TRENDS IN SPECIALIZATION CHOICES AMONG SECOND-SEMESTER STUDENTS AND SECOND-YEAR JUNIOR DOCTORS IN MEDICAL FACULTY AT UDAYANA UNIVERSITY

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ABSTRAK

Pendidikan kedokteran memiliki beragam pilihan karir yang menarik bagi mahasiswa. Wawasan tentang preferensi karir dan alasan pemilihannya di bidang kedokteran akan membantu mahasiswa menentukan karir medis yang tepat. Penelitian ini bertujuan mengetahui gambaran kecenderungan pemilihan spesialisasi pada mahasiswa semester dua dan dokter muda Sarjana Kedokteran Universitas Udayana serta kecenderungan alasan yang mendasarinya. Penelitian ini merupakan penelitian desain potong lintang kualitatif deskriptif. Pengambilan data dilakukan secara daring kepada mahasiswa semester dua dan dokter muda Sarjana Kedokteran Universitas Udayana dengan metode *total sampling* dan memakai kuesioner oleh Takeda (2013) yang telah diterjemahkan. Sebanyak 213 mahasiswa semester dua dan 228 dokter muda memenuhi kriteria inklusi. Spesialisasi yang paling diminati mahasiswa semester dua adalah spesialis penyakit dalam (21,6%). Bagi dokter muda, spesialisasi terbanyak dipilih adalah spesialis bedah (11%). Dua populasi menyatakan alasan pemilihan spesialisasi adalah minat pada pekerjaan klinis spesialisasinya (74,6% dan 70,9%), ketertarikan pada spesialisasi sebelum masuk sekolah kedokteran (48,7% dan 63,4%), dan nasihat orang tua (50% dan 72,8%). Pada mahasiswa semester dua, alasan lain meliputi ingin memiliki pendapatan tinggi (51,2%) dan pernah bertemu dokter yang dijadikan panutan (26,3%). Pada dokter muda, alasan lain adalah karena mendapat pengajaran yang baik (46,5%) dan ketersediaan lapangan pekerjaan (47,4%). Mahasiswa semester dua memilih spesialis penyakit dalam, sementara dokter muda mayoritas memilih spesialis bedah. Alasan pemilihan spesialisasi terbanyak adalah minat pada karakteristik pekerjaan klinisnya.

Kata kunci : faktor-faktor, mahasiswa kedokteran, pilihan karir

ABSTRACT

Medical education offers a variety of career options for students. Insights into career preferences and the reasons for choosing them in the medical field will help students determine the right career. This study aims to understand the trends in specialization choices among second-semester students and junior doctors of the Faculty of Medicine, Udayana University, as well as the underlying reasons for those choices. This study is a descriptive qualitative cross-sectional study. Data collection was conducted online by distributing questionnaires to second-semester students and junior doctors of the Faculty of Medicine with total sampling method and employed the questionnaire by Takeda (2013). A total of 213 second-semester students and 228 junior doctors met the inclusion criteria. The most preferred specialization for second-semester students was internal medicine (21.6%), while for junior doctors, surgery was the most selected specialization (11%). Both groups cited similar reasons for their specialization choices: interest in the clinical work of the specialization (74.6% and 70.9%), interested before entering medical school (48.7% and 63.4%), and parental advice (50% and 72.8%). For second-semester students, other reasons included the desire for a high income (51.2%) and having met a doctor as a role model (26.3%). Meanwhile, for junior doctors, additional reasons were good teaching (46.5%) and job availability (47.4%). Specialization choices varied between second-semester students and junior doctors. Majority of second-semester students chose internal medicine, while junior doctors chose surgery with interest in the characteristics of the clinical work as the most common reason.

Keywords *: career choices, contributing factors, medical students*

INTRODUCTION

The medical education program in Indonesia implements a curriculum designed to produce graduates who are competent, able to integrate various fields of knowledge, and understand the health issues of individuals, families, and communities within the context of primary healthcare services. The medical education curriculum that has been developed refers to the competency standards established by the Indonesian Medical Council, so that graduates are expected to meet the professionalism standards that have been set. Every medical student begins medical school with minimal information about the challenges and difficulties they must face to become a doctor. These challenges start from completing pre-clinical studies, clinical clerkships, and competency examinations. Furthermore, after completing their studies, students are faced with the choice of pursuing a career in clinical or non-clinical fields (Kumar et al., 2014).

The Republic of Indonesia Law No. 20 of 2013 on Medical Education stipulates that medical education consists of two levels: academic education and professional education. Academic education includes undergraduate medical programs, master's programs in medicine, and doctoral programs in medicine. Meanwhile, professional education consists of programs for medical doctors, primary care physicians, and specialization/sub-specialization programs. The career choices made by medical students have an impact on the development of healthcare professionals in society. Career determination is crucial to avoid a mismatch between medical graduates and the jobs they pursue (Dorsey et al., 2003). A pressing issue is the imbalance in the number of healthcare professionals, despite the increasing number of medical schools and students. The distribution of healthcare workers, particularly specialist doctors, remains uneven. The number of specialist doctors in hospitals across Indonesia in 2021 reached 43,173. The largest proportion consists of core specialists, including pediatricians, internists, gynecologists, and surgeons (44.14%). The smallest proportion is dental specialists (10%) (Ministry of Health, 2022).

According to the Indonesian Medical Council, Bali Province has 9,431 doctors, with unequal distribution across its districts. The most notable disparity is in the number of internal medicine specialists and paediatric surgeons in Denpasar City, with 182 and 2 doctors, respectively (Konsil Kedokteran Indonesia, 2022). The Indonesian government will find it easier to manage and predict the demand for medical professionals' roles early on if it can map out the career preferences of prospective doctors. Interventions at the level of the medical education curriculum, taking account of intrinsic and extrinsic motivational factors, have proven effective in influencing the career choices of future doctors. This approach helps prevent the government from facing polarization in certain specialties, which could lead to a shortage of doctors in specific areas.

Research on motivation, particularly in the field of medicine in Indonesia, is very limited. One example is the study conducted at Airlangga University in 2014 recorded that, out of 157 final-year students, 32 (20.4%) chose internal medicine, 24 (15.3%) selected surgical specialties, and the least, 2 (1.3%), chose anatomical pathology. The experiences during the education period and the way material is delivered influence motivation, which ultimately determines the career choices of the respondents. These specialization preferences vary depending on the underlying motivations of each student. The motivation underlying the career choices of tenth-semester students at the Faculty of Medicine, Airlangga University, is a proportional work-life balance, interest in certain fields, and the amount of income earned. (Andarwati et al., 2017).

A study in Japan aimed to identify the factors influencing specialty selection by examining the characteristic profiles of senior students and junior doctors deciding between various specialties. Factor analysis revealed five key determinants influencing career preferences. Fifteen medical specialties were categorized into four groups based on the factor with the

highest z-score: "life satisfaction with job security" (radiology anesthesiology, dermatology, ophthalmology, and psychiatry), "bioscientific focus" (surgery, internal medicine subspecialties, obstetrics and gynecology, urology, emergency medicine, and neurosurgery), and "personal motivations" (pediatrics and orthopedics). Additional influencing factors included "external advice" and "educational experience." The factors that influence career decisions differ across specialties. While lifestyle considerations are important, they may discourage students and junior doctors who are more focused on the bioscientific aspects of a specialty or have strong personal motivations for their career choice. To ensure a balanced workforce across specialties, it is important to consider selecting students with diverse backgrounds and beliefs during the admission process. The study also identified five main factors influencing specific career choices among medical students and junior doctors: job prospects, personal reasons, personal interest based on experiences in medical school, advice from others, and the characteristics of the specialization itself (Takeda et al., 2013)

This study not only seeks to understand the specialization preferences of medical students at the Faculty of Medicine, Udayana University, but also aims to explore the fundamental motivations behind these choices. By collecting this data, it is hoped that facilities can be improved for the specialties commonly chosen by junior doctors, while increasing exposure to less-selected specialties. This would broaden medical students' perspectives, allowing them to consider a more diverse range of career paths in medicine and, ultimately, achieving a more equitable distribution of specialization choices in the future.

METHOD

This study is a descriptive study using a cross-sectional method. This study used the total sampling technique, where the sample size was the same as the population size. The samples were taken from second-semester students and second-year junior doctor (Co-Assistants) at Faculty of Medicine, Udayana University. The study was conducted from February 2024 to April 2024 and was approved by the Research Ethics Commission of the Faculty of Medicine, Udayana University with protocol number 0412/UN14.2.2.VII.14/LT/2024.

This study used a questionnaire created with Google Forms, which was distributed to second-semester students and second-year junior doctor of the Faculty of Medicine, Udayana University. Respondent identities were kept confidential. The questionnaire was divided into two parts. The first part asked respondents to fill in data such as personal identity and other relevant information as medical students. The second part contained questions about future career plans, focusing on the choice of specialization and the reasons behind their selection. The questions related to the reasons for choosing a specialization combined both open-ended and closed-ended formats. The collected data subsequently processed using Microsoft Excel.

RESULTS

The second-year junior doctors and second-semester students of the Faculty of Medicine, Udayana University were used as the accessible population, in total 252 and 246 individuals, respectively. All respondents were given questionnaires related to career preferences and the factors influencing these preferences through Google Forms. 57 people did not return the distributed forms, so the sample consisted of 440 people, including 213 second-semester students and 228 junior doctors. The response rate in this study was 88%. Characteristics of respondents were showed in **Table 1.** The data showed that majority of junior doctors in this study were female, totaling 137 people (60.5%). The same was also found in the group of second-semester students, with 127 female respondents (59.6%). One of the determinants of career choice among medical students is the occupation of their parents. Based on the data shows the results regarding the parental occupation background of the

respondents, whether they are doctors or dentists. Among junior doctors, 100 people (43.9%) have parents who are doctors or dentists, while among second-semester students, there are only 59 people (27.7%) with parents who are doctors or dentists.

Besides the parents' occupation, income also becomes a determining factor in choosing a future career for medical students. The table shows the results of the combined nominal income of the parents. Among the respondents from junior doctors, there were 208 people (91.2%) whose parents earned more than Rp 6,000,000.00 per month, with the second-semester students, there were 190 respondents (89.2%) whose parents earned more than Rp 6,000,000.00 per month. The data also shows whether the respondents personally knew a doctor or dentist before entering medical school. Among the junior doctors, 115 people (50.4%) personally knew a doctor or dentist who was close to them, while the second-semester students, 88 people (41.3%) personally knew a doctor or dentist who was close to them.

Categories of areas where respondents grew up over 18 years are outlined in the table 1. In the population of junior doctor respondents, 86 respondents (47.7%) grew up in medium-sized cities with a population between 100,000 and 300,000 people. Meanwhile, among second-semester students, data showed that 65 respondents (30.5%) grew up in medium-sized cities with a population between 100,000 and 300,000 people.

Table 1. Characteristics of Respondents

Characteristics	Junior doctors (n (%))	Second semester (n (%))
Gender		
Male	91 (39.5)	86 (40.4)
Female	137 (60.5)	127 (59.6)
Parents occupation		
Physician/dentist	100 (43.9)	59 (27.7)
Not physician/dentist	128 (56.1)	153 (72.3)
Pendapatan orangtua		
More than Rp 6.000.000,00 /month	208 (91.2)	190 (89.2)
Less than Rp 6.000.000,00 /month	20 (8.8)	23 (10.8)
Relations with physician/dentists		
Yes	115 (50.4)	88 (41.3)
No	113 (49.6)	125 (58.7)
Place of origin	57 (25)	48 (22.5)
Large city	86 (37.7)	65 (30.5)
Midsize city	63 (27.6)	59 (27.7)
Small city	19 (8.3)	41 (19.2)
Village	3 (1.3)	0 (0)
Rural area		

Based on the respondents' data, table 2 has outlined the specialization preferences among junior doctors and second-semester students. Among the junior doctors, it was found that the most chosen specialization was surgery, with 24 people, followed by paediatric medicine and obstetrics and gynaecology, each with 21 people, and then cardiology with 19 people. Meanwhile, among the second-semester students, the most chosen specialization was internal medicine, with 40 people, followed by surgery and paediatric medicine, each with 34 people, and obstetrics and gynaecology with 26 people.

The choice of specialization can be influenced by many factors, one of which is based on the characteristics of the specialist themselves, such as being predominantly involved in emergency cases and specialists focused on target populations. The data from the research results in table 3, have outlined several reasons for the selection of specialization based on its characteristics. In the population of junior doctors, 170 respondents (74.6%) chose their specialization because of the clinical work involved. Meanwhile, in the population of second-semester students, the highest reason for choosing

a specialization based on its characteristics was their interest in the clinical work of that specialization (70.9%).

Table 2. Distribution of Respondent Specialization Preferences

Specialization	Junior doctors (n)		Second semester (n)	
	M	F	M	F
Internal medicine	7	10	29	11
Surgery	12	12	12	22
Orthopaedic surgery	8	6	6	3
Cardiology	6	13	11	14
Paediatrics	6	15	11	23
Obstetrics and gynecology	13	8	8	18
Psychiatry	3	4	3	7
Anaesthesia	5	10	2	1
Neurology	5	6	1	6
Dermatology	4	8	1	5
Ophtalmology	2	10	0	4
Otorhinolaryngology ENT	6	11	1	2
Urology	6	5	0	1
Radiology	3	5	0	0
Psychologyst	2	8	0	3
Forensic	1	3	1	4
Other*	2	3	0	3

M: male, F: female

*: pulmonology, clinical pathology, nuclear medicine

Table 3. Distribution of Reasons for Choosing Specialization Based On Characteristics Of The Specialty

Characteristics	Junior doctors (n (%))	Second semester (n (%))
Interest in the clinical work of the specialty	170 (74.6)	151 (70.9)
Interest in the targeted population (e.g. children, the elderly)	52 (22.8)	95 (44.6)
Interest in the research or scientific aspects	61 (26.8)	28 (13.1)
Interested in the surgical procedures or technologies	82 (36)	40 (18.8)
I am interested in handling emergency cases.	65 (28.5)	38 (17.8)
I am not interested in handling emergency cases.	54 (23.7)	17 (8)
Mastering the specialty	74 (32.5)	7 (3.3)
I have an aptitude for the specialty	86 (37.7)	32 (25)
I feel it rewarding to work in the specialty	65 (28.5)	48 (33.5)
Highly respected in society	49 (21.5)	43 (20.2)
I am looking for a challenging and innovative specialization.	51 (23.2)	24 (11.3)
Others	0	0

*: respondents can choose more than one option

The variables of specialized selection based on personal considerations, such as personal experiences or the health history of others around them, are listed in table 4. The 114 junior doctors (48.7%) and the 134 second-semester students (63.4%) in both groups had expressed interest in the specialization prior to starting medical school.

Based on the research data, table 5 shows the reasons for specialization selection based on experiences gained during the pre-clinic or clinic period. Among junior doctors, the most common reason for choosing a specialization based on medical school experience is receiving good teaching

(46.5%). Meanwhile, for second-semester students, the most common reason is meeting doctors who can serve as role models (43.2%).

Table 4. Distribution of Reasons for Choosing Specialization Based On Personal Experience

Characteristics	Junior doctors (n (%))	Second semester (n (%))
I suffer(ed) from the illness of the specialty	30 (13.2)	15 (7)
Friend/family suffer(ed) from the illness of the specialty	75 (32.9)	91 (42.7)
Became interested in the specialty before medical school	111 (48.7)	135 (63.4)
I am looking for a specialization with a short duration of education.	34 (14.9)	7 (3.3)
I am looking for a specialization with relatively low tuition fees.	34 (14.9)	3 (1.4)
I am looking for a specialization that fits my gender.	22 (9.6)	10 (4.7)
Others**	14 (6.1)	8 (3.9)

*: respondents can choose more than one option
**: getting good grades during the internship, watching from dramas or movies

Table 5. Distribution of Reasons for Choosing Specialization Based On Experience At A Medical School Or During Postgraduate Training

Characteristics	Junior doctors (n (%))	Second semester (n (%))
Memorable experience at a class or clinical rotation	55 (24.1)	26 (12.2)
Received excellent teachings	106 (46.5)	60 (28.2)
Comfortable atmosphere at the specialty department	93 (40.8)	13 (6.1)
Encounter with role model teachers	104 (45.6)	71 (33.3)
Encounter with role model junior doctors	60 (26.3)	92 (43.2)
Others**	5 (2)	14 (7.3)

*: respondents can choose more than one option
**: never had any experience at all, once got an interesting and challenging task

The data from the research results outlined in table 6 pertains to the reasons for choosing a specialization based on the influence of others. In both populations, the majority chose their specialization also influenced by advice or expectations from their parents, with 114 respondents (50%) among junior doctors and 155 respondents (72.8%) among second-semester students.

Table 6. Distribution of Reasons for Choosing Specialization Based On Advice From Others

Characteristics	Junior doctors (n (%))	Second semester (n (%))
Advice/Expectation of parents	114 (50)	155 (72.8)
Advice from senior students/residents	81 (35.5)	6 (2.8)
Advice from teachers/consultants	91 (39.9)	14 (6.6)
Influence of friends	60 (26.3)	81 (3.8)
Others**	9 (2.5)	12 (4.4)

*: respondents can choose more than one option
**: purely a desire from within, no one suggested it

The reason for choosing a specialization can also be influenced by job prospects when becoming a specialist. In table 7, the determinants of choosing a specialization based on future job prospects have been outlined. Among junior doctors, the highest reason based on job prospects is the availability of job opportunities, with 109 respondents (47.4%), while among second-semester students, the highest reason is the desire to have a high income (51.2%).

Table 7. Distribution of Reasons for Choosing Specialization Based On Future Work Condition

Characteristics	Junior doctors (n (%))	Second semester (n (%))
Job availability	108 (47.4)	83 (39.3)
Ease of opening practice	74 (32.5)	52 (24.6)
Expectation to inherit practice of my parents/relatives	63 (27.6)	38 (18)
There is a great opportunity to conduct scientific research.	77 (33.8)	51 (24.2)
There is a great opportunity to obtain a scholarship.	71 (31.1)	51 (24.2)
Expected income	86 (37.7)	108 (51.2)
Working hours	44 (19.3)	12 (5.7)
Attainable lifestyle	57 (25)	21 (10)
Influence of future health care reform	43 (18.9)	17 (8.1)
Risk of my malpractice law suits	40 (17.5)	8 (3.8)
Others**	0	3 (0.7)

*: respondents can choose more than one option
**: still could not decide

DISCUSSION

In the results of this study as shown in table 1, a higher proportion of women was found among both junior doctors (60.5%) and second-semester students (59.6%). This is in line with the study by Pickel & Sivachandran in Canada, a similar trend was observed where medical students who graduated and continued to professional education as junior doctors consistently fell within the range of 55% to 60% since 2005 (Pickel & Sivachandran, 2024).The study by (Sudewa et al., 2021) found that 74.5% of parents of medical students work in non-medical fields. Similarly, (Andarwati et al., 2017) reported that only 13% of medical students have parents who are doctors. This aligns with the current study, where most of respondents do not have parents with medical backgrounds. In contrast, (Henderson et al., 2002) noted that, despite only 9% of respondents having parents who are doctors, there is generally a positive attitude toward the medical profession, inspiring students to pursue careers as doctors.

The results in table 1, show that 90.4% of respondents' parents have a combined income of over Rp 6,000,000 per month, aligning with (Sudewa et al., 2021), where 67.6% of respondents reported similar incomes. Previous studies in 2014 and 2016 also found that most medical students come from high-income families, likely due to the substantial tuition fees and long duration of medical education. Additionally, parents' socioeconomic status and professions can influence their children's career interests, skills, and choice of medical specialization (Syakurah et al., 2014). The data from table 1 shows that 34.3% of respondents come from medium-sized cities (population 100,000–300,000), which contrasts with (Suzuki et al., 2023), where most medical students (34.6%) come from large cities (population >500,000). Suzuki in 2023 attribute this to the higher concentration of medical schools in metropolitan areas, providing easier access for urban students. However, the findings align with (Mu et al., 2021), who reported underrepresentation of students from remote areas (<1%), as seen in this study, where only 21 respondents (0.04%) came from rural areas. This disparity is due to better access to medical education in urban areas compared to smaller towns (Kumar et al., 2014)

Specialization Preferences

The results in table 2 show an overview for second-semester students, with the commonly chosen specializations being internal medicine (21.6%), surgery, and paediatric health sciences (16%), and obstetrics and gynaecology (12.2%). These results are consistent with a 2021 study

which stated that internal medicine specialists, paediatric specialists, and obstetrics-gynaecology specialists are the three most preferred specializations for pre-clinical students (Sudewa et al., 2021). Additionally, research in 2022 also mentioned that the most preferred specialization is surgery (Khamees et al., 2022).

In this study, it was also found that the most chosen specialization by female students was paediatrics, followed by surgery and obstetrics-gynaecology. In the research by (Khamees et al., 2022) similar results were found where the most chosen specializations by female students were surgery and paediatrics. Another study by (Dikici et al., 2008) states that obstetrics and gynaecology is also a dominant specialization choice among female students. Meanwhile, among male students, the most chosen specialization is internal medicine, followed by surgery, and then cardiology and vascular medicine. In the same study by (Khamees et al., 2022), majority of male students chose surgery and internal medicine. Meanwhile, in the study by (Dikici et al., 2008), the most chosen specialization was cardiology and vascular medicine.

This study observed that certain specializations, like forensic medicine and psychiatry, attract fewer students. Only 2.3% of second-semester students chose forensic medicine, while 4.6% opted for psychiatry. These findings align with (Baboolal & Hutchinson, 2007) who reported negative attitudes toward psychiatry due to students' perceived lack of ability to manage psychiatric patients. Additionally, psychiatry is considered less appealing due to its demanding lifestyle and less enjoyable work compared to other specializations.

The most popular specialties among junior doctors are surgery (11%), paediatrics and gynaecology (9.2% each), and cardiology/vascular surgery (8.5%). This aligns with (Avidan et al., 2021) who found surgery and paediatrics to be the top choices among clinical rotation participants. Despite its heavy workload, surgery remains highly sought after, likely due to its high income (Khamees et al., 2022). Female students primarily chose paediatrics, followed by cardiology/vascular surgery and general surgery. Male students choose gynaecology, surgery, and orthopaedics traumatology.

Characteristics of Specialty

This study found that 70.9% of second-semester students chose their specialization based on interest in the clinical work, consistent with the Association of American Medical Colleges survey, where 83% of students cited specialty content as a major influence (Pickel & Sivachandran, 2024). Additionally, 44.6% chose their specialization based on interest in the target population. This aligns with findings by Nojomi and Kaliszweski, where internal medicine was popular due to its potential to help family members, and paediatrics attracted students interested in caring for young patients (Nojomi et al., 2023) (Kaliszewski et al., 2024).

The results of this study show that majority of respondents among junior doctors (74.6%) choose their specialization based on interest in the clinical work of that specialization. Another reason is that the respondents feel they have a talent for that specialization (37.7%). This is consistent with Creed's research, which states that 87% of junior doctors choose a specialization because they feel aligned with and capable of that specialization (Creed et al., 2010)

Personal Reasons

Table 4 shows that 63.4% of second-semester students chose their specialization based on pre-existing interest before entering medical school, supported by data indicating 61% had a doctor as a role model. However, this contrasts with (Khamees et al., 2022), where only 23.5% of respondents had chosen their specialization beforehand, as many students need exposure to various departments to narrow their interests. Additionally, 42.7% of respondents cited family or friends with specific diseases as a motivation for their choice, aligning with(Saigal et al., 2007), who found family illness to be a significant factor influencing specialization decisions.

Table 4 also shows that 48.7% of respondents from junior doctors chose their specialization based on pre-existing interest before medical school, influenced by personal connections, as 50.4% reported knowing a close doctor or dentist. This aligns with (Olsson et al., 2019), who found that role models significantly shape specialization choices. However, it contrasts with (Khamees et al., 2022), where 37% of students chose their specialization during clinical rotations after gaining hands-on experience in various departments, which helped refine their interests.

Experience at A Medical School or During Postgraduate Training

According to table 5, 43.2% of second-semester students chose their specialization due to having a doctor as a role model, with 50.4 % confirming this influence in Table 1. This aligns with (Kaliyadan et al., 2015) who found that 31% of first-year medical students were significantly influenced by role models, such as doctors or lecturers, in their specialization decisions. Table 5 also reveals that junior doctors chose their specialization based on positive experiences during medical school, including good teaching (46.5%), exemplary instructors (45.6%), and a comfortable departmental atmosphere (40.8%). These findings align with (Yang et al., 2019), which reported that 46.93% of specialization choices were influenced by lecturer teaching. However, meeting a role model was less influential, as noted by (Gutiérrez-Cirlos et al., 2019), with only 26.3% of junior doctors citing it as a factor, consistent with this study's findings.

Advice From Others

Table 6 shows that 72.8% of second-semester students were influenced by parental advice in choosing their specialization, a much higher percentage than a study in Kuwait, where only 16.7% reported this influence (Al-Fouzan et al., 2012). While some students feel pressured by parental expectations, many prioritize their own career satisfaction. Additionally, 38% of respondents cited friends' influence as a factor, aligning with a 2015 study in Kuwait where 48% of first-year medical students reported friends' advice as a significant determinant (Kaliyadan et al., 2015). Table 6 reveals that 50% of junior doctors chose their specialization based on parental advice, which is higher than the 16.7% reported in a Kuwait study (Al-Fouzan et al., 2012). The second most common influence was advice from doctors, lecturers, or consultants (39.9%), consistent with a 2020 study where 72.5% of respondents reported positive experiences and guidance from medical professionals in their specialization choices (Al-Hariri Mohammed T1, Alghamdi Abdulrahman A1, Alkhaldi Saud K1, 2020).

Future Work Condition

Among second-semester students, 51.2% chose their specialization based on the desire for a high income, aligning with a 2019 Serbian study where over 40% of first-year students cited income as a key factor (Gazibara et al., 2019). Table 7 also shows that few respondents considered factors like malpractice risks, healthcare reforms, work-life balance, or daytime hours. This may be due to limited information and lack of direct experience with different specialization departments (Chew et al., 2011). According to table 7, 47.4% of junior doctors chose their specialization based on job availability, a finding consistent with (Zisk-Rony et al., 2023) where 40% of clinical rotation students preferred specializations with better job prospects. Additionally, 64% of respondents in the same study prioritized job security, highlighting the significant influence of job opportunities on specialization choices.

CONCLUSION

Based on the results, can be concluded that second-semester medical students tend to choose internal medicine, surgery, obstetrics and gynaecology, and paediatrics as their preferred

specializations. Their reasons included an interest in the clinical work of these specializations, having an interest in the specialization before entering medical school, meeting a doctor who served as a role model, parental advice, and the desire to have a high income. Junior doctors tend to choose surgery, pediatrics, obstetrics and gynecology, and cardiology as their preferred specializations. Their reasons included an interest in the clinical work of these specializations, having an interest in the specialization before entering medical school, receiving good teaching, parental advice, and job availability. There was a limitation in this study, as it only described the tendencies in specialization choices among students and medical interns in the Bachelor of Medicine Program, Faculty of Medicine, Udayana University. Further research should be conducted as an analytical study to determine the relationship between specialization choices and the reasons behind those choices.

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