

**JOB SATISFACTION AND ITS ASSOCIATED  
FACTORS AMONG MEDICAL AND HEALTH  
OFFICERS IN TERENGGANU**

**DR. AZIEMAH BINTI NAFSUN**

**UNIVERSITI SAINS MALAYSIA**

**2024**

# **JOB SATISFACTION AND ITS ASSOCIATED FACTORS AMONG MEDICAL AND HEALTH OFFICERS IN TERENGGANU**

by

**DR. AZIEMAH BINTI NAFSUN**

**Research Project Report submitted in partial fulfilment of the requirements for  
the degree of Master of Public Health**

**JUNE 2024**

## **ACKNOWLEDGEMENTS**

I would like to thank Allah SWT for giving me this opportunity and endlessly helping me finish this thesis. A very special appreciation and thank you goes out to my respected mentor, Associate Professor Dr. Mohd Nazri bin Shafei, for his exceptional dedication and support throughout the entire process of composing this thesis. His determined commitment to ensuring our academic success was truly captivating and inspiring.

I am honoured to express my earnest gratitude to my co-researcher, Dr. Noriah binti Mahmud, from Terengganu State Health Department. I would like to express my appreciation for all my lecturers in the Department of Community Medicine at the School of Medical Sciences, Health Campus, Universiti Sains Malaysia. My immense admiration goes to all my supportive classmates in the Master of Public Health 2023/2024 program, who have become my encouragement and inspiration throughout this journey.

Finally, to my wonderful and supportive husband, Dr. Anhar Syazwan bin Muhammad Anuar, my adorable kids, Aleesya Sara binti Anhar Syazwan, Ayana Sofya binti Anhar Syazwan, and Adelia Syifaa binti Anhar Syazwan, my parents, and in-laws, for their unending support and prayers throughout the years. Thank you for the tremendous support given to me along this journey.

## TABLE OF CONTENT

<b>ACKNOWLEDGEMENTS.....</b>	<b>ii</b>
<b>TABLE OF CONTENT.....</b>	<b>iii</b>
<b>LIST OF TABLES .....</b>	<b>vi</b>
<b>LIST OF FIGURES .....</b>	<b>vii</b>
<b>LIST OF APPENDICES .....</b>	<b>viii</b>
<b>LIST OF ABBREVIATIONS .....</b>	<b>ix</b>
<b>ABSTRAK .....</b>	<b>x</b>
<b>ABSTRACT.....</b>	<b>xii</b>
<b>CHAPTER 1 INTRODUCTION.....</b>	<b>14</b>
1.1 Background of the study .....	14
1.1.1 Role of Medical and Health Officers in Primary Health Care .....	14
1.1.2 Medical and Health Officer and Job Satisfaction.....	15
1.1.2(a) Low Job Satisfaction and Impact on Medical and Health Officers.....	16
1.1.2(b) Low Job Satisfaction and Impact on Healthcare System.....	17
1.2 Problem Statement and Rationale of Study.....	18
1.3 Research Questions .....	19
1.4 Research Objectives .....	20
1.4.1 General Objective.....	20
1.4.2 Specific Objectives.....	20
1.5 Research Hypothesis .....	20
<b>CHAPTER 2 LITERATURE REVIEW.....</b>	<b>21</b>
2.1 Job Satisfaction Among Medical Doctors.....	21
2.2 Associated Factors of Job Satisfaction Among Medical and Health Officers	22
2.2.1 Age .....	22

2.2.2	Gender .....	23
2.2.3	Body Mass Index.....	24
2.2.4	Race .....	25
2.2.5	Marital Status and Number of Children .....	26
2.2.6	Employment Status .....	26
2.2.7	Duration of Working .....	27
2.2.8	Working System and Involvement in Doing On-call.....	27
2.2.9	Monthly Income and Satisfaction with Income .....	28
2.2.10	Average Hours of Sleep .....	28
2.2.11	Social Support .....	28
2.2.12	Mental Stress .....	29
2.3	Conceptual Framework .....	31
<b>CHAPTER 3 METHODOLOGY.....</b>		<b>32</b>
3.1	Study Design .....	32
3.2	Study Location .....	32
3.3	Study Population .....	32
3.3.1	Reference Population .....	32
3.3.2	Source Population .....	32
3.3.3	Sampling Frame .....	32
3.4	Subject Criteria.....	33
3.5	Sample Size Estimation.....	33
3.5.1	Sample Size Calculation (Objective 1) .....	33
3.5.2	Sample Size Calculation (Objective 2) .....	34
3.6	Sampling Method and Subject Requirement.....	34
3.7	Study Instruments.....	36
3.8	Operational Definitions .....	37
3.9	Data Collection Method .....	37

3.10	Ethical Consideration .....	38
3.11	Statistical Analysis .....	38
3.12	Study Flowchart .....	40
<b>CHAPTER 4 RESULTS.....</b>		<b>41</b>
4.1	Descriptive Analysis .....	41
4.2	Mean Job Satisfaction Score Among Medical and Health Officers in Terengganu.....	43
4.3	Factors Associated with Job Satisfaction Among Medical and Health Officers in Terengganu.....	45
4.3.1	Simple Linear Regression (Univariable Analysis).....	45
4.3.2	Multiple Linear Regression (Multivariable Analysis) .....	47
<b>CHAPTER 5 DISCUSSIONS .....</b>		<b>51</b>
5.1	Discussions.....	51
5.1.1	Sociodemographic Among Study Participants.....	51
5.1.2	Working Characteristics .....	52
5.1.3	Lifestyle and Health Status .....	54
5.1.4	Psychosocial Factors .....	55
5.1.5	Job Satisfaction Score Among Study Participants .....	56
5.1.6	Associated Factors for Job Satisfaction Among Study Participants .....	57
5.2	Limitations of Study .....	64
<b>CHAPTER 6 CONCLUSION AND RECOMMENDATIONS .....</b>		<b>66</b>
6.1	Conclusion.....	66
6.2	Recommendations For Current Practice/System.....	67
6.3	Recommendation For Future Research .....	69
<b>REFERENCES.....</b>		<b>70</b>
<b>APPENDICES .....</b>		<b>81</b>

## LIST OF TABLES

	<b>Page</b>
Table 3. 1      Sample Size Calculation (Objective 1) .....	34
Table 3. 2      Proportionate Sample Size of Study Participants.....	35
Table 4. 1      Sociodemographic of the participants (n=200) .....	41
Table 4.2      Working Characteristics of the Participants (n=200).....	42
Table 4. 3      Lifestyle and Health Status of the Participants (n=200) .....	43
Table 4. 4      The Social Support and Mental Stress of the Participants (n=200) ...	43
Table 4. 5      Participants Responses to Job Satisfaction Scales, Items, and Response Frequencies .....	44
Table 4. 6      Associated factors of job satisfaction among M&HO in Terengganu using Simple Linear Regression Analysis (n=200) .....	46
Table 4. 7      Associated factors for Job Satisfaction among M&HO in Terengganu using Simple Linear Regression and Multiple Linear Regression (n=200) .....	48

## LIST OF FIGURES

	<b>Page</b>
Figure 2. 1    Conceptual Framework of Job Satisfaction among Medical and Health Officers in Terengganu.....	31
Figure 3. 1    Flowchart of Study .....	40



## **LIST OF APPENDICES**

- |            |  |
|------------|--|
| Appendix A | Proforma and Questionnaire for Job Satisfaction and Its Associated Factors Among Medical and Health Officers in Terengganu |
| Appendix B | Approval from Medical Research & Ethics Committee, National Malaysia Research Registry (NMRR)                              |
| Appendix C | Approval from Jawatankuasa Etika Penyelidikan Manusia (JEPeM) University Sains Malaysia                                    |
| Appendix D | Approval from Author for Using the Questionnaire   |

## **LIST OF ABBREVIATIONS**

BMI	Body Mass Index
CI	Confidence Interval
DOSM	Department of Statistics Malaysia
HCWs	Healthcare workers
JEPeM-USM	Jawatankuasa Etika Penyelidikan Manusia University Sains Malaysia
M&HO	Medical and Health Officers
MOH	Ministry of Health
NMRR	National Malaysia Research Registry
PHC	Primary Health Care
RM	Ringgit Malaysia
SD	Standard deviation
SDG	Sustainable Development Goals
SPSS	Statistical Package for the Social Sciences
UHC	Universal Health Coverage
UNICEF	United Nations Children's Fund
WHO	World Health Organization

# **KEPUASAN KERJA DAN FAKTOR YANG BERKAITAN DALAM KALANGAN PEGAWAI PERUBATAN DAN KESIHATAN DI TERENGGANU**

## **ABSTRAK**

**Pengenalan:** Memahami kepuasan kerja adalah penting untuk meningkatkan tahap penglibatan, dedikasi dan komitmen yang lebih tinggi terhadap kerja, yang akan meningkatkan kualiti keseluruhan perkhidmatan penjagaan kesihatan yang disediakan. Oleh itu, kajian ini menyiasat kepuasan kerja dan peramalannya dalam kalangan doktor yang bekerja dalam penjagaan kesihatan primer (pegawai perubatan dan kesihatan) di Terengganu.

**Metodologi:** Dalam kajian keratan rentas ini, pegawai perubatan dan kesihatan dari kesemua lapan pejabat kesihatan daerah dan jabatan kesihatan negeri Terengganu telah dipilih secara rawak dan berkadar sebagai peserta. Para peserta ini telah bekerja sekurang-kurangnya tiga bulan di pejabat kesihatan daerah dan jabatan kesihatan negeri Terengganu. Kajian ini menggunakan soal selidik yang akan dijawab sendiri: borang Soal Selidik Aspek Psikososial Kerja (PAW-M) versi Bahasa Melayu yang diisi melalui pautan Google. Soal Selidik ini terdiri daripada 15 item yang mengukur tiga aspek kerja: kepuasan kerja, sokongan sosial, dan mental tekanan kerja, dan diberi skor menggunakan skala Likert 5 mata. Data dianalisis menggunakan SPSS versi 27 dan analisis regresi linear untuk mengenal pasti faktor-faktor yang berkaitan untuk kepuasan kerja dalam kalangan peserta.

**Keputusan:** Sebanyak 200 orang pegawai perubatan dan kesihatan mengambil bahagian dalam kajian ini. Kajian menunjukkan pegawai perubatan dan kesihatan

mempunyai purata skor kepuasan kerja sebanyak 26.41 (4.7). Purata umur peserta ialah 35.45 (4.80), purata skor sokongan sosial ialah 16.67 (2.32) dan purata skor tekanan mental ialah 17.29 (2.07). Kajian mengenal pasti kepuasan pendapatan (95% CI: 0.118, 2.317,  $p=0.030$ ), status pekerjaan tetap (95% CI: 0.104, 3.403,  $p=0.037$ ) dan sokongan sosial (95% CI: 0.979, 1.432,  $p< 0.001$ ) sebagai faktor signifikan yang dikaitkan dengan kepuasan kerja dalam kalangan peserta kajian.

**Kesimpulan:** Kajian mendapati purata skor kepuasan kerja ialah 26.1, dengan faktor signifikan adalah kepuasan terhadap pendapatan, status pekerjaan tetap, dan sokongan sosial. Menangani faktor-faktor ini akan meningkatkan kepuasan kerja dalam kalangan pegawai perubatan dan kesihatan dan seterusnya meningkatkan kualiti perkhidmatan penjagaan kesihatan.

**Kata Kunci:** Kepuasan Kerja, Pegawai Perubatan dan Kesihatan, Penjagaan Kesihatan Utama.

# **JOB SATISFACTION AND ITS ASSOCIATED FACTORS AMONG MEDICAL AND HEALTH OFFICERS IN TERENGGANU**

## **ABSTRACT**

**Introduction:** Understanding job satisfaction is crucial for enhancing higher levels of engagement, dedication, and commitment to work, which will improve the overall quality of healthcare services provided. Thus, this study investigated job satisfaction and its associated factors among medical and health officers working in primary healthcare in Terengganu.

**Methodology:** In this cross-sectional study, medical and health officers from all eight district health offices and state health departments of Terengganu were randomly and proportionately selected as participants. These participants had worked for at least three months in the district health offices and state health departments of Terengganu. The study used the Malay version of the Psychosocial Aspect of Work Questionnaire (PAW-M) which was self-administered using a Google form link. It consists of 15 items that measure three aspects of work: job satisfaction, social support, and the mental stress of work, and scored using a 5-point Likert scale. The data was analyzed using SPSS version 27, and linear regression analyses were applied to identify the factors that are associated with job satisfaction.

**Results:** A total of 200 medical and health officers participated in the study. The study indicates that medical and health officers had a mean (SD) job satisfaction score of 26.41 (4.7). The mean age of the participants was 35.45 (4.80), the mean of social support was 16.67 (2.32) and the mean of mental stress was 17.29 (2.07). The study identifies that satisfied with income (95% CI: 0.118, 2.317,  $p=0.030$ ), permanent

employment status (95% CI: 0.104, 3.403,  $p=0.037$ ) and social support score (95% CI: 0.979, 1.432,  $p<0.001$ ) as the significant associated factors for job satisfaction among study participants.

**Conclusion:** The study found that the mean job satisfaction score was 26.1, associated with satisfaction of income, permanent employment status, and social support score. Addressing these factors will boost job satisfaction among medical and health officers and thus improve the quality of healthcare services.

**Keywords:** Job Satisfaction, Medical and Health Officers, Primary Healthcare.

## **CHAPTER 1**

### **INTRODUCTION**

#### **1.1 Background of the study**

##### **1.1.1 Role of Medical and Health Officers in Primary Health Care**

World Health Organization (WHO) defines primary health care (PHC) as a whole-of-government and whole-of-society approach to health that creates the foundation for the achievement of universal health coverage (UHC) and the health-related Sustainable Development Goals (SDGs). The concept of primary health care was endorsed by the World Health Organization (WHO) and United Nations Children's Fund (UNICEF) in the Alma-Ata Declaration in 1978. It emphasizes the importance of primary health care as a fundamental right of all people and highlights the need for urgent and effective implementation of primary health care throughout the world (World Health Organization and the United Nations Children's Fund (UNICEF), 2022). PHC provides basic medical and public health services to the population, making it a key component of a country's healthcare system (Ning *et al.*, 2023).

In Malaysia, PHC services exist in two parallel systems where the public primary care governed mainly by the Ministry of Health of Malaysia (MOH), has a wide geographical coverage, offers a comprehensive range of services (including health promotion, disease prevention, curative and rehabilitative care) and runs by a skill-mix of primary care providers such as family medicine specialists, medical and health officers (M&HO), physiotherapists, occupational therapists, certified nurses, and pharmacists. Meanwhile, private primary care clinics are privately owned practices mainly in urban, affluent areas with a focus on curative care and mainly consist of doctors and non-certified nursing aides (Ong *et al.*, 2022).

Malaysia with a dichotomous public-private health care system, has a total of 56 022 doctors working in MOH and 21 733 in non-MOH, which make up the ratio of doctors to the population as 1 to 420 (Azmi *et al.*, 2022). Ministry of Health Malaysia is targeting to have 1.0 doctors to 400 population and 1.0 doctors to 330 population by 2025 and 2030, respectively. It was equal to 90,057 actively practising doctors in 2025 and 114,187 in 2030 based on The Department of Statistics Malaysia (DOSM) projection that by 2025, the country will be populated by 36,022,700 people and 38,062,200 by the year 2030 (Ismail, 2023).

Medical and health officers are the doctors working in PHC. They play an important role in treating patients, planning, implementing, and re-evaluating activities and programs related to health and medicine in PHC so that people have facilities for effective, good, and quality health (Kementerian Kesihatan Malaysia, 2015). According to the Family Health Development Division Annual Report 2021, there are 7769 posts of medical and health officers which are filled and make up 101% of the ratio (MOH, 2021).

### **1.1.2 Medical and Health Officer and Job Satisfaction**

Job satisfaction has been defined as “the pleasurable emotional state resulting from the appraisal of one's job experience” and is determined by the extent to which individuals perceive that their job fulfils their expectations and desires (Locke, 1970). Job satisfaction influences various aspects of life quality, including social relationships, family connections, and perceived health status. It impacts job performance, absenteeism, and turnover rates, and in some instances, may lead to serious psychological conditions such as burnout (Montuori *et al.*, 2022). It is crucial to recognize that job satisfaction encompasses not only tangible factors such as salary and



benefits but also intangible elements like work-life balance, organizational culture, and opportunities for professional growth, and each of these components resonates differently with individuals based on their unique values, aspirations, and personal circumstances (Yong *et al.*, 2016; Azmi *et al.*, 2022).

The job satisfaction and well-being of healthcare professionals, particularly doctors in primary healthcare settings, are pivotal for the effective delivery of healthcare services and the overall functioning of healthcare systems (El Mouaddib *et al.*, 2023; Liu *et al.*, 2023). As job satisfaction of M&HO is an important component to address as part of the puzzle towards improving the quality of medical health services, ensuring high job satisfaction among M&HO is needed to ensure higher levels of engagement, dedication, and commitment with the work and subsequently improve the overall quality of healthcare services provided (Ab Rahman *et al.*, 2019).

#### **1.1.2(a) Low Job Satisfaction and Impact on Medical and Health Officers**

Job satisfaction is a very widely studied phenomenon. It is described as a pleasant or positive emotional condition derived from an employee's appreciation for his/ her occupation or work experience (Locke, 1976). Job satisfaction or dissatisfaction is affected by the relation between a person's job expectations and his/ her actual achievements.

Low job satisfaction among doctors can have far-reaching consequences beyond individual well-being, impacting various aspects of healthcare delivery and patient outcomes (Xiaoge *et al.*, 2018). Low job satisfaction can lead to decreased morale and motivation among doctors, and feeling unfulfilled or disengaged in their work can erode their sense of purpose and passion for patient care (Xiaoge *et al.*, 2018). As a result,

doctors may become less motivated to invest the necessary time and effort into their clinical responsibilities, potentially compromising their quality of care.

Moreover, doctors, by the nature of their job, are exposed to increased levels of stress and are at greater risk of experiencing anxiety and burnout. Low job satisfaction can contribute to increased levels of stress and burnout among doctors (Lu *et al.*, 2017). The demanding nature of medical practice, coupled with factors such as heavy workloads, administrative burdens, and limited resources, can exacerbate feelings of frustration and disillusionment among healthcare professionals (Lu *et al.*, 2017). Over time, chronic stress and burnout can take a toll on doctors' physical and mental health, leading to fatigue, emotional exhaustion, and even serious health conditions (Harun *et al.*, 2022).

On the contrary, job dissatisfaction among doctors has been linked to higher levels of burnout, mental health problems, and suicide (Williams and Skinner, 2003). Doctor job dissatisfaction was associated with resignation and had also been shown to have significant cost implications on healthcare organizations in terms of finding a replacement for the departing clinician (Tong *et al.*, 2018).

### **1.1.2(b) Low Job Satisfaction and Impact on Healthcare System**

Low job satisfaction can lead to employee turnover, which can become a concern for the healthcare system as it impacts the quality of service provided to patients (Roslan *et al.*, 2014). There is a negative relationship between job satisfaction and turnover intention, and job satisfaction is one of the factors that determines an employee's desire to stay or leave the organization (Rakhmitania, 2022). In PHC, the main providers, such as doctors, pharmacists, and dentists, have high turnover intentions, and one of the reasons is their job dissatisfaction (Roslan *et al.*, 2014). High

job satisfaction among physicians was associated with increased doctor-patient relationships, better-quality prescribing, higher medication adherence, and lower patient dissatisfaction (Chew *et al.*, 2013). Poor satisfaction is associated with suboptimal healthcare delivery, poor clinical outcomes, and higher staff turnover (Goetz *et al.*, 2011).

As we face an increasingly ageing population, rising non-communicable disease burden, and increasing health expenditure coupled with limited resources, the demand for PHC is expected to rise. Allocation of human resources is important to ensure the smooth functioning of the health system, increase health service accessibility, and improve health outcomes and equity (Ning *et al.*, 2023). There is a need to address ongoing health workforce shortages, including addressing health workforce attrition and improving job security (Lee *et al.*, 2023). As doctor turnover will further exacerbate existing challenges in healthcare delivery, M&HO's job satisfaction is important to ensuring retention and subsequently maintaining and improving our PHC towards achieving SDG.

## **1.2 Problem Statement and Rationale of Study**

Low job satisfaction among medical practitioners can lead to turnover, particularly among doctors. Currently, the turnover rate within the global healthcare sector stands at 20%, as reported by the Institute of Labour Market Information and Analysis (ILMIA) in 2018, with Malaysia's healthcare industry contributing 4% to this figure (ILMIA, 2018). With the maldistribution of supply between the public and private healthcare sectors, there is much greater pressure on public sector resources to cover the needs of the whole population. Hence, the high turnover rate, particularly among doctors from MOH, is a major concern. As an important constituent group of

health service providers, doctors are pivotal in shaping the quality of medical services delivered. Therefore, enhancing doctors' job satisfaction is paramount for improving the overall quality of healthcare delivery, fostering positive doctor-patient relationships, and enhancing patient satisfaction throughout the treatment journey (Xiaoge *et al.*, 2018).

Medical and health officers (M&HO) are the doctors who work in PHC (Kementerian Kesihatan Malaysia, 2015). However, there are limited studies on job satisfaction among them, especially in Malaysia. Thus, from this study, we can determine the job satisfaction score among M&HO in Terengganu and determine the factors that are associated with the job satisfaction score. We hope intervention can be implemented based on the study findings to improve their job satisfaction. Enhancing job satisfaction at the primary care level can build up doctor's motivation and efficiency, which may encourage them to stay and improve the retention rate of PHC doctors. Ensuring retention and job satisfaction would subsequently help maintain and enhance our PHC in line with achieving SDG 3.8 to achieve Universal Health Coverage.

### **1.3 Research Questions**

- 1 What is the job satisfaction scores among medical and health officers in Terengganu, Malaysia?
- 2 What are the factors associated with job satisfaction scores among medical and health officers in Terengganu, Malaysia?

## **1.4 Research Objectives**

### **1.4.1 General Objective**

To study job satisfaction scores and its associated factors among medical and health officers in Terengganu, Malaysia.

### **1.4.2 Specific Objectives**

- 1 To determine job satisfaction scores among medical and health officers in Terengganu.
- 2 To determine the factors associated with job satisfaction scores among medical and health officers in Terengganu.

## **1.5 Research Hypothesis**

There are significant associations between sociodemographics (age, gender, ethnicity, marital status and number of children), working characteristics (duration of working, employment status, type of work, extended hours, monthly income and satisfaction with income), lifestyle (average sleep hours per day and smoking), health status (BMI and presence of comorbidities), social support, as well as mental stress with job satisfaction scores among medical and health officers in Terengganu.

## **CHAPTER 2**

### **LITERATURE REVIEW**

#### **2.1 Job Satisfaction Among Medical Doctors**

Job satisfaction is a complex and multidimensional construct that varies across countries due to cultural, social, and economic differences. Many studies have been done on job satisfaction among medical doctors worldwide. However, the reported results varied due to the different methods and questionnaires. Different questionnaires may emphasize intrinsic motivation, extrinsic rewards, work-life balance, or organizational culture, influencing the overall score.

Few local studies have explored job satisfaction among similar study participants. The Quality and Costs of Primary Care (QUALICOPC) Malaysia study, a cross-sectional study conducted between August 2015 and June 2016 among doctors from 220 primary health clinics in Malaysia using a standardized questionnaire, reveals that the mean scores derived from Malaysian doctors are relatively high at 2.95. This multi-country study allows comparison, in which, despite having a heavier daily workload and more practice time, the mean job satisfaction scores of primary care doctors in Malaysia are higher than most European countries, which have a relatively stronger primary care system and health workforce density (Ab Rahman *et al.*, 2019). A cross sectional study by Azmi *et al.* (2022) conducted between October 2020 and December 2021 in all “Type 2 Health Clinics” in north-eastern Malaysia found that job dissatisfaction among the primary healthcare practitioners was 35.7%. This study uses the Job Satisfaction Survey questionnaire that measures 9 facets such as pay, promotion, contingent rewards, operating procedures, supervision, nature of work, fringe benefits,

communication, and co-workers in which the top two dissatisfaction factors are related to operating conditions (61.8%) and benefits (55.4%) (Azmi *et al.*, 2022).

Internationally, a study conducted by Goetz *et al.* (2016) among primary care physicians in Switzerland using the Warr-Cook-Wall scale reported a mean job satisfaction score of 6.16 with the highest level of satisfaction linked to the 'freedom of working method' (mean = 6.45) and lowest considering satisfaction with 'hours of work' (mean = 5.38) and 'income' (mean = 5.49). In Norway, a study by Rosta *et al.* (2019) using the Job Satisfaction Scale (JSS) showed a significant decrease in the mean job satisfaction score among Norwegian doctors from 5.52 in 2010 to 5.30 in 2017. However, the satisfaction level remained relatively high. Furthermore, a study focused on job satisfaction among primary care physicians in Western China using a structured questionnaire reported an overall satisfaction score of 3.26, among which the satisfaction scores of organizational management and job return were 3.41 and 3.09, respectively (Zhang *et al.*, 2020). A study by Liu *et al.* (2019), based on the Minnesota Satisfaction Questionnaire in China, indicated that only 35.2% of doctors reported good job satisfaction. Similarly, research in India suggested that the overall satisfaction among healthcare providers stood at a mere 20% (Deshmukh *et al.*, 2023).

## **2.2 Associated Factors of Job Satisfaction Among Medical and Health Officers**

### **2.2.1 Age**

Job satisfaction was associated with age, with older than 40 reporting higher levels of contentment in their jobs than younger ones (Manan *et al.*, 2015); Daud *et al.* (2022). It was also observed in a study conducted in China among physicians that 46 years or older had better job satisfaction than younger doctor (Zhang *et al.*, 2020). A

study by Azmi *et al.* (2022) found that a lower level of job satisfaction was associated with a younger age and an older professional getting close to retirement age. Older doctors are usually more experienced and thus tend to be more comfortable or used to current work conditions, which may lead to a greater satisfaction rate. A study by Abdullahi *et al.* (2023) found that job satisfaction dropped with age, which suggests that excitement and optimism diminish during one's profession.

On the other hand, a study by Derbel *et al.* (2017) reported that young age is connected with job satisfaction within the Tunisian medical community. Nevertheless, the effect of age on job satisfaction among primary care doctors was not significant in the study by (Ab Rahman *et al.*, 2019). A study by Daud *et al.* (2022) found that older primary care physicians report higher levels of job satisfaction than their younger counterparts. This trend can be attributed to increased experience, greater professional autonomy, and better-coping mechanisms developed over years of practice. Additionally, older doctors often have more stable work environments and have achieved a work-life balance that enhances their job satisfaction (Zhang *et al.*, 2020). On the other hand, younger doctors often encounter difficulties such as heavy workloads, administrative responsibilities, and the stresses of early career advancement, all of which can reduce their job satisfaction (Ab Rahman *et al.*, 2019). Hence, understanding the correlation between age and job satisfaction is crucial for healthcare organizations aiming to improve retention rates and doctor's well-being in primary care settings.

### **2.2.2 Gender**

There is also a correlation between gender and job happiness, with females reporting higher levels of job satisfaction than males (Atefi *et al.*, 2013). The study



conducted in rural western China found that there were gender differences in terms of job quality and job satisfaction among doctors. The study found that female doctors who participated had higher levels of job satisfaction and better job quality than male doctors (Miao *et al.*, 2017). Furthermore, female doctors rated their job satisfaction higher than male doctors (Goetz *et al.*, 2011). However, there was no association between gender and job satisfaction reported by (Daud *et al.*, 2022).

In prior research, it was shown that women are even more content with their jobs than males, although they are frequently faceless advantageous conditions, particularly in terms of money. This was to be explained by the fact that women had fewer expectations regarding their employment due to socialization. As a result, we can assume that socialization effects are still at work because the women in our group rated the same level of satisfaction or even greater than their male counterparts (Sousa-Poza and Sousa-Poza, 2000; Goetz *et al.*, 2011).

### **2.2.3 Body Mass Index**

Body Mass Index (BMI) is an important indicator for assessing weight status and a preliminary screening tool to identify potential weight-related health issues. Its association with job satisfaction can be mediated through its impact on physical and mental health, workplace discrimination, and the ability to meet job demands. However, the association between a doctor's BMI and their level of job satisfaction, on the other hand, has not been thoroughly researched. A study conducted by Jacobsen *et al.* (2022) reported that a greater BMI was linked to a poorer level of satisfaction with one's work life. According to this finding, a reduction in BMI may have a favorable influence on the satisfaction related to work-life among those who are obese. Obesity is also associated with greater rates of unemployment and a decrease in the quality of jobs