

# Job satisfaction among family medicine physicians in Saudi Arabia

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## ABSTRACT

**Objective:** Physicians are subject to chronic stressors, depression, and burnout due to long working hours, high requirements, and critical decision-making.<sup>[1-5]</sup> All those reasons contribute to the dissatisfaction of physicians. The dissatisfaction of physicians might lead to lower health-care quality.<sup>[6]</sup> Moreover, patient satisfaction is strongly affected by physician satisfaction.<sup>[7,8]</sup> This study aims to measure job satisfaction among family medicine (FM) physicians in Saudi Arabia. **Study Design:** In this cross-sectional study, we recruited 265 FM physicians working in Saudi Arabia to participate in an online survey between October 2019 and January 2019. **Results:** Results showed that more than 50% of the respondents were very satisfied with their career choice (55.5%,  $n = 147$ ). Non-Saudis who were satisfied or strongly satisfied were higher than those of Saudis ( $P = 0.035$ ) and 2.45 times more likely to be dissatisfied compared to non-Saudi respondents. Respondents from the southern region were 81% less likely to be dissatisfied than respondents from the central region (OR = 0.19,  $P < 0.05$ ). **Conclusion:** Family medicine physicians showed a high level of satisfaction with their career choice regardless of gender, age, sector public or private, marital status. This is promising for family medicine as a medical specialty. The future of health care in Saudi Arabia is driven toward general practice and primary care centers, which aligns with the future vision of Saudi Arabia 2030.

**Keywords:** Burnout, family medicine, job satisfaction, Saudi Arabia

## Introduction

Physicians are subject to chronic stressors, depression, and burnout due to long working hours, high requirements, and critical decision-making.<sup>[1-5,9]</sup> All those reasons contribute to the

dissatisfaction of physicians. The dissatisfaction of physicians might lead to lower health-care quality.<sup>[6]</sup> Moreover, patient satisfaction is strongly affected by physician satisfaction.<sup>[7,8]</sup> Physician satisfaction directly correlates with health-care system quality. Productivity, creativity, and loyalty are of great importance to any organization, and satisfaction positively affects all these factors.<sup>[10-13]</sup> Next generations consider the satisfaction of physicians as an essential aspect that guides their specialty choice. There are many definitions of satisfaction, but generally, satisfaction falls under these concepts, which are how well a physician evaluate his relationship with his patient, the value of their rewards, both psychological and material rewards, the social

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atmosphere in which they are, and the degree of enjoyment during work.<sup>[13,14]</sup>

Many factors influence the job satisfaction of physicians. For example, demographic data such as age, gender, and educational level play a role in job satisfaction. Moreover, working hours, including on-call hours, affect satisfaction negatively or positively, alongside other factors like income, years of service, and physician lifestyle. Furthermore, professional accomplishment, expression freedom, good doctor-patient relationship, and appreciation positively affect physician satisfaction. Low physician satisfaction and greater burnout rates are significantly related.<sup>[15]</sup> Medical errors and suboptimal patient care are also a consequence of physician burnout.<sup>[16,17]</sup>

Burnout is a combination of a triad of emotional exhaustion, depersonalization, and low accomplishment sense.<sup>[1,18-24,17]</sup> Emotional exhaustion is emotional depletion due to interacting with other people. Depersonalization believes that everybody follows their interest without any regard for others. Low accomplishment sense is self-feeling of low productivity and meaningless.<sup>[25]</sup>

Family physicians are the frontline of any health-care system in the world. Continuous and comprehensive health-care services for individuals and families were offered by family medicine specialty. It has a broad impact on any health-care system due to focusing on all ages, organ systems, and diseases.<sup>[26]</sup> Moreover, family medicine is responsible for treating patients and promoting health, preventing disease, and rehabilitation.<sup>[26]</sup> Satisfied family physicians support health-care systems by providing competent and cost-effective services that could be accessed easily. Patients see their family physicians more than any other physicians.

Burnout is a very considerable problem among physicians due to its high prevalence<sup>[24]</sup>—precisely, family physicians with many job burnout prevalence. More troubling studies imply that more than half of family physicians suffer from burnout.<sup>[27]</sup> Developing countries suffer the same problem, too; countries like Saudi Arabia have a significant prevalence of burnout.<sup>[28-30,25,31-33]</sup>

Saudi Arabia aims to promote general population health as a significant objective in the 2030 vision. To achieve this goal, Saudi Arabia seeks to increase its primary health-care facilities. However, to improve primary health-care facilities, Saudi Arabia intends to enroll many physicians in family programs in order to run these facilities, therefore increasing the number of family physicians among health-care providers.

Some studies have been done on job satisfaction both locally in Saudi Arabia and overseas as well. An analysis of the 2013 National Physician Survey database,<sup>[34]</sup> which took place in Canada, demonstrates that family physicians' job satisfaction is 72% among the responders.<sup>[34]</sup> The satisfaction of family physicians on a scale of 1–6 is 3.99 the results of job satisfaction and associated factors among health-care staff: a cross-sectional

study in Guangdong Province, China.<sup>[35]</sup> Locally, in Satisfaction of Family Physicians During Their Training Program, Jeddah, Saudi Arabia, Shareef surveyed the training physicians in family medicine program and found that 62% of them were satisfied with being a family physician.<sup>[36]</sup> Moreover, in “Physicians’ Job Satisfaction and its Correlates in a Tertiary Medical Care Center, Riyadh, Saudi Arabia,”<sup>[37]</sup> which was done in Riyadh on physicians in general, Bahnassy *et al.* found that the overall satisfaction was 73.4%.<sup>[37]</sup>

It is essential to maintain an appropriate and skilled workforce for any organization to function better. Our study aims to measure job satisfaction among family medicine physicians in Saudi Arabia.

## Methods

### Study design and subjects

This cross-sectional study was conducted between October 2019 and January 2019 in Riyadh, Saudi Arabia. The desired population for this study was family medicine physicians practicing in Riyadh. With assistance from the Saudi Commission for Health Specialties database, physicians were contacted to participate in this study. An online survey was sent to participants through electronic mails and a short message service to explain the research and its purpose, with informed consent required before participation and completion of the questionnaire. This study's protocol was approved by the Institutional Review Board of Imam Mohammad Ibn Saud Islamic University (Registration: HAPO-03R-001) (Project Number: 6-2021). The approval from the ethics committee was obtained (Number 6-2021).

### Sample size

According to Al-Khaldi *et al.*<sup>[38]</sup> family physicians are estimated to be 636 physicians across Saudi Arabia regions. Based on an acceptable margin of error equal to 5% and a design effect of 1 with 95% confidence, a sample size of at least 239 was required: In our study, the total number of physicians included in the analysis was 265. The sample size was calculated using Epi Info version 7.2.3.1.

### Data collection tool

The questionnaire was made in the English language, and it contained 12 questions divided into 3 sections. The first section collected personal data (sex, age, nationality, marital status). The second section obtained current working status covering the region; place of the hospital which the participant is practicing in Saudi Arabia; type of services provided from the hospital defined by either primary, secondary, or tertiary; and who are that institution's owners, either one of governments ministries or private companies and individuals. The third section concerned about the satisfaction level if the participant regrets choosing the specialty and would choose the same path if they went back in time or not. Lastly, an open question lists the main three reasons for the family physician's dissatisfaction from the participant's perspective.

## Data analysis

Statistical analysis was performed using R v 3.6.3. Categorical variables were summarized using counts and percentages. Respondents were divided into two groups based on their wish to change the family specialty medicine. Linear regression was used to assess factors associated with satisfaction with a family medicine career. Binary logistic regression analysis was used to evaluate factors related to the wish to change specialty. Independent variables included satisfaction with family medicine specialty, gender, age, nationality, employment sector, and facility (general hospital, primary care, or tertiary care). Hypothesis testing was performed at a 5% level of significance.

## Results

The study sample included 265 physicians (41.1% females and 58.9% males) who specialize in family medicine. Respondents aged 25–35 years old represented 32.1% of the study sample, while respondents aged 36–45 and 46–55 years old represented 39.6% and 20.8% of the study sample, respectively. Saudi physicians represented 47.5% of the study population. Physicians from the central region represented 32.1% of the study sample, while physicians from the eastern and northern regions represented 10.6% and 9.06% of the included physicians, respectively. Respondents from the southern and western regions represented 15.1% and 33.2% of the study population, respectively. The majority of physicians were from primary care/family practice centers (86.8%). Physicians from general and tertiary hospitals represented 8.3% and 4.9% of the study population, respectively. Physicians from hospitals following the Ministry of Health (MOH) represented 66.4% of the study sample [Table 1].

Participants were classified into two groups based on their satisfaction with professional life. Group 1 included respondents who chose satisfied or strongly satisfied, while group 2 included neutral or dissatisfied or strongly dissatisfied respondents. Binary logistic regression was used to assess factors associated with dissatisfaction (being in group 2 compared to group 1). Table 2 showed that Saudi respondents were more likely to be dissatisfied than non-Saudi respondents (OR = 2.45,  $P < 0.05$ ). This indicates that Saudi respondents are 2.45 times more likely to be dissatisfied compared to non-Saudi respondents. Respondents from the southern region were 81% less likely to be dissatisfied than respondents from the central region (OR = 0.19,  $P < 0.05$ ).

Results showed that more than 50% of the respondents were very satisfied with their career choice (55.5%,  $n = 147$ ) and that slightly more than one-quarter were somewhat satisfied (27.6%,  $n = 73$ ). Less than 10% of the respondents were very dissatisfied or somewhat dissatisfied with their career choice. The remaining 7.9% of the physicians were neither satisfied nor dissatisfied.

Results showed that one-quarter of the respondents (24.5%,  $n = 65$ ) would change specialty if they went back in time. Results

**Table 1. Descriptive statistics for the study sample**

	[ALL] <i>n</i> =265
Gender:	
Female	109 (41.1%)
Male	156 (58.9%)
Age:	
25-35 years	85 (32.1%)
36-45 years	105 (39.6%)
46-55 years	55 (20.8%)
56-65 years	16 (6.04%)
More than 65 years	4 (1.51%)
Marital status:	
Single	24 (9.06%)
Married	232 (87.5%)
Divorced	8 (3.02%)
Widow – widower	1 (0.38%)
Nationality:	
Non- Saudi	139 (52.5%)
Saudi	126 (47.5%)
Region:	
Central Regions	85 (32.1%)
Eastern Region	28 (10.6%)
Northern Regions	24 (9.06%)
Southern Regions	40 (15.1%)
Western Regions	88 (33.2%)
Facility:	
General hospital	22 (8.30%)
Primary care center/family practice	230 (86.8%)
Tertiary hospital	13 (4.91%)
Sector:	
Aramco	4 (1.51%)
MOD	32 (12.1%)
MOE	23 (8.68%)
MOH	176 (66.4%)
MOI	8 (3.02%)
National Guard	10 (3.77%)
Private sector	8 (3.02%)
Royal commission	3 (1.13%)

also showed that one-quarter of the respondents (24.1%,  $n = 64$ ) regretted choosing the current specialty.

Of the 65% of respondents who wished to change specialty, the alternative specialty was recorded by 59 respondents. Dermatology was selected by 16 (27.1%) of the respondents, while internal medicine and cardiology were chosen by 8.5%.

Results showed that only region and nationality were significantly associated with satisfaction with a family medicine career. The average satisfaction score was significantly higher across physicians from the southern region than physicians from the central region ( $B = 0.49$ ,  $P < 0.05$ ). The average satisfaction score was significantly lower across Saudi physicians than non-Saudi physicians ( $B = -0.43$ ,  $P < 0.05$ ). This indicates that the average satisfaction score is lower by 0.43 points in Saudi physicians compared to non-Saudi physicians. None of the remaining

**Table 2. Job satisfaction in relation to demographic variables**

	Very Dissatisfied n=10	Somewhat Dissatisfied n=14	Neither Satisfied Nor Dissatisfied n=21	Somewhat Satisfied n=73	Very Satisfied n=147	P
Gender:						0.970
Female	4 (3.67%)	6 (5.50%)	7 (6.42%)	30 (27.5%)	62 (56.9%)	
Male	6 (3.85%)	8 (5.13%)	14 (8.97%)	43 (27.6%)	85 (54.5%)	
Age:						0.348
25-35 years	3 (3.53%)	7 (8.24%)	10 (11.8%)	24 (28.2%)	41 (48.2%)	
36-45 years	3 (2.86%)	3 (2.86%)	8 (7.62%)	29 (27.6%)	62 (59.0%)	
46-55 years	2 (3.64%)	4 (7.27%)	3 (5.45%)	12 (21.8%)	34 (61.8%)	
> 55	2 (10.0%)	0 (0.00%)	0 (0.00%)	8 (40.0%)	10 (50.0%)	
Marital status:						0.185
Single	1 (4.17%)	3 (12.5%)	2 (8.33%)	5 (20.8%)	13 (54.2%)	
Married	9 (3.88%)	11 (4.74%)	16 (6.90%)	66 (28.4%)	130 (56.0%)	
Divorced	0 (0.00%)	0 (0.00%)	3 (37.5%)	2 (25.0%)	3 (37.5%)	
Nationality:						0.035
Non-Saudi	2 (1.44%)	4 (2.88%)	9 (6.47%)	38 (27.3%)	86 (61.9%)	
Saudi	8 (6.35%)	10 (7.94%)	12 (9.52%)	35 (27.8%)	61 (48.4%)	
Region:						0.106
Central Regions	2 (2.35%)	9 (10.6%)	8 (9.41%)	18 (21.2%)	48 (56.5%)	
Eastern Region	3 (10.7%)	3 (10.7%)	1 (3.57%)	9 (32.1%)	12 (42.9%)	
Northern Regions	1 (4.17%)	0 (0.00%)	2 (8.33%)	10 (41.7%)	11 (45.8%)	
Southern Regions	0 (0.00%)	0 (0.00%)	3 (7.50%)	10 (25.0%)	27 (67.5%)	
Western Regions	4 (4.55%)	2 (2.27%)	7 (7.95%)	26 (29.5%)	49 (55.7%)	
Facility:						0.437
General hospital	3 (13.6%)	1 (4.55%)	0 (0.00%)	5 (22.7%)	13 (59.1%)	
Primary care center/family practice	7 (3.04%)	13 (5.65%)	20 (8.70%)	64 (27.8%)	126 (54.8%)	
Tertiary hospital	0 (0.00%)	0 (0.00%)	1 (7.69%)	4 (30.8%)	8 (61.5%)	
Practice affiliation						0.246
MOD	2 (6.25%)	2 (6.25%)	1 (3.12%)	10 (31.2%)	17 (53.1%)	
MOE	0 (0.00%)	0 (0.00%)	2 (8.70%)	6 (26.1%)	15 (65.2%)	
MOH	7 (3.98%)	8 (4.55%)	16 (9.09%)	53 (30.1%)	92 (52.3%)	
MOI	1 (12.5%)	2 (25.0%)	0 (0.00%)	2 (25.0%)	3 (37.5%)	
National Guard	0 (0.00%)	2 (20.0%)	1 (10.0%)	1 (10.0%)	6 (60.0%)	
Other	0 (0.00%)	0 (0.00%)	1 (12.5%)	1 (12.5%)	6 (75.0%)	
Private sector	0 (0.00%)	0 (0.00%)	0 (0.00%)	0 (0.00%)	8 (100%)	

Chi-square and Fisher-Exact tests were used to assess the association between demographic characteristics and satisfaction with family medicine as a career choice. Results showed a statistically significant positive association between nationality and satisfaction with family medicine as a specialty. The % of Non-Saudis who were satisfied or strongly satisfied were higher than those of Saudis ( $P=0.035$ ). None of the remaining factors showed a statistically significant association with satisfaction.

factors was significantly associated with satisfaction with the current specialty.

Results showed that satisfaction score was significantly associated with the wish to change the specialization ( $OR = 0.27, P < 0.001$ ). This indicates that the odds of wishing to change the specialty decrease by 73% for each 1 unit increase in satisfaction, that is, higher satisfaction is associated with lower odds of wanting to change specialty. Results also showed that respondents from the eastern region were less likely to wish to change family medicine as a specialty than respondents from the central region ( $OR = 0.14, P < 0.05$ ). None of the remaining factors was significantly associated with the wish to change family medicine as a career specialty.

## Discussion

Our study found that more than 80% of participants were satisfied (somewhat satisfied—very satisfied) with their specialty. The most satisfied participants were more likely to

be Saudi ( $P = 0.003$ ) and live in the southern region of Saudi Arabia ( $P = 0.019$ ). Participants who wished to change their careers were more likely to be associated with a lower satisfaction score ( $P < 0.001$ ) and to be from the eastern region ( $P = 0.014$ ). The participants who were dissatisfied with their specialty and wanted to change specialties preferred dermatology, followed by internal medicine and cardiology. Perhaps the reasons for wishing to change specialties include income<sup>[39-44]</sup> and work-life balance.<sup>[45,46]</sup>

Our findings align with what Address *et al.*<sup>[39]</sup> found in his study, conducted in a tertiary hospital in Saudi Arabia. The majority of family medicine physicians were satisfied with their jobs. Moreover, a survey conducted on Pakistani family medicine physicians by Ashraf *et al.*<sup>[40]</sup> showed similar results to our study, where 74% were satisfied with their career choice. In support of our findings, the survey conducted in the United States of America by Hueston<sup>[41]</sup> showed that 82% of family medicine physicians were satisfied with their specialty.



In contrast to García-Peña *et al.*<sup>[42]</sup> in Mexico's findings where there was a difference in satisfaction among family medicine physicians between the private and public sectors, our study showed no significance in the difference of satisfaction between the sectors in Saudi Arabia. Moreover, our findings show that family medicine physicians were significant in the eastern region and the wish to switch medical specialties. However, the study conducted by Bawakid *et al.*<sup>[43]</sup> found that the family medicine physicians in the eastern region were satisfied in their specialty.

## Conclusion

Family medicine physicians showed a high level of satisfaction with their career choice regardless of gender, age, sector public or private, marital status. However, the region as a factor seems to affect the satisfaction level. A percentage of 83.1 of participants were either very satisfied or somewhat satisfied compared to the dissatisfied participants who account for less than 10%. This is promising for family medicine as a medical specialty, predominantly that the future of health care in Saudi Arabia is driven toward general practice and primary care centers, which aligns with the future vision of Saudi Arabia 2030.<sup>[47]</sup> To promote this satisfaction among family physicians, we recommend that further research be done to explore the causes of dissatisfaction and find possible solutions for such reasons.

## Limitations

This study's results cannot be generalized to all practicing family physicians due to the small sample size. A convenient sampling technique was used to recruit participants, which could affect the generalizability of the results.

## Declaration of patient consent

The authors certify that they have obtained all appropriate participant's consent forms. In the form, the participants have given his/her/their consent for his/her/their images and other clinical information to be reported in the journal. The participants understand that their names and initials will not be published and due efforts will be made to conceal their identity, but anonymity cannot be guaranteed.

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## Conflicts of interest

There are no conflicts of interest.

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