



RESEARCH ARTICLE

FACTORS INFLUENCING CHOOSING MEDICAL SPECIALTIES AMONG FINAL YEAR MALE MEDICAL STUDENTS AT KAU, JEDDAH, SAUDI ARABIA. A CROSS SECTIONAL STUDY

Dr.Asim Tariq Sharif, Eyad Saleh S. Alahmadi, Marwan Mansour M. Abdulhaq,
Alwaleed Mahmoud H. Timraz, Khalid Esam A. Alshebl, Nawaf Meshal R. Alhassani
and Mohammed Saleh S. Aljuhani

1-Assistant Professor, Department of Medical Education, Consultant, Internal Medicine, King Abdulaziz University, Saudi Arabia.

2-MD, faculty of medicine, King Abdulaziz University, Saudi Arabia.

3-MD, faculty of medicine, King Abdulaziz University, Saudi Arabia.

4-MD, faculty of medicine, King Abdulaziz University, Saudi Arabia.

5-MD, faculty of medicine, King Abdulaziz University, Saudi Arabia.

6-MD, faculty of medicine, King Abdulaziz University, Saudi Arabia.

7-MD, faculty of medicine, King Abdulaziz University, Saudi Arabia.

Manuscript Info

Manuscript History

Received: 05 September 2022

Final Accepted: 09 November 2022

Published: December 2022

Abstract

Background: Choosing a medical specialty is one of the challenging aspects among medical students at their final academic year. This study aims to understand the factors influencing choosing medical specialties among medical students at King Abdulaziz University.

Methodology: An electronic questionnaire has been designed for data collection that involved 6th year medical students at faculty of medicine King Abdulaziz University. And chi-square test used to compare between different variables regarding the choice of medical fields.

Result: Of the 150 students approached, 45 (30%) decided to participate. Of those who participated, a total of 36 (80%) students made a decision regarding their choice of future medical specialty. Internal medicine (20%), psychiatry (8.9%), orthopedics (6.7%), and diagnostic radiology (6.7%) were the most desired specialties. Only 77.8% of those who selected a future specialty received advice regarding their choice. Deciding factors included a good lifestyle (22.2%), good treatment outcome (20%), a variety of subspecialties (15.6%).

Conclusion: Multiple factors have been considered, even non-financial aspects, that inform a student's decision when selecting their best fit for a future career. These aspects include lifestyle, better treatment outcomes, and family advice.

Copy Right, IJAR, 2022,. All rights reserved.

Corresponding Author:- Dr.Asim Tariq Sharif

Address :- Assistant Professor, Department of Medical Education, Consultant, Internal Medicine, King Abdulaziz University, Saudi Arabia

Introduction:-

One of the most important and challenging steps for medical students is choosing their desired specialty. During their final year and internship training, medical students begin to select their future career and perform their job using what they learned during their academic years.

There are some motivations and impacts that change a student's preference towards picking certain medical fields. These includes family desire, income, commute distance (especially those who live in villages and suburban regions where there are a significant shortage and limitations in the medical services).

In Saudi Arabia, The postgraduate students may choose to complete a residency program locally or abroad. Non-Saudis can also join the national program, although citizens are first in line for the local programs.

The medical field in Saudi Arabia is well-established and has undergone significant transformation to support the Saudi Vision 2030. Therefore the majority of students prefer to join the local residency programs. As such, we conducted this study to determine the factors that made the students decide their specialty.

Methodology:-

Data Collections Method: An electronic questionnaire was designed consisting of 16 questions, all in one section. The closed-ended questions involved agreement for participation in the study, decisions in choosing medical specialties, and the advice the students received. The remaining questions were open ended.

Study Design and Participants: The cross-sectional study was conducted in May 2022. The sample involved students from faculty of medicine at King Abdulaziz University during the 2021/2022 academic year. Only the final-year students were included. We had contact with 45 students out of 150 at KAU, all those who participated and were ensured about entire confidentiality of the gathered information. The proposal and the data collection was approved by the ethical committee at the KAU.

Statistical Analysis: The SPSS was used to enter and analyze the data. We used a chi-squared test in most of the variables in order to bring more clarifications of the results.

Result:-

Out of 45 male sixth-year medical students at KAU, future specialty choices and the influential factors that led to these choices were evaluated.

In tables below, sociodemographic characteristics of the study population are illustrated. The age of the participants ranged from 23 to 27 years, with mean of 23.98. 95.6% of students were Saudi. Most of our participants were unmarried (95.6%). A monthly family income of more than 11,000 riyal was reported by 62.2% participants. In terms of parents' education, 68.9% fathers and 67.6% mothers of our participants obtained a bachelor degree or higher educational degrees. In terms of academic performance, (23%) of the students reported a GPA of more than 4.5 (out of 5.0), while (37.2% reported a GPA of less than or equal 4.0. 17.8% of the students had not decided on a future specialty yet.

Descriptive Statistics

	N	Minimum	Maximum	Mean	Std. Deviation
Age	45	23	27	23.98	1.011
Valid N (listwise)	43				

Nationality

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Non-Saudi	2	4.4	4.4	4.4
	Saudi	43	95.6	95.6	100.0
	Total	45	100.0	100.0	

Marital_status:

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Married	2	4.4	4.4	4.4
	Single	43	95.6	95.6	100.0
	Total	45	100.0	100.0	

The_total_monthly_income_of_the_family

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	between 11,000and 20,000 riyals	14	31.1	31.1	31.1
	between 21,000 and 30,000 riyals	9	20.0	20.0	51.1
	between 5000and 10,000 riyals	2	4.4	4.4	55.6
	less than 5000 riyals	6	13.3	13.3	68.9
	more than 30,000 riyals	14	31.1	31.1	100.0
	Total	45	100.0	100.0	

The_level_of_education_of_the_father

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	bachelor	21	46.7	46.7	46.7
	diploma	6	13.3	13.3	60.0
	high school or less	8	17.8	17.8	77.8
	master	5	11.1	11.1	88.9
	phD	5	11.1	11.1	100.0
	Total	45	100.0	100.0	

The_level_of_education_of_the_mother

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	bachelor	24	53.3	53.3	53.3
	diploma	2	4.4	4.4	57.8
	high school or less	13	28.9	28.9	86.7
	master	5	11.1	11.1	97.8
	phD	1	2.2	2.2	100.0
	Total	45	100.0	100.0	

_GPA		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	3.50	3	6.7	7.0	7.0
	3.55	1	2.2	2.3	9.3
	3.60	2	4.4	4.7	14.0
	3.65	1	2.2	2.3	16.3
	3.73	1	2.2	2.3	18.6
	3.80	1	2.2	2.3	20.9
	3.90	1	2.2	2.3	23.3
	4.00	6	13.3	14.0	37.2
	4.07	1	2.2	2.3	39.5
	4.08	1	2.2	2.3	41.9
	4.10	4	8.9	9.3	51.2
	4.21	1	2.2	2.3	53.5
	4.26	1	2.2	2.3	55.8
	4.30	1	2.2	2.3	58.1
	4.33	1	2.2	2.3	60.5
	4.40	4	8.9	9.3	69.8
	4.50	3	6.7	7.0	76.7
	4.60	3	6.7	7.0	83.7
	4.61	1	2.2	2.3	86.0
	4.68	1	2.2	2.3	88.4
	4.69	1	2.2	2.3	90.7
	4.70	2	4.4	4.7	95.3
	4.80	2	4.4	4.7	100.0
	Total	43	95.6	100.0	
Missing	System	2	4.4		
Total		45	100.0		

Have_you_decided_your_future_speciality_yet ?

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	no	9	20.0	20.0	20.0
	yes	36	80.0	80.0	100.0
	Total	45	100.0	100.0	

The table below demonstrates the future specialty choices of our participants. The four most desired specialties are internal medicine, psychiatry, orthopedics, and diagnostic radiology (20%, 8.9%, 6.7, and 6.7% of students, respectively).

	Frequency	Percent	Valid Percent	Cumulative Percent
Valid	8	17.8	17.8	17.8
Dermatology	1	2.2	2.2	20.0
Diagnostic Radiology	3	6.7	6.7	26.7
Ear, Nose, Throat, Head and Neck Surgery	1	2.2	2.2	28.9
Emergency Medicine	2	4.4	4.4	33.3
family Medicine	1	2.2	2.2	35.6
Forensic Medicine	1	2.2	2.2	37.8
General Surgery	2	4.4	4.4	42.2
Internal Medicine	9	20.0	20.0	62.2
Neurology	1	2.2	2.2	64.4
Neurosurgery	1	2.2	2.2	66.7
Obstetrics and gynecology	1	2.2	2.2	68.9
Ophthalmology	2	4.4	4.4	73.3
Orthopedic Surgery	3	6.7	6.7	80.0
pathology	1	2.2	2.2	82.2
Pediatric surgery	1	2.2	2.2	84.4
Pediatrics	2	4.4	4.4	88.9
Psychiatry	4	8.9	8.9	97.8
Urology	1	2.2	2.2	100.0
Total	45	100.0	100.0	

The sources of advice to choose a future medical specialty among our participants are outlined in the table below. Among the students who have chosen their future specialty, 77.8% received advice regarding their specialty choice. The sources of advice varied: 28.9% students received advice from family, 24.4% from their friends, 22.2% from doctors, and only 2.2% from social media.

	Frequency	Percent	Valid Percent	Cumulative Percent
Valid	10	22.2	22.2	22.2
Doctors	10	22.2	22.2	44.4
Family	13	28.9	28.9	73.3
Friends	11	24.4	24.4	97.8
Social media	1	2.2	2.2	100.0
Total	45	100.0	100.0	

The reasons behind choosing a future specialty are shown in table below. The most frequently cited reason for choosing a future specialty was a good lifestyle (22.2%), good treatment outcomes (20%), a variety of subspecialties (15.6%).

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	influenced by monitor	1	2.2	2.2	2.2
	The challenging level of this specialty	6	13.3	13.3	17.8
	The enjoyment of this specialty during study	5	11.1	11.1	28.9
	The good lifestyle	10	22.2	22.2	51.1
	The good treatment outcome	9	20.0	20.0	71.1
	The income	2	4.4	4.4	75.6
	The lack of the direct interaction with patients	1	2.2	2.2	77.8
	The need for specialization	2	4.4	4.4	82.2
	The prestige	1	2.2	2.2	84.4
	The variety of subspecialty	7	15.6	15.6	100.0
	Total	45	100.0	100.0	

Discussion and Conclusions:

This study is based on specified questions aiming to know exactly what the factors are that affect a medical student's choice of medical specialty. We gained insights of a medical student's thought process while choosing their path. Our study is based on a single survey concerning only medical students during their sixth year at King Abdulaziz University. Many factors affect their decision and some of them are more common than others. We wanted to be very precise in our results, hence only choosing sixth-year students due to their understanding of the importance of such a choice and their readiness by being one step away from choosing their specialty.

Our results showed that a high percentage of students consider lifestyle and good treatment outcomes when determining their specialty. The most popular specialty is internal medicine. This is due to multiple factors and those factors such as their high exposure to this specialty during their medical program, a good lifestyle, good treatment outcomes, and the variety of the subspecialties. Surprisingly, we found out that the surgical specialties are least commonly selected by medical students prefer and we suspect it is because of the hard lifestyle, less exposure compared to internal medicine, and the difficulty-level of the specialty. Moreover, we found out that an important factor that influences a medical student's choice is the advice received from their family and friends, rather than the advice coming from doctors. We think that this should be addressed by highlighting the importance of mentoring in medical school, and by increasing the opportunities for taking electives. This would give students more exposure to the specialties they have interest in, and will assist them in making the decision of their future specialty with a clear vision.

In conclusion, many factors affect a student's choice of medical specialty, and the most important ones are a good lifestyle and good treatment outcomes. Students prefer the internal medicine specialties over the surgical ones due to their higher exposure during their medical program and the lower level of difficulty while studying the specialty. Family and friends play a major role affecting medical students' choices and judgements. Therefore, good mentoring and good clinical exposure allow the decision to be made with confidence and clarity.

Funding:

This research received no external funding.

Institutional Review Board Statement:

The study was approved by The Unit of biomedical ethics ,Research Ethics Committee (REC) NCBE Registration No: (HA-02-J-008) with (Reference No:205-22) at faculty of medicine,king abdulaziz university

Conflicts of Interest:

The authors declare no conflict of interest in this research.

References:

- 1- Gutiérrez-Cirlos C, Naveja JJ, García-Minjares M, Martínez-González A, Sánchez-Mendiola M. Specialty choice determinants among Mexican medical students: a cross-sectional study. BMC medical education. 2019 Dec;19(1):1-8.
- 2- Al-Fouzan R, Al-Ajlan S, Marwan Y, Al-Saleh M. Factors affecting future specialty choice among medical students in Kuwait. Medical education online. 2012 Jan 1;17(1):19587.
- 3- Correia Lima de Souza L, Mendonça VR, Garcia GB, Brandão EC, Barral-Netto M. Medical specialty choice and related factors of Brazilian medical students and recent doctors. PloS one. 2015 Jul 24;10(7):e0133585.
- 4- Ng-Sueng LF, Vargas-Matos I, Mayta-Tristán P, Pereyra-Elías R, Montenegro-Idrogo JJ, Inga- Berrospi F, Ancalli F, Bonilla-Escobar F, Diaz-Velez C, Gutierrez-Quezada E, Gomez-Alhach J. Gender associated with the intention to choose a medical specialty in medical students: a cross- sectional study in 11 countries in Latin America. PloS one. 2016 Aug 12;11(8):e0161000.
- 5- Al-Beitawi SN, Al-Shatanawi TN, Qudsieh SA, Marar EI, Al Zoubi MS, Al-Zubi M. 6th year medical -sectional study. Annals of Medicine and Surgery. 2021 Jun 1;66:102373.