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Influence of Factors on Career Intentions: A Cross-Sectional Study of Female Medical Students Pursuing Anesthesia Careers in Saudi Arabia

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Abstract **Background:** The decision to pursue a medical career is influenced by a multitude of factors, including gender, family background, and socioeconomic status. Despite the multifaceted role of anaesthesia in critical care and disaster response, physician anesthesiologists remain underrepresented in Saudi Arabia and other developing countries, posing challenges to healthcare systems. This study explores the factors influencing career intentions among female medical students in Saudi Arabia regarding pursuing a career in anaesthesia. **Aim:** This study aims to identify factors influencing the career choice of anesthesia among female undergraduates, exploring associations with other sociodemographic variables. **Methodology:** A cross sectional study was done by using comprehensive questionnaire-based approach employed to gather data on demographic profiles, experiences during anaesthesia rotations, postgraduate training preferences, and perceptions of the field. Logistic regression analysis was applied to investigate associations between demographic variables and attitudes towards anaesthesia as a career choice. **Results:** Varied age distribution (9.9%-54.5%), predominantly Saudi nationals (90.4%), and diverse parental occupations, mainly in healthcare, including medicine (6.8%-47.7%), were observed in the study. Regression analysis identifies non-Saudi nationality as associated with a positive attitude (Odds Ratio = 4.9247, p = 0.050), while increasing undergraduate years correlate with decreased positive attitudes. Factors linked to negative attitudes include older age (>27) (Coefficient = 1.2668, p = 0.248), and non-Saudi nationality with higher log odds (Odds Ratio = 5.0054, p = 0.130). Key influencers include financial considerations, perceptions of respect and patient care, mentorship, and misconceptions. Attitudes towards anaesthesia evolved with advancing education years. **Conclusion:** This study sheds light on the nuanced factors shaping career intentions within the anaesthesia field among female medical students in Saudi Arabia. By understanding these influences, healthcare institutions and policymakers can develop tailored strategies to attract and retain talent, addressing the underrepresentation of physician anesthesiologists and promoting anaesthesia as a rewarding career path. Our study emphasizes the pivotal role of cultural context, clinical experiences, and tailored support mechanisms in shaping the career intentions of Saudi Arabian female medical students towards anaesthesia.

Key Words anesthesia, Asia, decision, female, Saudi Arabia

1. Introduction

A career in medicine is distinctive because it is thought to be extremely virtuous and offers more opportunities to serve humanity than any other career [1]. The decision to pursue medicine as a career is influenced by a variety of circumstances, including the graduate's preferences before beginning medical school as well as any exposure during training in medical school [2]. These include gender and residency conditions, such as the availability of part-time work and parental leave, family background, socioeconomic status, prestige, and income of the parents, as well as their income and role models. They also include local market forces, committed relationships, employment opportunities, and controllable versus non-controllable lifestyles [3]–[5].

By asking students about their personal motivations for becoming a specialist, the final decision is the outcome of an integrated interplay between external and internal variables of the primary motive of medical students [6]. When the question of choosing an undergraduate medical course, e.g. MBBS, comes, a reflective investigation of doctors' moti-

vations revealed five primary factors: a strong interest in science, the desire to become a doctor, a desire for a fulfilling job, the influence of friends and family, and a desire to help others [2]. Potential motives can clash occasionally. Serving the public and doing scientific research are both admirable goals, but frequently, they cannot be accomplished at the same time, necessitating a choice as to which is more crucial for a certain doctor [3].

Medical careers are initially nonspecific, and after completing postgraduate study, the majority of doctors are specialized in a particular field of practice. The transition from the medical student, who can be thought of as a relatively undifferentiated, totipotent "stem doctor", potentially capable of entering any speciality, through to the final, fully-differentiated specialist, who is essentially limited to one specialized area of medical work, is relatively little understood especially among females.

Most low- and middle-income nations lack the number of specialty anaesthetists required to offer a high-quality, safe anaesthetic service [7]. Despite the multifaceted nature of anaesthesia, encompassing critical care, palliative care, pain management, and disaster response, physician anesthesiologists in Saudi Arabia, much like in numerous other developing nations, continue to experience notably lower levels of representation within the medical specialization(4) Officially, anesthesiologists must direct and supervise anaesthesia technicians at all times. The general situation in developing countries is that a vast majority of hospitals where technicians work don't actually have qualified anesthesiologists. Anesthesiologists are in short supply and unable to adequately manage all critical cases where they are present. Because of this, the majority of anaesthesia technicians frequently work alone, attending to any patients that require anaesthetic care [8].

Numerous studies conducted in Europe have attempted to pinpoint the causes of the anesthesiologists' shortage, particularly problems with human resources. There haven't been any formal studies done on the factors influencing poor anaesthesia recruitment as a career choice [9]. Even though very few of these studies were conducted in Saudi Arabia, our assessment of the literature revealed that they had been done in both the developed and developing worlds [10]. There have been numerous other studies released and covered by the media on the hot-button topics of gender equality, career choices, and work-life balance. Personal-professional balance issues have been the subject of several recent studies. These issues include career objectives, discriminatory impediments to desirable employment, and striking a balance between work and personal limits and satisfactions [11]–[15]. As a result, the goal of this study was to identify the variables that affect female undergraduates' decision to choose anaesthesia as a career option. The findings of this study can be utilized to investigate potential strategies for increasing anesthesiology recruitment, especially among female students. Hence this study was conducted to identify the factors that affect female undergraduates' decision to choose anesthesia as a career option and to find out the associations of other sociodemographic variables with the career choice.

2. Material & Methods

This observational cross sectional study was carried from April 2023 to June 2023 among all the female students studying in College of Medicine at Majmaah University. A complete enumeration sampling technique was applied to recruit the eligible students. Ethical clearance was obtained from the Deanship of Scientific Research with IRB no. MUREC-Mar.20/ COM-2O23/11-4.

A. Inclusion Criteria

1) All the female students studying in College of Medicine at Majmaah University
2) All those giving Consent to take part in the study

B. Exclusion Criteria

1) All the male students studying in College of Medicine at Majmaah University
2) All those not giving Consent to take part in the study.

After a thorough literature review, a semi-structured, self-validated questionnaire was formed. It has three broad sections, the first consisting of a few demographic questions, the Second section tries to explore the Student's Choice and Experience, and the third section/part consisting of 26 items, (each in 5-point Likert scale).

The questionnaire/tool employed in this study serves as a comprehensive instrument for understanding the factors influencing the career intentions and perceptions of female medical students regarding pursuing an Anesthesia career in Saudi Arabia. A pilot study was carried out and the Cronbach's alpha was found to be 0.76.

1) Part One - Sociodemographic Background:
   The initial section delves into the participants' sociodemographic information, capturing aspects such as age, gender, ethnicity, nationality (Saudi/Non-Saudi), academic year/class, and details about their parents' occupations and specialities, if applicable. This segment provides essential context to comprehend the diverse backgrounds that may influence career choices.
2) Part Two - Student's Choice and Experience:
   This section examines the students' anaesthetic rotation experiences and postgraduate training choices. During their rotations, students are asked how much time they spend with Saudi and non-Saudi anaesthetic consultants, providing information about their exposure and interactions. Additionally, the reasons underlying their preferences for postgraduate training specialties are explored. Participants are urged to discuss their choices and the sequence in which they came to them. In order to have a more thorough insight of the perspectives of the students, those who do not prioritise anaesthesia are asked to explain why.
3) Part Three - Student's Perception:

The perspectives of students towards the field of anaesthesia are explored in this section. It enables participants to describe the best and worst parts of their medical school anaesthetic rotation. Additionally, it looks into the timing of decision-making and the factors that led them to seek or forego postgraduate education. The top three explanations for those who did not choose anaesthetic as their first option were requested. Based on the replies, a score for positive perception (considered to be 60% positive if 6 or more out of 10 questions responded as strongly agree or somewhat agree) and a score for negative perception (considered to be 60% negative if 8 or more out of 13 questions responded as strongly agree or somewhat agree) were produced. Overall, this questionnaire/tool serves as a comprehensive framework for gathering data on various facets of career intentions, preferences, and perceptions related to pursuing an Anesthesia career among female medical students in Saudi Arabia. The structured approach facilitates a thorough understanding of the influencing factors and perceptions that shape their career decisions in this field. A prior clerkship experience, first preference speciality, when and where that preference was determined, factors affecting that preference, first preference speciality in an ideal context, and, once more, factors affecting that ideal preference all were questioned in the survey. The survey was given to medical students by means of Google Forms.

C. Data Analysis

The Google Forms automatically converted the data into Excel format, and that was used for entering into the SPSS. Then, the results were analyzed with SPSS V.22 using descriptive statistics to identify the characteristics of students and their factors affecting specialization choices. Significance was determined as $p < 0.05$. A logistic regression analysis was done to predict the choice and perception of Anaesthesia as a career among female students.

3. Results

The findings from the data table (Table 1) shed light on the influencing factors shaping the intentions of female medical students in Saudi Arabia toward pursuing a career in Anesthesia. Diverse age distribution ranges between 9.9% and 54.5%, while Saudi nationals represent 90.4%. Year-wise representation spans 7.1% to 43.2%. Parental occupation highlights healthcare workers (6.8% to 47.7%), particularly in medicine (21.1% to 46.3%). Anesthesia rotations' exposure varies, reflecting interaction with consultants. Notably, 24.9% decide against postgraduate training, 54.8% express intent and 20.3% remain undecided. These insights collectively provide a nuanced understanding of the multifaceted dynamics that contribute to the career intentions of female medical students in the Anesthesia field in Saudi Arabia.

The combined results extrapolated from Tables 2, 3, and 4 offer important insights into the factors influencing Saudi Arabian female medical students' ambitions towards a career in anaesthesia. Table 2 shows that financial factors have a significant influence on professional choices, with 58.5% strongly agreeing that consultant wages have an impact on their employment choice. The availability of full-time or part-time jobs in the private sector also influences people's decision-making, according to 37.9% of respondents who strongly agree. Notably, practical issues also come into play, as shown by 54.2% strongly agreeing that their choice of postgraduate residency can be influenced by the expense of commuting between their place of residence and the hospital on academic days. An intriguing variety of favourable opinions towards a career in anaesthesia are shown in Table 3. With 40.7% of respondents strongly believing that anesthesiology is a respected field, the specialization has respect. Additionally, some parts of the profession appear to strike a particularly deep chord with responders. For instance, 51.1% of respondents said they get satisfaction from caring for severely ill patients, while 50.6% strongly agree that they love doing invasive treatments. Additionally, 39.8% of respondents said that anesthesiologists they have met have motivated them, which emphasizes the importance of mentorship and role models in influencing career aspirations. Table 4 explores erroneous beliefs and misconceptions in contrast. There may be a misunderstanding of the responsibilities of various healthcare providers because a sizeable portion 46.0% strongly feels that anaesthesia technicians can perform all anaesthesia treatments for patients in Saudi Arabia. The study's finding that 43.8% of respondents admit they don't fully grasp anesthesiology suggests the need for better training in the field. Concerns regarding patient safety and anesthesiologists' role also surface since 49.2% of respondents strongly agree that too many patients die from anaesthesia, and 37.9% think they have little to no impact on patient outcomes.

The findings of the regression analysis (Table 5) shed light on the factors impacting Positive attitudes towards Anesthesia as a career among female students. Age-related changes of positive attitude were not statistically significant for those between the ages of 23 and 27 (odds ratio = 0.6066, $p = 0.243$) or for those older than 27 (odds ratio = 2.2882, $p = 0.345$) as compared to the reference group (18 to 22 years).

Being a non-Saudi relative to a Saudi raised the odds of a positive attitude (Odds Ratio = 4.9247, $p = 0.050$), indicating that nationality played an impact. The regression considers different undergraduate years compared to the 1st year. The coefficients suggest varying effects on the log odds of a positive attitude. For example, individuals in the 2nd year have higher odds, while those in the 4th and 5th years have substantially lower odds of a positive attitude. In other words, it can be said that as the year of medical education increases, the odds of having a positive approach towards Anesthesia as a career decreases.

Two age groups, 23-27 and >27, are compared to the reference group of 18-22 years. The coefficient for the >27 age group is 1.2668, implying individuals older than 27 have higher log odds of a negative attitude, though this difference is not statistically significant ($p = 0.248$). Coming to nation-

Sociodemographic variables		Frequency	Percent	95% CI
Age	18-22	193	54.5%	(49.0%, 60.0%)
	23-27	126	35.6%	(29.7%, 41.4%)
	>27	35	9.9%	(6.5%, 13.4%)
Nationality	Non-Saudi	34	9.6%	(6.6%, 12.3%)
	Saudi	320	90.4%	(85.8%, 94.0%)
Undergraduate year (N=354)	1st	153	43.2%	(37.2%, 49.4%)
	2nd	64	18.1%	(13.0%, 23.7%)
	3rd	41	11.6%	(7.4%, 18.3%)
	4th	30	8.5%	(5.0%, 15.3%)
	5th	25	7.1%	(3.6%, 12.4%)
	Intern	41	11.6%	(7.3%, 18.4%)
Occupation of father (N=354)	Clerical Job	24	6.8%	(3.9%, 11.8%)
	Educational Job	67	18.9%	(14.5%, 26.0%)
	Health care worker	169	47.7%	(40.9%, 54.6%)
	Business	40	11.3%	(7.0%, 19.6%)
	Homemaker	10	2.8%	(1.5%, 5.0%)
	Military	15	4.2%	(2.5%, 6.5%)
	Retired	15	4.2%	(2.5%, 6.5%)
	Unemployed	11	3.1%	(1.6%, 4.9%)
	Deceased	3	0.84%	(0.3%, 2.5%)
If Father is a Doctor, which speciality (N=354)	Anaesthesia	5	1.4%	(0.5%, 3.1%)
	ENT	17	4.8%	(2.8%, 7.2%)
	Family Medicine	9	2.5%	(1.1%, 4.2%)
	Lab Medicine	9	2.5%	(1.1%, 4.2%)
	Medicine	163	46.0%	(39.1%, 52.9%)
	Not a doctor	75	21.1%	(15.5%, 27.0%)
	Obs and Gynaecology	6	1.7%	(0.7%, 4.0%)
	Ophthalmology	19	5.4%	(3.1%, 8.1%)
	Paediatrics	7	2.0%	(0.8%, 4.5%)
	Surgery	44	12.4%	(9.0%, 17.8%)
Occupation of Mother (N=354)	Clerical Job	20	5.6%	(3.6%, 9.0%)
	Education	74	20.9%	(15.0%, 28.0%)
	Health care worker	157	44.4%	(36.6%, 52.2%)
	Business	23	6.5%	(4.0%, 11.1%)
	Homemaker	32	9.0%	(6.2%, 12.9%)
	Military	3	0.8%	(0.2%, 2.5%)
	Retired	23	6.5%	(4.0%, 11.1%)
	Unemployed	22	6.2%	(3.6%, 10.6%)
If Mother is a Doctor, which speciality (N=354)	Anaesthesia	10	2.8%	(1.3%, 4.7%)
	ENT	16	4.5%	(2.6%, 7.4%)
	Family Medicine	9	2.5%	(1.1%, 4.2%)
	Lab Medicine	7	2.0%	(0.9%, 3.8%)
	Medicine	164	46.3%	(39.6%, 53.0%)
	Not a doctor	75	21.1%	(15.5%, 27.0%)
	Obs and Gynaecology	7	2.0%	(0.9%, 3.8%)
	Ophthalmology	26	7.3%	(5.0%, 10.7%)
	Paediatrics	6	1.7%	(0.8%, 4.5%)
	Surgery	34	9.6%	(6.5%, 12.5%)
During anaesthesia rotation in medical school, did you spend a significant amount of time with? (N=354)	No Anesthesia posting yet	161	45.4%	(40.7%, 51.3%)
	Spent enough time with a Saudi consultant	77	21.8%	(16.7%, 28.2%)
	Spent enough time with a non-Saudi consultant	33	9.3%	(6.0%, 15.1%)
	Didn't spend enough time with the Saudi consultant	68	19.2%	(14.3%, 24.3%)
	Didn't spend enough time with a non-Saudi consultant	15	4.2%	(2.4%, 7.1%)
Decision about postgraduate training (N=354)	Decided NOT to take up postgraduate training	88	24.9%	(19.8%, 30.1%)
	Decided to take up postgraduate training	194	54.8%	(48.3%, 61.6%)
	Undecided yet	72	20.3%	(15.6%, 29.2%)

Table 1: Sociodemographic and other characteristics of the participants (N=354)

	Strongly Agree	Somewhat agree	Somewhat Disagree	Strongly Disagree	Neutral
The money I will make as a consultant affects my career choice	207(58.5)	127(35.9)	11(3.1)	3(0.8)	6(1.7)
The opportunity to have a full-time/part-time job in the private sector affects my career choice	134(37.9)	203(57.3)	7(2.0)	4(1.1)	6(1.7)
The cost of transportation between my hostel/residence to the hospital for academic days affects the postgraduate residency I choose	192(54.2)	134(37.9)	14(4.0)	4(1.1)	10(2.8)

Table 2: Factors affecting the choice of Anesthesia as a career

	Strongly Agree	Somewhat agree	Somewhat Disagree	Strongly Disagree	Neutral
Anesthesiology is a respected specialty	144 (40.7)	189 (53.4)	12 (3.4)	4 (1.1)	5 (1.4)
Anesthesia residents have enough time to read and study	175 (49.4)	145(41.0)	13(3.7)	2(.6)	19(5.4)
Anesthesiologists in Saudi Arabia enjoy their work	136(38.4)	185(52.3)	12(3.4)	2(.6)	19(5.4)
I enjoy performing invasive procedures	179(50.6)	148(41.8)	13(3.7)	5(1.4)	9(2.5)
I am inspired by an anesthesiologist I have	141(39.8)	177(50.0)	13(3.7)	4(1.1)	19(5.4)
I like taking care of critically ill patients	181(51.1)	137(38.7)	14(4.0)	9(2.5)	13(3.7)
I enjoy taking care of emergency patients	145(41.0)	175 (49.4)	16(4.5)	6(1.7)	12(3.4)
I enjoy the complexity of human physiology and pharmacology	178(50.3)	143(40.4)	14(4.0)	7(2.0)	12(3.4)
I enjoy spending most of my working day in the operating room	143(40.4)	177(50.0)	10(2.8)	9(2.5)	15(4.2)
I enjoy spending most of my working day in the intensive care unit	178(50.3)	141(39.8)	11(3.1)	12(3.4)	12(3.4)

Table 3: Responses to Positive questions regarding Anesthesia as a career (N=354)

	Strongly Agree	Somewhat agree	Somewhat Disagree	Strongly Disagree	Neutral
Anaesthesia technicians can provide all of the anaesthesia for patients in Saudi Arabia	163 (46.0)	145(41.0)	16(4.5)	18 (5.1)	12(3.4)
I do not know enough about anesthesiology to choose it as my career	155 (43.8)	172(48.6)	10(2.8)	6(1.7)	11(3.1)
Anesthesiologists are not needed in Saudi Arabia	139(39.3)	165(46.6)	10(2.8)	26(7.3)	14(4.0)
Too many patients die because of anaesthesia	174(49.2)	140(39.5)	19(5.4)	7(2.0)	14(4.0)
Anesthesia is too difficult to study	140(39.5)	174(49.2)	22(6.2)	4(1.1)	14(4.0)
Compared with other doctors, anesthesiologists see too many patients die	174(49.2)	144 (40.7)	17(4.8)	6(1.7)	13(3.7)
Anesthesiologists do not improve the outcome of their patients	134(37.9)	175 (49.4)	10(2.8)	20(5.6)	15(4.2)
The overnight duties of anaesthesia for female residents are too difficult	135(38.1)	189(53.4)	10(2.8)	6(1.7)	14(4.0)
Anesthesia consultants do not earn enough salary	169(47.7)	146(41.2)	15(4.2)	4(1.1)	20(5.6)
Anaesthesia consultants spend too much time at the hospital. Being a female, it is difficult	127(35.9)	187(52.8)	13(3.7)	11(3.1)	16(4.5)
Anaesthesia residents spend too much time at the hospital being female; it is difficult	179(50.6)	135(38.1)	16(4.5)	9(2.5)	15(4.2)
I do not understand the difference between an anesthesiologist and an anesthesia technician	129(36.4)	187(52.8)	18 (5.1)	10(2.8)	10(2.8)
Anesthesia residents do not have enough supervision by consultants/Senior Faculty members	177(50.0)	136(38.4)	16(4.5)	7(2.0)	18 (5.1)

Table 4: Responses to Negative questions regarding Anesthesia as a career (N=354)

						95% Confidence Interval	
Predictor	Estimate	SE	Z	p	Odds ratio	Lower	Upper
Intercept	3.431	0.473	7.252	< .001	30.8941	12.22444	78.077
23-27 – 18-22	-0.500	0.428	-1.169	0.243	0.6066	0.26231	1.403
>27 – 18-22	0.828	0.877	0.944	0.345	2.2882	0.41029	12.761
Nationality:							
Non-Saudi – Saudi	1.594	0.815	1.956	*0.050	4.9247	0.99708	24.324
Undergraduate year:							
2nd – 1st	0.853	1.120	0.762	0.446	2.3476	0.26135	21.088
3rd – 1st	-1.108	0.708	-1.565	0.118	0.3302	0.08239	1.323
4th – 1st	-2.098	0.674	-3.112	*0.002	0.1227	0.03273	0.460
5th – 1st	-3.386	0.671	-5.046	* < .001	0.0338	0.00909	0.126
Intern – 1st	-1.909	0.622	-3.067	*0.002	0.1482	0.04376	0.502
Note. Estimates represent the log odds of "Positive Attitude = Yes" vs. "Positive Attitude = No", "* denoted p value less than 0.05 is considered statistically significant"							

Table 5: Model Coefficients -Positive Attitude towards Anaesthesia

ality, The non-Saudi individuals have an odds ratio of 5.0054, indicating higher log odds of a negative attitude towards anaesthesia compared to Saudis. However, this difference is not statistically significant (p = 0.130).

Considering Undergraduate Years of education, the coefficients suggest varying effects on the log odds of a negative attitude. For example, students in the 3rd, 5th, and intern years have substantially lower odds, while the 4th year shows a slight decrease in odds. In summary, as the students advance in their years of graduation, their negative attitude towards anaesthesia decreases.

Table 6) presents the outcomes of a logistic regression analysis conducted to investigate the factors associated with a negative attitude towards anaesthesia.

4. Discussion

Our study on career intentions of female medical students in Saudi Arabia regarding anesthesia reveals significant insights. Most of the participants were from the age group of 18-22 years and majority were Saudi nationals. Almost >43% of the participants were undergraduates and around 47% of the participant's parents were health professionals and out of those maximum were medicine specialists.

Majority of the students said that they have decided about taking a post graduate training.Financial considerations emerge as significant, with a majority acknowledging the impact of consultant wages and job availability in the private sector on their career choices. Positive perceptions towards anaesthesia, including its perceived respectability and the satisfaction derived from patient care, are evident. However, misconceptions regarding the roles of healthcare providers and concerns about patient safety highlight areas for improvement in education and training. Regression analysis further elucidates these dynamics, revealing the influence of age, nationality, and stage of undergraduate education on attitudes towards anaesthesia careers.

A study by Khan FA focused on clinical clerkship's impact revealed that before clerkship, only 8% of students considered anaesthesia as their top career choice, but post-clerkship, this increased to 24%. Furthermore, 57 participants experienced a perceptual shift towards anaesthesia(5). Our study also tries to explore the years of medical schooling and positive perception towards anaesthesia and finds that more years of medical schooling increases the positive perception significantly. A comparison with the study conducted by Akinyemi OO et al. offers valuable insights into the factors impacting career intentions within the field of anaesthesia [16]. While the methodologies and contexts differ between the two studies, certain commonalities emerge. Akinyemi's study focused on the impact of clinical clerkship on students' attitudes towards anaesthesia. It revealed a perceptual shift towards the speciality after the clerkship experience, with increased consideration of anaesthesia as a career choice [16]. This resonates with our study, where Saudi Arabian female medical students expressed varied intentions towards pursuing an anaesthesia career.

In our study, demographic factors such as age, nationality, and undergraduate years played a role in shaping students' attitudes. Financial considerations, perceptions of respect and patient care, and mentorship emerged as influential factors. Similarly, Akinyemi's study underscored perceptions of interest and importance as pivotal in determining students' career aspirations [16].

In a study by Madu et al, the major specialty choices among medical students were Paedia, Medicine, Obstetrics & Gynaecology and Public Health [17]. This was similar to our study where the top choices were Internal medicine, Surgery and Paediatrics.

In comparing our study's results with Nwasor EA's study, certain parallels and distinctions emerge. While Nwasor EA's research explores general medical students' willingness to specialize, our study specifically investigates the career intentions of Saudi Arabian female medical students in the anaesthesia field [18]. Both studies underscore the complexity of factors shaping career decisions, with Nwasor EA's findings highlighting reasons for interest or lack of interest in anaesthesia among a diverse group and our study revealing financial considerations, perceptions of respect and patient care, mentorship, and misconceptions as key influencers for Saudi Arabian female students [18]. These comparisons deepen our understanding of the multifaceted dynamics guiding career intentions, emphasizing the importance of contextual and

95% Confidence Interval							
Predictor	Estimate	SE	Z	p	Odds ratio	Lower	Upper
Intercept	3.8179	0.591	6.463	* < .001	45.5078	14.2973	144.850
Age:							
23-27 – 18-22	0.0540	0.450	0.120	0.905	1.0555	0.4365	2.552
>27 – 18-22	1.2668	1.097	1.155	0.248	3.5495	0.4138	30.448
Nationality:							
Non-Saudi – Saudi	1.6105	1.064	1.514	0.130	5.0054	0.6225	40.251
Undergraduate year:							
2nd – 1st	-0.5990	0.942	-0.636	0.525	0.5494	0.0867	3.481
3rd – 1st	-2.2387	0.743	-3.013	*0.003	0.1066	0.0248	0.457
4th – 1st	-1.5233	0.956	-1.593	0.111	0.2180	0.0335	1.421
Intercept	3.431	0.473	7.252	< .001	30.8941	12.22444	78.077
Intern – 1st	-2.7692	0.715	-3.873	* < .001	0.0627	0.0154	0.255
Note. Estimates represent the log odds of "Negative Attitude = No" vs. "Negative Attitude = Yes", "* denoted p value less than 0.05 is considered statistically significant"							

Table 6: Model Coefficients -Negative Attitude towards Anaesthesia

demographic factors in shaping individual aspirations.

Comparing the findings from the study conducted by AlKhilaiwi RM with the results of our study, certain similarities and disparities become apparent. While both studies delve into factors influencing career decisions, AlKhilaiwi's study examines a broader range of specialities and resonates with our work in certain aspects. Similar to our study's exploration of influential factors such as financial considerations, perceptions of prestige, and lifestyle, AlKhilaiwi's findings indicate that controllable lifestyle, doctor-patient relationships, and income significantly impact residency program choices among participants. Additionally, their study highlights that even though respondents perceived anesthesiology to offer high salaries, this factor did not strongly influence their choice of residency programs, paralleling our findings on the complex interplay of factors impacting career intentions [19].

According to G Turner et al Doctors' views of working hours, working conditions, and opportunities for advancement and career advancement all had a favourable impact on their decision to pursue a career in anaesthesia, in addition to their enthusiasm for the field [20]. The findings were similar to our study.

5. Limitations

Limitations of the study may include potential response bias, as self-reported data can be influenced by subjective perceptions. The study's generalization may also be limited to the specific demographic of female medical students at Majmaah University. Additionally, the reliance on a cross-sectional design may restrict the establishment of causal relationships. The survey's mode of administration through Google Forms may introduce a digital divide, impacting the inclusion of participants less familiar with online platforms. Lastly, the Liker scale used in the questionnaire may have limitations in capturing complex responses.

6. Conclusion

In conclusion, our study illuminates the determinants shaping Saudi Arabian female medical students' anesthesia career intentions, resonating with prior research on clinical clerkship's impact and years of medical schooling. A comparative analysis with other studies reveals shared themes, including the influence of perceptions, financial aspects, and mentor ship. The study's context-specific nature underscores cultural nuances and gender dynamics in career intentions. These findings collectively emphasize the complex nature of career choices, calling for tailored strategies to support and encourage Saudi Arabian female medical students to pursue anesthesia careers.

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Conflict of interest

The author declares no conflict of interests. Author read and approved final version of the paper.

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