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ORIGINAL ARTICLE

Decision to pursue a profession in obstetrics and gynaecology: a career choice and practice challenges

OB/GYN career decisions & challenges

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ABSTRACT

Objective. This study aimed to investigate the factors influencing undergraduate medical students' decisions to pursue or reject ObGyn as a career, focusing on personality traits, educational environment, and gender disparities.

Materials and Methods. A prospective, cross-sectional study was conducted among fourth, fifth-, and sixth-year medical students and interns at Batterjee Medical College, Jeddah, Saudi Arabia, from May to July 2023. A structured, validated questionnaire assessed

specialty preferences, personality traits (Kamel's OCEAN Test), educational environment (DREEM), and clinical placement (MCPI). Statistical analysis included Chi-square and t-tests, with $p < 0.05$ considered significant.

Results. ObGyn was selected by 44 females (38.9%) and only 4 males (7.5%) ($p = 0.00023$). Key attractors for females included private sector opportunities (100%), emotional satisfaction (74.3%), and female-oriented environments (74.3%). Males were drawn by a limited syllabus (75.5%) and practical surgical exposure (47.2%) but deterred by gender discrimination (92.5%) and patient perception (92.5%). Personality analysis revealed females had significantly higher mean scores in conscientiousness (32.6 vs. 21.0), extroversion (29.0 vs. 18.3), and agreeableness (29.2 vs. 18.1) ($p < 0.0001$). Educational environment scores (DREEM) were higher for females in learning (85.4% vs. 79.2%), academic self-perception (90.6% vs. 87.5%), and social perception (85.7% vs. 71.4%) (all $p < 0.05$).

Conclusions. Obstetrics and Gynaecology was predominantly selected by female students due to private sector opportunities, emotional satisfaction, and supportive learning environments. Male students were largely discouraged by gender discrimination and patient perceptions despite valuing surgical exposure. Addressing these gender-based barriers is essential to encourage broader participation and achieve a more balanced ObGyn workforce.

Key words

Obstetrics; gynaecology; medical speciality; students; assessment.

Introduction

The decision-making process underlying the selection of a medical specialty is a complex phenomenon that has gathered attention through numerous global studies to identify predictive factors influencing medical students' career choices (1). While extensive research has been conducted worldwide, the specific process of medical specialty selection among students in Arabic countries remains an area that requires further exploration. In particular, research from Saudi Arabia is relatively limited despite its rapidly expanding healthcare system, diverse medical education structure, and unique cultural dynamics that may shape students' specialty preferences differently from those in Western contexts.

In Saudi Arabia, the internship training year constitutes a crucial aspect of undergraduate medical education. This 12-month program, mandatory for all medical graduates, involves core and elective rotations, with two months dedicated to internal medicine, obstetrics and gynaecology, general surgery, and paediatrics (2). Following this, one-month emergency medicine and family medicine rotations are undertaken, with the remaining two months allocated to elective rotations in a chosen specialty. The training occurs in accredited hospitals, emphasising supervised clinical practice to enhance interns' skills and knowledge (3).

Obstetrics and Gynaecology (ObGyn), a distinctive branch of female reproductive health, is among the primary medical specialties. It encompasses both medical and surgical aspects, addressing issues of the female genital tract and reproductive system, including care for pregnant women and non-pregnant females from puberty to menopause. Despite being a challenging yet rewarding field, ObGyn faces a recruitment challenge, evident in decreasing interest among medical graduates (4, 5). A comprehensive survey conducted in London, UK, in 2006, involving 24,623 young medical graduates between 1974 and 2002, discovered

a significant decrease in ObGyn selection. This became a major worry for medical educators, health investors, and legislators to maximise demand for this specialty (6).

Notably, a decline in ObGyn's interest is not limited to Saudi Arabia. Still, it is a global concern, evident in studies conducted in the United Kingdom, the United States, Germany, Botswana, Nigeria, Jordan, Egypt, Sudan, and Saudi Arabia. This trend raises concerns about the potential impact on healthcare service delivery, with an increasing gap between the demand for ObGyn specialists and the number of practitioners (7-10) (11).

Numerous surveys highlight medical students' perspectives on ObGyn as a career choice, pointing to factors influencing their decisions. Excitement, reward, and integrating surgery with medicine are positive aspects, while concerns about medical lawsuits, a demanding lifestyle, and on-call duties deter some students (4). The stress, lack of support, paperwork burden, liabilities, and fear of litigation contribute to high attrition rates among those initially opting for ObGyn in the USA, UK, and Australia (5).

Integrating practical training into medical curricula, especially in clinical specialties like ObGyn, is crucial for students' success. However, discomfort associated with certain clinical procedures, such as Pap smears and digital pelvic examinations, raises gender disparities and affects training opportunities for male medical students (12, 13). This issue is particularly pronounced in conservative societies such as Saudi Arabia, where cultural and religious norms strongly influence patient preferences, often limiting male students' clinical exposure and shaping gendered patterns of career choice (14, 15).

Personality traits have been suggested as potential determinants in medical specialty selection. The "Big Five" personality model, comprising Openness, Conscientiousness, Extroversion, Agreeableness, and Neuroticism, has been explored to understand how specific traits align with medical specialties (16). Notably, neuroticism positively influences

risk perception and clinical skills acquisition, suggesting its role in shaping career choices (17).

Considering the significant impact of the educational environment on students' attitudes and career choices, understanding its influence is crucial. Both university and clinical placements play vital roles in shaping students' academic learning, progress, and overall well-being, affecting their attitudes toward various medical specialties and influencing career decisions (18, 19).

Against this background, this study contributes new insights by focusing on Saudi medical students, with special attention to gender differences in the perception of and decision to pursue ObGyn. By examining the interplay between personality traits, educational experiences, and cultural influences, the study highlights factors that are not only globally relevant but also uniquely shaped by the Saudi context.

This study aims to discover significant determinants and create a list of desired medical specializations by thoroughly examining the decision-making process in choosing a specialty among undergraduates. It explores the connection between personality types and specialty choices, examines how male and female students view obstetrics and gynaecology and identifies factors influencing the choice of specialization. The study also examines how the educational setting affects students' performance and specialized choices.

Materials And Methods

Study Design and Setting

This prospective, cross-sectional, observational study was done online as a structured self-administered questionnaire for undergraduate medical students in their fourth and fifth years and medical interns at the Batterjee Medical College (BMC) in Jeddah, Saudi Arabia. The study was extended for three months, from May 1st to July 31st, 2023.

Criteria for Selection and Exclusion

The selection criteria include all undergraduate medical students (males and females) of the clinical years of the General Medicine Program, the 4th and 5th medical years, as well as the 6th year (medical interns) of the Batterjee Medical College of any nationality (Saudi and non-Saudi), for the academic year 2022-2023. The exclusion criteria include all undergraduate medical students (males and females) of the pre-clinical years of the General Medicine Programme, the 1st, 2nd, and 3rd medical years, and the postgraduate doctors (20).

Sample Size and Study Tools

The minimum sample size required for a valid study is 131 students, calculated online at www.calculator.net, considering the total population size is 197 students and a degree of confidence of 95% with an estimated prevalence of 50% and significance of 5%.

A validated questionnaire was used for data collection, covering sociodemographic data, medical specialization options, personality traits, preferences for obstetrics and gynaecology, educational environment assessment, and clinical environment assessment. The questionnaire was reliable and collected from individuals who provided informed consent. The questionnaire incorporated “Kamel’s” Arabic versions of three widely recognized scales: (i) the OCEAN test (based on the Big Five personality model), (ii) the Dundee Ready Educational Environment Measure (DREEM), and (iii) the Manchester Clinical Placement Index (MCPI). These adapted versions had previously undergone content validation by experts in medical education in Saudi Arabia and demonstrated acceptable reliability (Cronbach’s alpha > 0.70 in pilot testing). Informed consent was obtained from all participants prior to data collection.

Data Analysis

Data entry and cleaning were performed using Microsoft Excel 2016; however, all statistical analyses were conducted exclusively with IBM SPSS Statistics version 26.0 (IBM, Chicago, IL, USA). Descriptive statistics were presented as numbers, percentages, means, and standard deviations (SD). The following tests were applied: Pearson's Chi-square test and Fisher's exact test for categorical variables, and Student's t-test for continuous variables. A p-value of <0.05 was considered statistically significant.

Results

Demographics

A total of 166 students from the 4th, 5th, and 6th clinical years at Batterjee Medical College participated in the study (53 males, 113 females). Participation rates were comparable across years, and there was a higher proportion of females in all cohorts. **Table 1** summarizes the sociodemographic characteristics. Significant gender differences were found in religion (p = 0.038) and annual family income (p = 0.0003), while other factors showed no statistical difference.

Place Table 1 here

Figure 1 represents the parents' educational levels of those students who participated in this study. Speciality Choices of Participating Students.

Place Figure 1 Here

Specialty Choices

Table 2 presents students' top three specialty preferences. Gender-based differences were significant in seven specialties: emergency medicine, general surgery, internal medicine, neurosurgery, obstetrics and gynaecology (ObGyn), paediatrics, and plastic surgery. For

example, females preferred internal medicine, paediatrics, and ObGyn, whereas males leaned toward general surgery, neurosurgery, and plastic surgery.

Place table 2 here

Personality Traits

Using Kamel's OCEAN Test **(Table 3),** females scored significantly higher in openness, conscientiousness, extroversion, and agreeableness (all $p < 0.0001$), while males had higher neuroticism ($p < 0.0001$).

Place table 3 here

Table 4 further shows that medical specialties associated with females (internal medicine, paediatrics, ObGyn) corresponded with higher conscientiousness, agreeableness, and extroversion, while surgical specialties (general surgery, neurosurgery, plastic surgery) aligned more with traits found in males, such as lower openness and higher neuroticism.

Place table 4 here

Figure 2 represents that emergency medicine was characterised by low openness to experience, normal conscientiousness, extroversion, agreeableness, and neuroticism.

Place Figure 2 Here

Determinants of Specialty Choice

Table 5 outlines the determinants influencing specialty selection. Working hours, lifestyle, and job stress were universally important across genders. However, males emphasized prestige ($p = 0.0020$) and ease of decision-making ($p = 0.0058$), while females prioritized residency location ($p < 0.00001$), communication with patients ($p < 0.00001$), and job flexibility ($p < 0.00001$). These findings highlight gender-based deterrents and motivators in career choice.

Place table 5 here

Table 6 shows that female students were significantly more likely to finalize their specialty choice during the 5th (48.4%) and 6th years (40.5%) compared to the 4th year (30.0%), while males showed no clear trend across grades ($p = 0.00023$). This indicates that female students tend to solidify decisions later, especially during internship.

Place Table 6 here

ObGyn as a Specialty Choice

Only 4 males (7.5%) selected ObGyn compared to 44 females (38.9%), a highly significant difference ($p = 0.00023$). **Figure 3** illustrates the year-wise distribution of ObGyn choices.

Place Figure 3 Here

Attractors to ObGyn

Table 7 demonstrates clear gender contrasts in motivating factors. For males, key attractors were the limited syllabus (75.5%), mostly healthy patients (75.5%), direct patient contact (66.0%), and surgical exposure (47.2%). For females, the strongest attractors were private sector opportunities (100%), motivation to help/emotional satisfaction (74.3%), and female-oriented practice with supportive colleagues (74.3%)..

Place table 7 Here

Table 8 highlights striking gender-based deterrents. Male students emphasized barriers rooted in social and cultural factors such as gender discrimination (92.5%), perception by female patients (92.5%), family considerations (92.5%), and negative social perception (92.5%). In contrast, female students cited professional and lifestyle challenges including

the long residency (61.1%), overwhelming workload (61.1%), emotional toll (61.1%), and high-risk nature of the field.

Place table 8 Here

Educational Environment (DREEM & MCPI Tests)

Tables 9 and **10** together show that both the academic and clinical training environments for ObGyn were rated as excellent overall (83.5–87.0%). No gender difference emerged in perception of teachers, but females reported higher scores for learning ($p = 0.0051$), academic self-perception ($p = 0.0340$), and social support ($p < 0.0001$), while males rated atmosphere more positively ($p = 0.0155$).

Similarly, MCPI results confirmed that both genders viewed hospital placements positively, though females emphasized support and facilities, while males highlighted atmosphere and planning.

Place table 9 Here

Place table 10 Here

The study found no significant difference in male and female students' perceptions of teachers' teaching ObGyn block, but significant differences in learning, academic self-perception, atmosphere, and social self-perception, with Kamel's DREEM Test scores (**Figure 4**).

Place Figure 4 here

The study found no significant difference in male and female students' participation in the ObGyn clinical rotation, training, and observation. However, there were differences in support, facilities, planning, and feedback. Kamel's MCPI Test score was 32, indicating a positive clinical placement (**Figure 5)**.

Place Figure 5 here

Discussion

Various factors impact the selection of undergraduate medical students' specialization, including the significance of specialization, perception of their demands and benefits, the unstable and uncertain nature of the healthcare system, and health security. This study specifically examined the drivers and barriers related to pursuing Obstetrics and Gynaecology (ObGyn) and highlighted gender-based differences in career preferences. Unlike male students, who were more likely to choose general surgery or pediatrics, female students demonstrated stronger interest in ObGyn, internal medicine, and pediatrics. These findings are consistent with prior studies in Saudi Arabia, where lifestyle, income expectations, and work flexibility have been reported as key determinants of specialty choice (21).

Personality traits strongly shaped specialty preferences. Fields like internal medicine, ObGyn, and pediatrics attract students with higher conscientiousness, extraversion, and agreeableness, while surgical fields draw those with lower scores (22). In the present study, female students scored significantly higher across all domains, whereas males scored lower. This alignment suggests that females may find ObGyn more compatible with their interpersonal and empathetic traits, whereas males may perceive weaker personality fit, reducing their interest.

While factors such as marital status, family influence, and academic performance showed no significant impact on specialty choice, variables linked to professional experience and lifestyle such as residency duration, patient interaction, work flexibility, and perceived prestige were decisive. These determinants were particularly influential for female students, suggesting that career decisions in ObGyn are shaped less by background characteristics

and more by practical, work-related considerations, aligning with findings from previous research (23).

In Saudi Arabia, determinants such as expected income, specialty aspirations, and work flexibility play an important role in shaping medical students' career choices (24). The findings of the present study highlight distinct gendered trends. Female students demonstrated a stronger and earlier inclination toward specialty selection compared to their male peers, with a substantially higher proportion of fourth-, fifth-, and sixth-year females expressing career interest. This pattern suggests that women are more proactive in aligning personal motivations with future career paths, a trend consistent with prior studies (25). For females, attraction to obstetrics and gynecology was linked to intellectual content, emotional satisfaction, opportunities to serve women, and supportive family and social environments. Conversely, males reported deterrents such as lengthy residency programs, gender discrimination, and societal attitudes toward the specialty, reflecting broader structural and cultural barriers (26). Interestingly, practical surgical exposure showed no significant gender differences, suggesting that perceptions rather than training opportunities shape career choices. Notably, low confidence and morale were more evident among female students. These findings underscore the importance of targeted career counseling and institutional support to address gender-specific concerns and foster balanced participation in ObGyn.

The DREEM results revealed that female students reported significantly higher scores in learning, academic self-perception, atmosphere, and social self-perception, while no differences emerged in perceptions of teachers. Both genders rated the overall educational environment positively, suggesting a generally supportive learning context. However, the observed differences highlight areas where female students perceive greater benefits, indicating potential gender-based variations in educational experiences. Addressing these

disparities through targeted interventions may further strengthen the learning environment and improve equity in ObGyn training.

The MCPI results showed that female students scored significantly higher in learning, academic self-perception, atmosphere, and social self-perception, while no difference was noted in teacher perception. This suggests gender-based variation in how students experience ObGyn training, with females reporting a more positive environment. Similar findings were reported at Saudi German Hospital, where high scores reflected effective leadership and clinical support (18). The learning environment at Batterjee Medical College (BMC) is positive, with high student perceptions of learning, teachers, academic self-perception, atmosphere, and social self-perception. Students' insight into the ObGyn experience during clerkship and clinical placement plays a vital role in recruitment choices (27).

Conclusion

In conclusion, the study reveals gender-specific **specialty** preferences in surgery, internal medicine, and obstetrics, with males **favouring** surgery and females preferring internal medicine and obstetrics. Personality traits influence these choices, with Obstetrics and Gynaecology preferred by 44 females and 4 males. Furthermore, this research highlights the significance of promoting a supportive and comprehensive learning environment that encourages variability in medical specialties.

Limitations Of The Study

This study was conducted at a single institution (Batterjee Medical College), which may limit generalizability to other medical schools in Saudi Arabia or internationally. The cross-sectional design prevents establishing causality, and self-reported questionnaires may

introduce response bias. In addition, while validated tools were used, the results represent students' perceptions at a single point in time and may not reflect long-term career decisions.

Recommendations

Medical students' advisors should be knowledgeable about residency applications, using "Kamel's OCEAN Test" to avoid burnout. Preclinical shadowing improves ObGyn perceptions, and male students' support is crucial. Postgraduate training programs should focus on residents as educators, and successful clerkship techniques should be exchanged. More study is needed.

Institutional Review Board Statement

The study protocol was approved by the Ethical Committee of the Batterjee Medical College (BMC) Research Unit (Registration number for ethical permission: RES/050/2023). All data were collected and analysed in accordance with the Declaration of Helsinki. Participation was voluntary and unpaid, and informed, signed consent was provided by all participants.

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None

Author Contribution

R.M.K. (Remah M. Kamel): Conceptualization, Methodology, Formal Analysis, Supervision, Writing – original draft, Writing – review & editing.

M.H. (Muna Hassan): Data curation, Investigation, Writing – review & editing.

S.M. (Shama Mousa): Data curation, Resources, Visualization.

G.M. (Ghazal Mira): Investigation, Validation.

R.E. (Rahaf Eskndr): Project administration, Resources.

L.A. (Lujain Aloreni): Software, Data curation.

K.A. (Kholod Alsubhi): Methodology, Writing – review & editing.

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The authors declared that no financial funding or grants were involved in supporting this work.

Conflict of Interest

The authors have no conflicts of interest.

Informed Consent

Written informed consent was obtained from all participants before enrolment in the study. Participation was voluntary, anonymous, and without any compensation.

Data Sharing

The datasets generated and/or analyzed during the current study are available within this article.

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Ethical Approval

The study protocol was approved by the Ethical Committee of the Batterjee Medical College (BMC) Research Unit (Registration number for ethical permission: RES/050/2023). All data were collected and analysed in accordance with the Declaration of Helsinki. Participation was voluntary and unpaid, and informed, signed consent was provided by all participants.

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Table 1 (Sociodemographic characteristics of the study participants)

Variables **Sociodemographic Data**		**Male Students**		**Female Students**		**Chi-Square** X^2	***P* value***
		N = 53	**(%)**	**N = 113**	**(%)**		
Age (in years)	< 22	8.0	(15.1)	18	(15.9)	0.14	0.987
	22 - < 24	30	(56.6)	65	(57.5)		
	24 - < 26	12	(22.6)	25	(22.2)		
	≥ 26	3.0	(5.7)	5.0	(4.4)		
Religion	Muslim	52	(98.1)	100	(88.5)	4.32	0.038*
	Non-Muslim	1.0	(1.9)	13	(11.5)		
Nationality	Saudi	40	(75.5)	78	(69.1)	0.73	0.393
	Non-Saudi	13	(24.5)	35	(30.9)		
Studying Year	4th medical year	18	(34)	40	(35.4)	2.09	0.351
	5th medical year	20	(37.7)	31	(27.4)		
	6th year (Internship)	15	(28.3)	42	(37.2)		
GPA	< 4.0	13	(24.5)	18	(15.9)	2.82	0.244
	4.0 – 4.5	25	(47.2)	50	(44.3)		
	> 4.5	15	(28.3)	45	(39.8)		

Parents' Education	PhD / Master	10	(18.9)	22	(19.5)	2.69	0.442
	University	35	(66.0)	83	(73.5)		
	High school (G10-12)	5.0	(9.4)	5.0	(4.4)		
	Intermediate (G7-9)	3.0	(5.7)	3.0	(2.6)		
	Primary (G1-6)	0.0	(0.0)	0.0	(0.0)		
	None (illiterate)	0.0	(0.0)	0.0	(0.0)		
Ethnicity	Arabic	50	(94.3)	95	(84.1)	3.44	0.635
	Non-Arabic	3.0	(5.7)	18	(15.9)		
Living Status	With Parents	25	(47.2)	55	(48.7)	2.03	0.730
	With Spouse	10	(18.8)	18	(15.9)		
	With Relative	5.0	(9.4)	7.0	(6.2)		
	With Friend	10	(18.9)	20	(17.7)		
	Alone	3.0	(5.7)	13	(11.5)		
Marital Status	Single	43	(81.1)	95	(84.1)	0.222	0.637
	Married	10	(18.9)	18	(15.9)		
	Divorced	0.0	(0.0)	0.0	(0.0)		
	Widowed	0.0	(0.0)	0.0	(0.0)		

Number of Children	None	43	(81.1)	95	(84.1)	0.886	0.829
	1	2.0	(3.8)	6.0	(5.3)		
	2	7.0	(13.2)	10	(8.8)		
	≥ 3	1.0	(1.9)	2.0	(1.8)		
Training Setting	Private (SGH©)	47	(88.7)	100	(88.5)	0.262	0.967
	University	3.0	(5.7)	8.0	(7.1)		
	Military	2.0	(3.8)	3.0	(2.6)		
	MOH	1.0	(1.9)	2.0	(1.8)		
Annual family income (in USD)	< 15,000	1.0	(1.9)	8.0	(7.1)	21.39	0.0003*
	15,000 - < 20,000	7.0	(13.2)	33	(29.2)		
	20,000 - < 25,000	22	(41.5)	50	(44.3)		
	25,000 - < 30,000	10	(18.9)	18	(15.9)		
	≥ 30,000	13	(24.5)	4.0	(3.5)		
Chronic illness	None	45	(84.9)	88	(77.9)	1.133	0.568
	Medical	5.0	(9.4)	15	(13.3)		
	Psychiatric	3.0	(5.7)	10	(8.8)		

Table 2 (Three Speciality Choices of Participated Students)

Specialty Choices	**Males Speciality choices**				**Females Speciality choices**				***P* value***
	1st	**2nd**	**3rd**	**(%)**	**1st**	**2nd**	**3rd**	**(%)**	
Anaesthesiology.	1	1	1	(1.89)	1	1	1	(0.88)	0.339
Cardiology.	1	2	1	(2.52)	3	2	5	(2.95)	0.785
Cardio-thoracic Surgery.	1	1	2	(2.52)	1	1	2	(1.18)	0.269
Community Medicine.	2	2	3	(4.40)	5	4	2	(3.24)	0.519
Dermatology.	2	3	4	(5.66)	10	8	6	(7.08)	0.553
Emergency Medicine.	2	2	2	(3.77)	1	1	1	(0.88)	0.024*
Endocrinology.	1	1	1	(1.89)	3	2	2	(2.06)	0.895
Family Medicine.	5	4	3	(7.55)	8	5	5	(5.31)	0.328
Gastroenterology.	1	1	1	(1.89)	1	1	3	(1.47)	0.733
General Surgery.	8	5	4	(10.69)	5	3	1	(2.65)	0.0002*
Intensive Care.	1	1	2	(2.52)	1	1	2	(1.18)	0.269
Internal Medicine.	5	4	3	(7.55)	20	28	20	(20.06)	0.0004*
Nephrology.	1	1	1	(1.89)	1	1	2	(1.18)	0.532
Neurology.	1	1	1	(1.89)	1	1	2	(1.18)	0.532
Neurosurgery.	2	2	3	(4.40)	2	1	2	(1.47)	0.047*
Obstetrics and Gynaecology.	2	1	1	(2.52)	17	15	12	(12.98)	0.0002*
Oncology	1	1	1	(1.89)	1	1	3	(1.47)	0.733
Ophthalmology.	2	2	1	(3.14)	4	3	4	(3.24)	0.953
Orthopaedic Surgery.	1	2	2	(3.14)	1	1	1	(0.88)	0.062
Otolaryngology (ENT).	2	2	1	(3.14)	1	1	5	(2.06)	0.464
Paediatrics.	4	5	4	(8.18)	20	26	20	(19.47)	0.0013*
Plastic Surgery.	2	4	6	(7.55)	1	1	2	(1.18)	0.0002*
Psychiatry.	1	1	1	(1.89)	1	1	2	(1.18)	0.532
Pulmonology.	1	1	1	(1.89)	1	1	2	(1.18)	0.532
Radiology.	1	1	1	(1.89)	1	1	2	(1.18)	0.532
Rheumatology.	1	1	1	(1.89)	1	1	2	(1.18)	0.532
Urology / Nephrology.	1	1	1	(1.89)	1	1	2	(1.18)	0.532

Table 3 (The Five Major Personality Traits of Participants according to Gender)

Personality Traits	**Male Students** Total N= 53	**Female Students** Total N= 113	***P*** value*
	Mean ± SD	**Mean ± SD**	
Openness to Experience	18.44 ± 0.74	20.40 ± 0.74	< 0.0001*
Conscientiousness	20.96 ± 0.72	32.64 ± 0.75	< 0.0001*
Extroversion	18.28 ± 0.87	28.96 ± 0.90	< 0.0001*
Agreeableness	18.12 ± 0.67	29.20 ± 0.68	< 0.0001*
Neuroticism	20.96 ± 0.76	18.52 ± 0.84	< 0.0001*

Table 4 (Personality Traits according to Medical Specialties of Statistical Significance)

Medical Specialty	**Students**		**Personality Traits: Mean (SD)**				
	Males: N (%)	Females: N (%)	O	C	E	A	N
Emergency Medicine	6 (3.77)	3 (0.88)	18.92 (0.74)	21.96 (0.72)	18.28 (0.97)	18.15 (0.60)	24.20 (0.78)
General Surgery	17 (10.69)	9 (2.65)	18.42 (0.74)	20.20 (0.72)	19.24 (0.17)	19.10 (0.17)	20.75 (0.75)
Internal Medicine	12 (7.55)	68 (20.06)	22.35 (0.74)	26.60 (0.52)	28.96 (0.90)	30.50 (0.08)	18.28 (0.97)
Neuro-surgery	7 (4.40)	5 (1.47)	19.44 (0.74)	21.96 (0.72)	19.28 (0.85)	18.89 (0.60)	21.20 (0.95)
ObGyn	4 (2.52)	44 (12.98)	20.20 (0.74)	30.60 (0.12)	27.96 (0.99)	29.20 (0.68)	18.90 (0.97)
Paediatrics	13 (8.18)	66 (19.47)	21.40 (0.74)	28.60 (0.22)	28.06 (0.90)	32.50 (0.38)	19.08 (0.97)
Plastic Surgery	12 (7.55)	4 (1.18)	19.40 (0.74)	21.96 (0.92)	18.25 (0.80)	18.78 (0.17)	21.40 (0.72)

Table 5 (General Determinants Affecting Speciality Choice by Medical Students)

Determinants of Medical Choice	**Male Students** Total N= 53 (100%)		**Female Students** Total N= 113 (100%)		***P*** value*
	Number	**(%)**	**Number**	**(%)**	
Gender (Social and Cultural expectation).	25	(47.17)	64	(56.64)	0.254
Religion and beliefs.	7	(13.21)	25	(22.12)	0.175
Family, Spouse, or other advice.	15	(28.30)	35	(30.97)	0.727
Working hours and lifestyle.	53	(100.0)	113	(100.0)	0.581
Marital status.	10	(18.87)	18	(15.93)	0.637
Personality type and Interests.	45	(84.91)	95	(84.07)	0.890
Monthly income.	40	(75.47)	80	(70.80)	0.530
Academic and educational determinants (GPA).	35	(66.04)	75	(66.37)	0.966
Particular teacher/mentor model.	15	(28.30)	35	(30.97)	0.727
Level of job stress.	53	(100.0)	113	(100.0)	0.581
Working conditions, atmosphere, colleagues.	15	(28.30)	70	(61.95)	0.00005*
Easy decision-making.	25	(47.17)	29	(25.66)	0.0058*
Prestige and Social level.	27	(50.94)	30	(26.55)	0.0020*
Parents' or spouse's medical profession.	5	(9.43)	20	(17.70)	0.165
Opportunity to secure a training post.	35	(66.04)	75	(66.37)	0.966
Duration of the Residency program.	43	(81.13)	113	(100.0)	0.00001*
Patients' outcome (Prognosis).	45	(84.91)	85	(75.22)	0.158
Communication with patients	35	(66.04)	25	(22.12)	<0.00001*
Residency location.	20	(37.74)	113	(100.0)	<0.00001*
Rare specialty.	16	(30.19)	27	(23.89)	0.388
Early experience or background information.	25	(47.17)	32	(28.32)	0.017*
Opportunity to do research and teach.	16	(30.19)	27	(23.89)	0.388
Job flexibility (opportunity to work part-time).	10	(18.87)	113	(100.0)	<0.00001*

Available job opportunities (Secure Job).	5	(100.0)	113	(100.0)	0.581
Type and variety of patients served.	45	(84.91)	85	(75.22)	0.158
Source of information about specialty	15	(28.30)	45	(39.82)	0.150
Impact on people's lives.	25	(47.17)	75	(66.37)	0.018*

Table 6 (General Determinants Affecting Speciality Choice by Medical Students)

Medical Grade	**Male Students** Total N = 53 (100%)		**Female Students** Total N = 113 (100%)		***P*** value*
	Number	**(%)**	**Number**	**(%)**	
4th Year Students	1	(5.56)	12	(30.0)	0.00023*
5th Year Students	1	(5.00)	15	(48.39)	
6th Year (Interns)	2	(13.33)	17	(40.48)	

Table 7 (Merits of a future career in ObGyn)

ObGyn Attracted Factors	**Male Students** Total N= 53 (100%)		**Female Students** Total N= 113 (100%)		***P*** value*
	Number	**(%)**	**Number**	**(%)**	
One organ system focus (Limited syllabus).	40	(75.47)	90	(79.65)	0.543
Passion and Aptitude in Ob/Gyn.	14	(26.42)	44	(38.94)	0.115
Intellectual content.	20	(37.74)	80	(70.80)	0.00005*
Challenging specialty.	20	(37.74)	44	(38.94)	0.882
Involved female patients only.	4	(7.55)	44	(38.94)	0.00003*
The narrow scope of practice (Mastering specialty).	20	(37.74)	80	(70.80)	0.00005*
Mostly healthy (Pregnancy is not an illness).	40	(75.47)	80	(70.80)	0.530
Observing Obstetric deliveries.	15	(28.30)	57	(50.44)	0.082
Practical exposure to hands-on surgeries.	25	(47.17)	44	(38.94)	0.316
Prestige and social image.	4	(7.55)	44	(38.94)	0.00003*
Highly rewarding (financial prospects).	20	(37.74)	64	(56.64)	0.023*

Personal preference and interest.	4	(7.55)	44	(38.94)	0.00003*
Wide variety of subspecialties.	20	(37.74)	44	(38.94)	0.882
The specialty of a mix (Medicine + Surgery).	20	(37.74)	64	(56.64)	0.023*
Direct contact with patients.	35	(66.04)	44	(38.94)	0.001*
Job opportunity.	4	(7.55)	64	(56.64)	<0.00001*
Motivation to help and Emotional satisfaction.	20	(37.74)	84	(74.34)	<0.00001*
Female-oriented-field and co-workers.	0	(0.00)	84	(74.34)	<0.00001*
Family and partner support.	4	(7.55)	44	(38.94)	0.00003*
Positive attitude.	4	(7.55)	44	(38.94)	0.00003*
Good personal experience.	4	(7.55)	44	(38.94)	0.00003*
Movies inspiration.	4	(7.55)	44	(38.94)	0.00003*
Positive feedback.	4	(7.55)	44	(38.94)	0.00003*
Private sector opportunities.	0	(0.00)	113	(100.0)	<0.00001*
Good patients' prognosis	20	(37.74)	80	(70.80)	0.00005*
Cutting-edge technology.	20	(37.74)	44	(38.94)	0.882
Coping with maternal and foetal deaths	4	(7.55)	44	(38.94)	0.00003*

Table 8 (Demerits of a future career in ObGyn)

ObGyn Detracted Factors	**Male Students** Total N= 53 (100%)		**Female Students** Total N= 113 (100%)		***P*** value*
	Number	**(%)**	**Number**	**(%)**	
Long residency program.	49	(92.45)	69	(61.06)	0.00003*
Family considerations.	49	(92.45)	25	(22.12)	<0.00001*
Overwhelming lifestyle (Professional burnout).	49	(92.45)	69	(61.06)	0.00003
Content and procedures.	40	(75.47)	25	(22.12)	<0.00001*
Gender discrimination and bias.	49	(92.45)	0	(0.0)	<0.00001*
Stress demanding (tough) specialty.	40	(75.47)	69	(61.06)	0.068
Workforce market requirement.	49	(92.45)	0	(0.0)	<0.00001*
High-risk specialty with poor support.	40	(75.47)	69	(61.06)	0.068

Apprehension of medical litigations.	40	(75.47)	69	(61.06)	0.068
Direct contact with patients	25	(47.17)	45	(39.82)	0.372
Two people's responsibility (mother and foetus).	49	(92.45)	69	(61.06)	0.00003*
High-prized malpractice insurance.	40	(75.47)	69	(61.06)	0.068
Professional liability (continuing care).	40	(75.47)	69	(61.06)	0.068
Out of working hours and Night duties.	35	(66.04)	69	(61.06)	0.537
Difficult handling with maternal mortality.	25	(47.17)	55	(48.67)	0.857
Perception by female patients.	49	(92.45)	0	(0.0)	<0.00001*
Emotional toll.	40	(75.47)	69	(61.06)	0.068
Limited posts and high competition.	25	(47.17)	45	(39.82)	0.372
Low morale (lack of confidence).	35	(66.04)	55	(48.67)	0.036*
Excessive paperwork.	25	(47.17)	45	(39.82)	0.372
Lack of motivation.	15	(28.30)	35	(30.97)	0.727
Lack of clinical exposure	40	(75.47)	25	(22.12)	<0.00001*
Bad personal experience or Negative feedback.	25	(47.17)	35	(30.97)	0.043*
Social perception (religion and cultural roles)	49	(92.45)	0	(0.0)	<0.00001*
Presence of alternatives (other options)	40	(75.47)	69	(61.06)	0.068
Concerns regarding personal safety	25	(47.17)	45	(39.82)	0.372
Lack of resilience (work flexibility).	25	(47.17)	55	(48.67)	0.857

Table 9 (Kamel's DREEM Test (Educational Environment) for ObGyn Block)

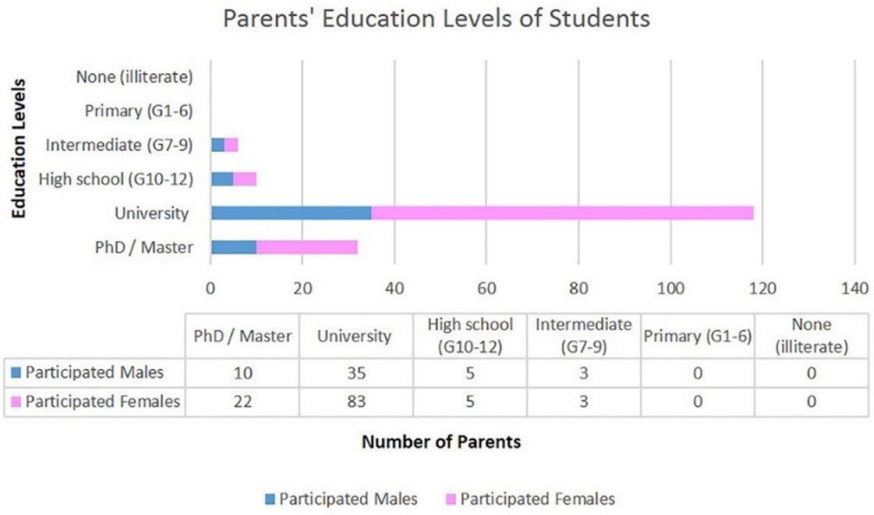
Student's Domains	**Males N = 53 (31.93%)**		**Females N = 133 (68.07%)**		***P* value***
	Mean Score ± SD	**(%)**	**Mean Score ± SD**	**(%)**	
Perception of Learning (out of 48)	38 ± 6.3	(79.17)	41 ± 6.6	(85.42)	0.0051*
Perception of Teachers (out of 44)	39 ± 4.5	(88.64)	40 ± 2.6	(90.91)	0.0599

Academic Self-perception (out of 32)	28 ± 3.3	(87.50)	29 ± 2.7	(90.63)	0.0340*
Perception of Atmosphere (out of 48)	42 ± 4.6	(87.50)	40 ± 5.2	(83.33)	0.0155*
Social Self-perception (out of 28)	20 ± 3.9	(71.43)	24 ± 3.4	(85.71)	<0.0001*
Total Score (out of 200)	167 - 174 (83.5 - 87.0%): Excellent Education Environment				

Table 10 (Kamel's MCPI Test (Educational Environment) for ObGyn Block)

Student's Domains	Males N = 53 (31.93%)		Females N = 133 (68.07%)		*P* value*
	Mean Score ± SD	(%)	Mean Score ± SD	(%)	
Perception of Learning (out of 48)	38 ± 6.3	(79.17)	41 ± 6.6	(85.42)	0.0051*
Perception of Teachers (out of 44)	39 ± 4.5	(88.64)	40 ± 2.6	(90.91)	0.0599
Academic Self-perception (out of 32)	28 ± 3.3	(87.50)	29 ± 2.7	(90.63)	0.0340*
Perception of Atmosphere (out of 48)	42 ± 4.6	(87.50)	40 ± 5.2	(83.33)	0.0155*
Social Self-perception (out of 28)	20 ± 3.9	(71.43)	24 ± 3.4	(85.71)	<0.0001*
Total Score (out of 200)	167 - 174 (83.5 - 87.0%): Excellent Education Environment				

Figure 1 (Parents' Education Levels of Participated Students)



	PhD / Master	University	High school (G10-12)	Intermediate (G7-9)	Primary (G1-6)	None (illiterate)
Participated Males	10	35	5	3	0	0
Participated Females	22	83	5	3	0	0

Figure 2 (Students' Medical Specialties of Statistical Significance)

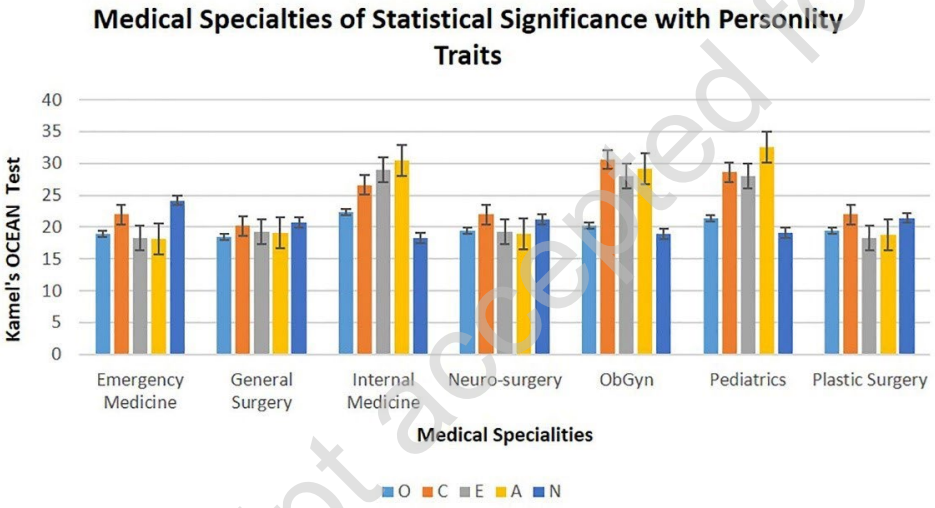


Figure 3 (ObGyn Speciality Choice among Participated Students)

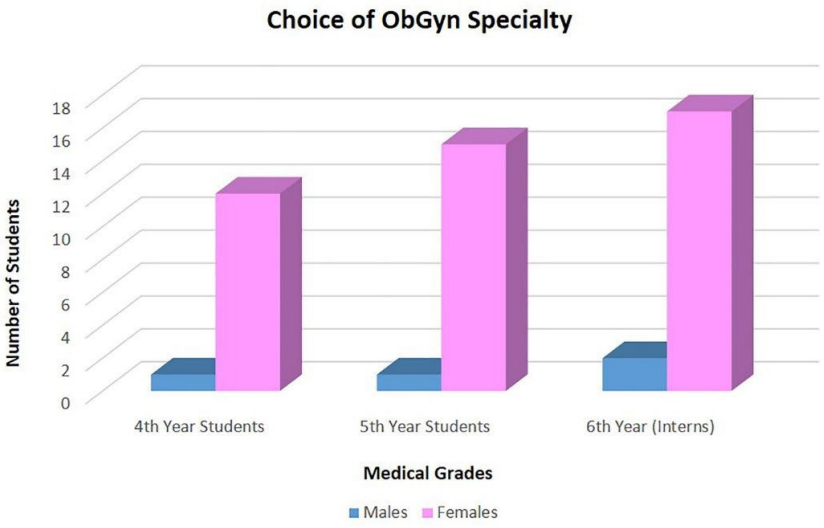
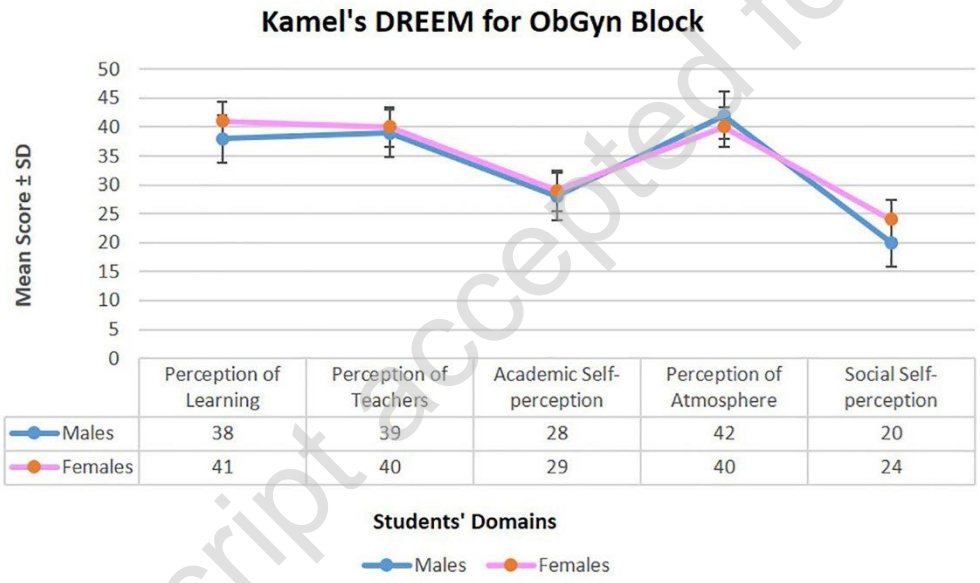


Figure 4 (Kamel's DREEM Test (Educational Environment) for ObGyn Block)



	Perception of Learning	Perception of Teachers	Academic Self-perception	Perception of Atmosphere	Social Self-perception
Males	38	39	28	42	20
Females	41	40	29	40	24

Figure 5 (Kamel's MCPI Test (Clinical Placement) for ObGyn Rotation)