial social factors influencing post-secondary students' choices of career in medicine. **Method:** The comparative study was conducted in Ajman, among medical students in the beginning three years, and non-medical students at the same educational level. After obtaining verbal consent, the participants completed a pilot tested, self-administered questionnaire which included socio-demographic variables and social factors related to career choices. **Result:** Among the 135 medical students, two thirds were females and 87.3% were below 23 years of age. Most fathers were South Asians (53%); 80% had professional training; 48% were business persons and 12% worked in the medical field. Among mothers, 61.4% were professionally trained, and 67.2% was engaged in unskilled, semi-skilled or skilled labor. The non-medical students had mostly Middle Eastern fathers (83.5%), were professionally educated (56.3%) and had careers in business (52.9%); mothers of non-medical students were primarily working in unskilled, skilled or semi-skilled occupations (61.4%) and 38% had attained a professional level of education. The majority of medical students perceived their parents to have had strong influence on their career choice of medicine. Among non-familial social factors, 'friends' had a significantly weak influence on their career choice. While more medical students chose their career along with parents, most of the non-medical group made the choice on their own. **Conclusion:** Parents had significant influence on post-secondary career choice in medicine and friends had a weak influence. Career guidance programs should consider including parents at the process of career selection at the secondary level.

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## Introduction

Many factors influence the career pathway a person enters. Most individuals make this choice during their years in secondary school due to rigid academic streams where they choose elective courses based on future academic goals, and stay with this choice until program completion (1). Students are forced to make career choices such as medicine at a young age during the “exploratory stage of their career development” (2). Students at this age are susceptible to influences from a number of external sources as well as perceptions relating to their future careers. For example, it has been found that students with authoritative parents are more decisive in their career choices (3).

Social factors include people or groups of people that influence a student’s choice to enter a given field of study. According to Simons, *attitude* is a behavior that will lead to certain outcomes, and *social pressure* is the “belief that specific individuals or groups approve or disapprove of the behavior” (4). Cannon has identified that social factors are the most prevalent factor in a high school student’s choice to attend post-secondary institutions, but are far less influential than career-related factors with respect to which institution or program to choose. Mothers are identified as being more influential than fathers in the choice of institution, and this was found to be higher for both male and female students, and in both white and non-white ethnicities (5).

Parents’ beliefs and gender stereotypes are identified as factors that influence high school students to choose a given career, seen in particular in the fields of mathematics and sciences. Parents’ gender-typed beliefs were indirectly related to children’s self-perceptions so that boys had consistently higher mathematical inclination and future career expectancies in that field than girls” (6). This can account for parental pressure for boys to enter mathematics-based sciences such as engineering, and girls to attend fields of study in other areas. In the medical sciences, Law and Arthur have identified advice from family, friends, school career masters, practitioners, and students

already enrolled in similar program(s) to be common major influencing factors (7). Gray and Daugherty were able to quantify this in their study of students entering technology sciences and found that when asked “Who influenced choice of career?”, the most dominant influence was the teaching staff followed by self-choice, parents, co-workers, friends, and other relatives (8).

It is important to identify the factors that influence career choice in order to provide youth with more options and more independence, as this has been positively identified as a desirable characteristic in the context of career decision making (9). This is particularly important in the face of a singular dominating influence, such as the role of parents and other social influences in the decision making process. Therefore, the present study assessed the influence of peers, friends, teachers, familial relations and role models (particularly parents) as potential influences for the choice of a career in medicine. The current report is a part of a larger study describing various factors influencing career choice in medicine, engineering, and business studies.

## Method

A comparative study was conducted among 135 preclinical students of multinational origin enrolled in the course in medicine at a medical university in Ajman, United Arab Emirates and 268 students from non-medical courses in engineering and business at a second university also located in Ajman in the United Arab Emirates. A questionnaire was prepared in English with open and close ended items to gather appropriate information on socio-demographic factors and career choice. The first section of the questionnaire collected personal data including age, gender, and parental data. The remainder of the questionnaire asked about the factors that influenced the participants’ choice to enter a given career. For the social factors, students recorded the degree of influence of peers, friends, teachers, father, mother, siblings, relatives and role models on their choice to enter medicine using a rating scale, and

the degree of parental control in the choice. The questionnaire was reviewed by specialists of behavioural sciences and community medicine, and underwent pilot testing prior to the survey. After receiving approval from the university ethical committee and the College of Medicine, the study was conducted among an incidental sample of 135 preclinical students, sample size determined (n=113) based on a 69.5% prevalence of students reporting parental influence for career choice (7).

A sample was located by approaching pre-clinical students having classes held in the university's Learning and Resource Centre based on their class timing, between the hours of 11 a.m. and 2 p.m. on three successive days until 135 surveys had been collected. The sample included any students, provided they were studying in their first three years of undergraduate medicine at the time of the survey. After explanation of the questionnaire and obtaining verbal consent, the anonymous survey was conducted. The raw data from the questionnaires were entered into a Microsoft Excel spreadsheet assigning a code for each response to the questions. Once the data entry was complete, it was imported into Predictive Analytical Software Version 18.0. The data were decoded, titled and cleaned. Simple frequencies and cross tabulations were computed to

determine the associations with the observed outcomes. Chi-squared test and Adjusted Odds Ratio were used to identify significant influencing factors with and without confounding variables.

## Result

Table 1 indicates the distribution of studied medical students by socio-demographic variables, age and gender of participants, ethnicity, level of education, and occupation of father. Most were below 23 years of age (87.3%) and two thirds were females. More than half were South Asians and almost a third of Middle Eastern origin. The most common paternal occupation was business (48.1%), with 12% in the medical profession; 80% were professionally educated. Most mothers (61.4%) were professionally educated but were mostly (67.2%) engaged in occupational class designated as unskilled, semi-skilled skilled in nature; housewives were placed in this category. Table 2 reports parental influence on career choices; more medical students chose their career consulting with parents, while most non-medical students made choices on their own (p<0.01).

Table 1. Distribution of participants by socio-demographic characteristics

Variables	Groups	Choice of medicine as career				P Values
		Yes		No		
		n	%	n	%	
Age in years	16 – 19	56	41.8	61	23.1	<0.001
	20 – 22	61	45.5	142	53.8	
	>=23	17	12.7	61	23.1	
	Total	*134	100.0	*264	100.0	
Gender	Male	45	33.3	76	28.4	†NS
	Female	90	66.6	192	71.6	
	Total	135	100.0	268	100.0	
Ethnicity of Father	South Asian	71	53.0	24	9.2	<0.001
	Middle Eastern	41	31.0	217	83.5	
	Other	22	16.4	19	7.3	
	Total	*134	100.0	*260	100.0	
Ethnicity of	South Asian	72	53.7	25	9.7	<0.001

Mother	Middle Eastern	40	29.9	215	83.0	
	Other	22	16.4	19	7.3	
	Total	*134	100.0	*259	100.0	
Level of Education of Father	None/ High school/ Diploma	25	19.8	107	43.7	<0.001
	Professional	101	80.2	138	56.3	
	Total	*126	100.0	*245	100.0	
Level of Education of Mother	None	11	8.7	24	10.0	<0.001
	High school	24	18.9	80	33.3	
	Diploma	14	11.0	44	18.3	
	Professional	78	61.4	92	38.3	
	Total	127	100.0	*240	100.0	
Occupation of Father	Unskilled / Semi-Skilled /Skilled	9	6.9	22	9.8	+NS
	Business	63	48.1	119	52.9	
	Engineering	19	14.5	29	12.9	
	Medical	16	12.2	18	8.0	
	Other professions	24	18.3	37	16.4	
	Total	*131	100.0	*225	100.0	
Occupation of Mother	Unskilled / Semi-skilled / Skilled	88	67.2	97	61.4	+NS
	Medical	14	10.7	9	5.7	
	Other Professions	29	22.1	52	32.9	
	Total	*131	100.0	*158	100.0	

\*variation in totals due to non-response

+NS – Not significant

Table 2. Distribution of participants by the parental influence on choice of medicine as a career

Items	Choice of medicine as career			
	Yes		No	
	n	%	n	%
I had no desire to enter this program, or I do not mind this program	16	12.0	23	10.1
I chose to please my parent(s)	13	9.8	9	3.9
My parent(s) and I decided together	58	43.6	71	31.1
I decided to pursue this course myself, or My parent(s) were against this course	46	34.6	125	54.8
<b>Total</b>	<b>133*</b>	<b>100.0</b>	<b>228*</b>	<b>100.0</b>

\*variation in totals due to non-response

P Value < 0.01

Figure 1. Non-Family Influence in the choice of Medicine program

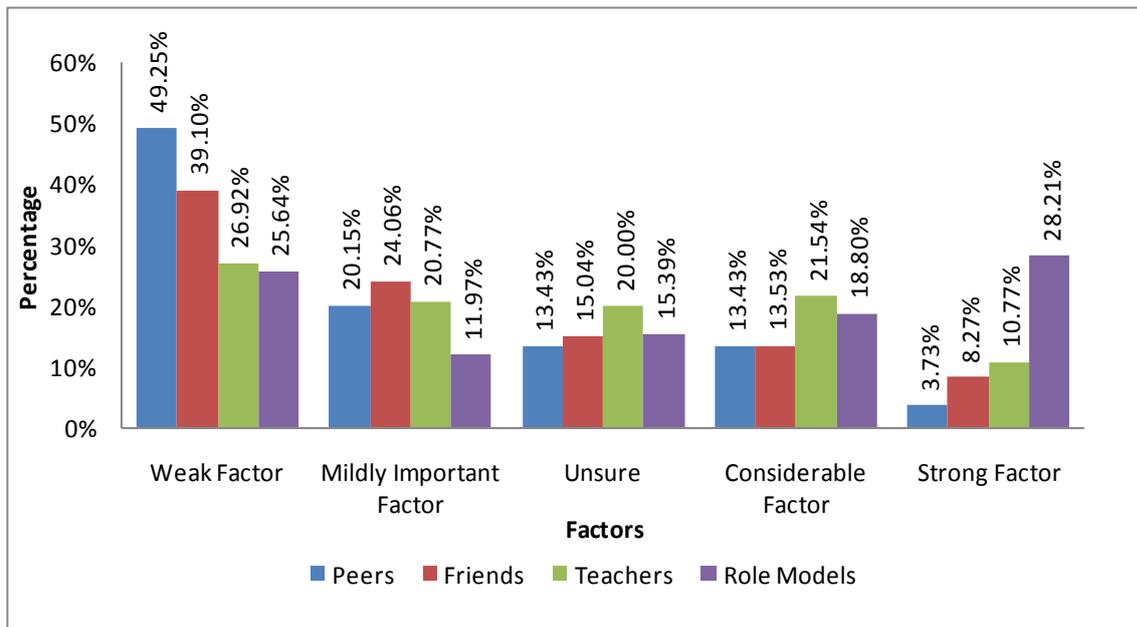


Figure 2. Family influence in Choice of Medicine Program

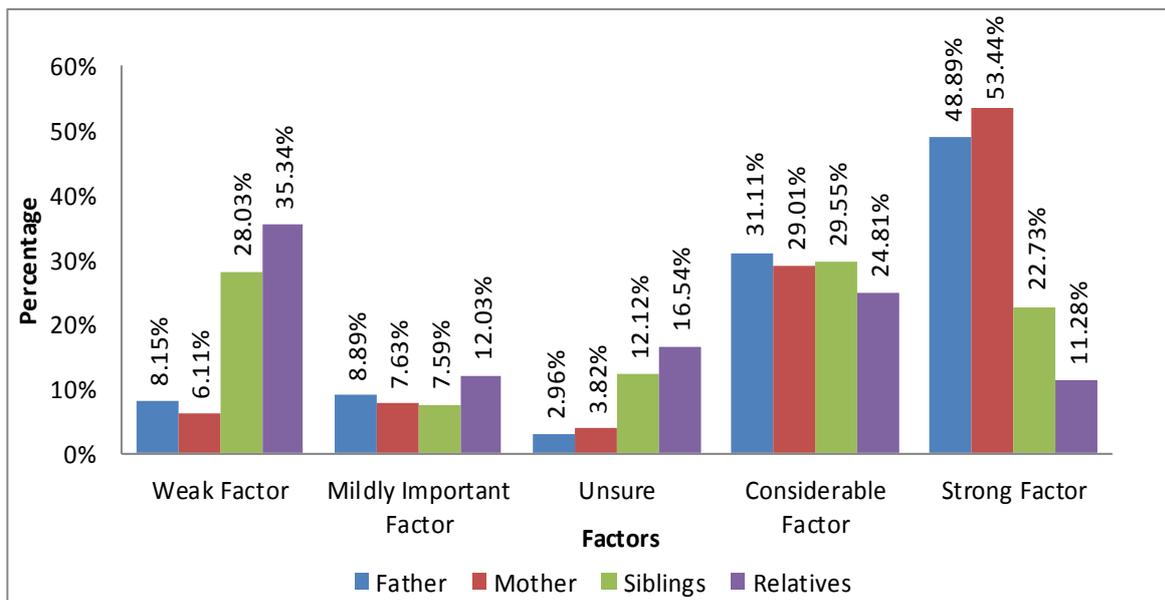


Figure 1 depicts non-family influences in the choice of a medical career. Role models had some influence whereas friends and peers had the least influence. Figure 2 demonstrates family influence, which shows a ‘considerable to strong’ influence of father and mother, and more the mother. Out of a total 133 medical students who responded to the questionnaire, 58 indicated

that they decided on their career in medicine together with their parents (43.6%) and 46 of them indicated that they chose their course by themselves or their parents were against their choice to enter medicine (34.6%).

Among the factors considered to have influence on career choice, 38.8% of the 129 respondents perceived family and social factors as having the

strongest influence, followed by interest (31%). Gender and logistics had the least influence.

Table 3 and 4 show that significant social factors (as determined by chi square test) influenced the choice of medicine as a career when compared to

the non-medical careers. After adjusting for other factors, “mothers” had a significantly strong influence (OR 2.8) on the choice of medical career and “friends” significantly weak influence (OR 0.4).

Table 3. Influence of significant social factors on the choice of medicine as a career in comparison to non-medical programs

Variables	Group	Choice of medicine as career				P
		Yes		No		
		n	%	n	%	
Friends	Yes	29	21.8	86	33.6	<0.05
	No	104	78.2	170	66.4	
Father	Yes	108	80.0	175	69.2	<0.05
	No	27	20.0	78	30.8	
Mother	Yes	108	82.4	157	64.1	<0.001
	No	23	17.6	88	35.9	
Siblings	Yes	69	52.3	92	38.3	<0.01
	No	63	47.7	148	61.7	

Table 4. Significant social factors in choosing Medicine as a career in comparison to non-medical programs

Variable	Adjusted	
	Odds Ratio	Confidence interval
Friends	0.42	0.25 – 0.70
Father	0.98	0.47 – 2.08
Mother	2.82	1.30 – 6.11
Siblings	1.45	0.90 – 2.36

## Discussion

The present report is aimed at identifying the social factors that influenced post-secondary career choice among students of the first three years of the undergraduate medical course in a medical university in Ajman, United Arab Emirates. The majority of participants’ fathers had a university education and the most common paternal occupation was in business. While the majority of the maternal educational status was at a professional level, the maternal occupation for the majority of students was unskilled, semi-skilled or skilled; this includes the occupation of ‘housewife’. Arthur observed in his study that “as the education level of the parent increases,

the students’ interest in a medical sciences career increases” (7). Many participants in our study perceived that the greatest influence was family and social factors. This is similar to the findings from Hong Kong where two thirds of participants reported a positive influence from parents on career choice, other factors being work experience, teachers and friends (7). The second most common influence on career choice in the present study was interest in the career. The non-family factors of teachers and role models were found to be insignificant. Bleeker and Jacobs found that maternal prediction of a child’s academic ability ultimately shaped the student’s career self-efficacy (6). However, Cannon identified the role of parents as a less

influential factor than career factors, self-interest, and logistical factors (5). Parents of medical students probably recognized their children's abilities at a younger age and guided them into academically suitable careers. Like the findings from Cannon in the United States (5), we also observed the mothers were more influential than fathers. But it is contrary to Taylor's report on parents' perception, where the majority did not report much influence on their child's career (10). Our study found that friends did not have much influence on the career choice in the field of medicine, whereas parents and especially mothers had significant influence; this is despite the majority of mothers working in occupations below their level of education and not in the field of medicine. Though the study used only medical students from one medical school they were of multinational origin and from various family backgrounds. It is encouraging to note that most participants decided on the course by themselves or along with parents, but were not forced by their parents.

### Conclusion

The results indicated that most medical students considered both parents' preferences to be either a strong or a considerable factor in their career choice. Friends had significantly weak influence on the choice of career whereas mothers had the strongest influence. The insignificance of teachers and role models as influential factors may speak to the dominance of familial over non-familial influences amongst a primarily expatriate population. It may be useful to include parents in career guidance program in the higher secondary schools in the United Arab Emirates.

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