Level and determinants of job satisfaction among Saudi physicians working in primary health-care facilities in Western Region, KSA

AbdulLateef A. Allebdi¹, Hanan M. Ibrahim²,³

¹Community Medicine Specialist, Saudi Red Crescent Authority – Makkah Region Branch, Jeddah, ²Department of Family and Community Medicine, Taibah University, Saudi Arabia, ³Department of Public Health and Community Medicine, Cairo University, Egypt

ABSTRACT

Introduction: Job satisfaction is an important factor influencing the health of workers and is directly related to quality of care. Objectives: To assess the level of job satisfaction and factors contributing to dissatisfaction of Saudi physicians in primary health care centers in Jeddah. Methods All Saudi physicians working in primary health care centers in a city in the Western region, KSA, were included in this web-based survey using the “Job Satisfaction Survey” questionnaire adopted by Paul E. Spector (1994). In addition, socio-demographic data (age, sex, marital status, work facilities, qualification, work experience and income) were collected (response rate 83%). Results: 63% of the physicians are satisfied about the nature of work in the primary health care centers, while 25.2% were satisfied about the payment. A large proportion of respondents were dissatisfied about the contingent rewards and fringe benefits (83.2%, 76.5% respectively). None of the specialists were satisfied about the work compared to 10.6% of the general practitioners. Conclusion: Slightly less than half of the physicians are satisfied. Financial incentives (contingent rewards and fringe benefits) impose a negative impact on job satisfaction for primary care physicians. On the other side, the nature of work has had the most positive impact on job satisfaction. Specialists were found to have less satisfaction. Investing in the physicians’ satisfaction about the nature of work in the primary healthcare facilities to create a sense of ownership that would be reflected on the quality of patient care is required. There is a need to conduct further studies on the fiscal privileges that lead to job satisfaction among physicians.

Keywords: Job satisfaction, primary health care, Saudi physicians

Introduction

Job satisfaction is the extent to which people like (satisfaction) or dislike (dissatisfaction) their job. It describes the general affective reaction that individuals hold about their job. It is also worker's sense of achievement and success. It is generally perceived to be directly linked to productivity as well as to personal well-being. Job dissatisfaction has negative impacts on the organizational structure and work flows of establishments, such as greater nonconformance to procedures and guidelines and higher employee absence and turnover, decline in productivity, increase in work accidents, deterioration of mental and physical health of the employees, and intraorganizational conflict. Physicians’ job satisfaction was found to be positively correlated with patient satisfaction and quality of health care. Correspondingly, they were more committed to safety management policies and consequently registered a lower rate of accident involvement.

A primary-care physician is the first medical practitioner contacted by a patient, due to several factors such as ease of access and familiar professional interactions.
communication, accessible location, familiarity, and increasingly issues of cost and managed care requirements. Patients whose physicians report greater practice satisfaction describe significantly greater satisfaction with their care. The Rand Medical Outcomes Study demonstrated a significant positive correlation between physician satisfaction and patient adherence to physician care recommendations among patients with major chronic conditions.\[8\]

If an organization is aiming at the most effective use of its resources, including human resources, then it is of ultimate importance to maximize employees’ productivity by considering and addressing the factors that would inversely affect their job satisfaction.\[8\] The aim of this study is to assess the level of job satisfaction and factors contributing to dissatisfaction of Saudi physicians working in primary health-care (PHC) centers at Jeddah thus, helping to plan corrective actions that would enhance their job satisfaction and thus contribute to a higher work productivity in the future.

**Objectives**

1. To investigate the level and job satisfaction facets among Saudi physicians working in PHC facilities in a city in Western region, Kingdom of Saudi Arabia (KSA).
2. To explore the determinants of job satisfaction among them.

**Materials and Methods**

**Ethics**

An administrative approval to conduct the study was sought from the Directorate of Health Affairs in the selected city in the Western Region, KSA. An ethical approval from the ethical committee of Directorate of Health Affairs in Jeddah was obtained prior to conduction of the study in 18 January 2016 (# A00321). An informed consent was included in the web based survey that had to be read and approved by the participant before starting to fill the questionnaire.

**Study design**

This is an analytical cross-sectional study.

**Study setting and study period**

This study was conducted during the time period from 1/3/2016 to 31/9/2016 involving a city in the Western region, KSA. There are 45 PHC centers in the city that serve as the first level of care.

**Study participants and sampling**

The target population is the Saudi physicians from all specialties who are working in PHC centers and are registered in the Directorate of Health Affairs in the selected city, KSA. All of the 143 Saudi physicians with available contact information registered in the Directorate of Health Affairs were included in the study as a total population sample. Inclusion criteria for the study included Saudi nationality and having available contact information in the Directorate of health affairs registries in Jeddah.

**Data collection**

An invitation to participate in the study was sent to all of the 143 physicians who have contact information in the database of the health directorate. The invitation was sent by WhatsApp application as well as by SMS. This invitation contained information about the study objectives, benefits, and confidentiality assurance, as well as the researcher’s contact information and specialty. The invitation contained as well the link to the questionnaire page on Google drive. Invitation process started on the 1st of April 2016 and ended in the 31st of May 2016. It was sent to all of the physicians and then it was repeated three times every two weeks for reminder. Only 119 posts were received from the web survey page. Thus, 119 physicians participated in the study out of a total 143, who received the invitation with a response rate of 83%. There were no missing data from all participants because all fields were required to be answered for the questionnaire to be submitted.

A self-administrated, web-based questionnaire was distributed to the participants. It consists of three parts, the first one is a letter (informed consent) explaining the purpose of the study and contains the information of the researcher and at the end, there is a request for approval to participate in the study and therefore proceed to the second part of the web survey. Only those who agree to participate in the study can proceed to the second and third parts. The second part contains the demographic data (age, sex, marital status, place of work, job, qualification (specialist or general practitioner), duration of work experience, and income). The third part consists of The Job Satisfaction Survey (JSS) questionnaire.\[8\] This well-established instrument has been repeatedly investigated for reliability and validity. It involves nine subscales that relate moderately to well between each other with an internal consistency score of 0.60 for coworker to 0.91 for the total scale. Overall, an average on 0.70 for internal consistency was obtained out of a sample of 3067 individuals. Over 18-month time period, an internal consistency of 0.37–0.74 was calculated for a smaller sample of 43 workers. A correlation of 0.61 for coworkers to 0.80 for supervision was calculated between five of the job satisfaction subscales and some of the Job Description Index.\[8\]

The JSS instrument involves 36 items that represent 9 facets (subscales) to assess employee attitudes about the job and aspects of the job. These nine subscales which represent work conditions are pay, promotion, supervision, fringe benefits, contingent rewards (performance-based rewards), operating procedures (required rules and procedures), coworkers, nature of Work, and communication. Each facet is assessed with four items, and a total score is computed from all items. A summated rating scale format is used, with six choices per item ranging from “disagree very much” to “agree very much” as follows: (1) disagree very much, (2) disagree moderately, (3) disagree slightly, (4) agree slightly, (5) agree moderately, and (6) agree very much. Items are written in both directions, so about half items are reverse scored. Agreement with positively worded items and disagreement with
negatively worded items would represent satisfaction, whereas disagreement with positive-worded items and agreement with negative-worded items represent dissatisfaction.

Scoring system for the 4-item subscales, as well as the 36-item total score: Scores with a mean item response of 4 or more represents satisfaction, whereas mean responses of 3 or less represent dissatisfaction. Mean scores between 3 and 4 are ambivalence. The summed scores for the 4-item subscales would range from 4 to 24. Scores of 4 to 12 are dissatisfied, 16 to 24 are satisfied, and between 12 and 16 are ambivalent. For the 36-item total where possible scores range from 36 to 216, the ranges are 36–108 for dissatisfaction, 144–216 for satisfaction, and between 108 and 144 for ambivalent.\(^7\)

Statistical analysis

The Statistical Package of Social Science Software (SPSS version 20) was used for data entry and analysis. Descriptive statistics are presented as frequencies and percentages for categorical data, arithmetic mean, and standard deviation for continuous data after ensuring normality using Shapiro–Wilk test. Chi-square test was used to test association between job satisfaction level (outcome) and all independent factors whenever the data fulfill the condition that no more than 20% of the cells have expected count less than five and/or no one cell with expected count less than one. In case of violating these conditions, either collapse of the cells was made without substantial distorting data such as the qualifications of the physicians, which was grouped into either Bachelor or postgraduate degree. Otherwise, whenever collapse was found not practical as it might distort the categories of the variables, the results were presented in a descriptive form, with a note “NA” which means that Chi square not applicable, because of the violation of its conditions. The independent T-test and ANOVA test were carried out to investigate the association between the level of satisfaction and continuous independent variables. The level of significance was set at a \(P\) value of < 0.05.

Results

The mean age of the participating physicians accounted for 32.8 ± 5.6 years, ranging between 23 and 49 years; female physicians represent 59.7% of the group. Nearly 28.8% of physicians are specialists and 53.8% of them had a salary less than 20,000 Saudi Riyal. The mean duration of work experience is 2.0 ± 0.8 years [Table 1].

While 63% of the physicians expressed that they are satisfied about the nature of work in the PHC centers, much lower percentages of them were satisfied about operating conditions (8.4%), and while one quarter of them (25.2%) indicated that they were satisfied about the payment, only 6.7% were satisfied about the contingent rewards, and 9.2% were satisfied about the fringe benefits [Table 2].

The mean ± SD was calculated for each facet of job satisfaction and displayed in Figure 1. It shows that out of a maximum of 24 points which indicates definite satisfaction, the highest level of satisfaction was noticed toward the nature of work in the PHC centers (16.5 ± 5.1), which denote that it was the only facet in the range of satisfaction (16–24). Meanwhile, four facets showed mean values within the range of ambivalent (12–16), namely, supervision, coworkers, pay, and communication, while the rest four facets fell in the range of dissatisfaction, namely, operating condition, promotion, fringe benefits, and contingent rewards.

When the physicians were requested to rate their overall level of satisfaction about work in the PHC centers, only nine (7.6%) of them expressed that they were satisfied, and almost one half of them (49.6%) were ambivalent, and the rest (42.9%) were dissatisfied [Figure 2].

### Table 1: General characteristics and duration of work of the participating physicians in PHC facilities in a city in the Western region, KSA

| Characteristic          | n=119 | Percentage |
|-------------------------|-------|------------|
| Gender                  |       |            |
| Male                    | 48    | 40.3       |
| Female                  | 71    | 59.7       |
| Marital status          |       |            |
| Married                 | 98    | 82.4       |
| Single                  | 19    | 16.0       |
| Divorced                | 2     | 1.7        |
| Qualification           |       |            |
| No specialty            | 85    | 71.4       |
| Specialist              | 34    | 28.8       |
| Salary                  |       |            |
| <20,000 SR              | 64    | 53.8       |
| 20,000–<25,000 SR       | 24    | 20.2       |
| 25,000–<30,000 SR       | 19    | 16.0       |
| 30,000–<35,000 SR       | 6     | 5.0        |
| 40,000–<45,000 SR       | 3     | 2.5        |
| 45,000+ SR              | 3     | 2.5        |
| Work experience (mean±SD)| 2.0±0.8 years |
| Duration of work in the same PHC facility (mean±SD) | 1.5±0.7 years |

### Figure 1: Mean scores of the job satisfaction survey facets among physicians working in the primary health-care centers in a city in the Western region, KSA
Although the satisfied physicians were younger (29.9 ± 4.1 years) than the ambivalent (33.5 ± 6.3 years) or the dissatisfied (32.7 ± 5.0 years), ANOVA test revealed that this difference is not statistically significant, $P > 0.05$ [Table 3].

Table 3 also demonstrates that none of the specialists was satisfied compared to 10.6% of the physicians who are not specialists (general practitioners) and this finding is statistically significant, $P = 0.029$. The longer the duration of work in the same PHC facility, the higher is the dissatisfaction, $P = 0.054$.

On the other hand, percentages of satisfied physicians were higher among males (8.3%) and unmarried (9.5%); however, these differences were not statistically significant, $P > 0.05$. It was observed that the highest is the monthly income of the physician, the lowest is the satisfaction, though this difference is not statistically significant, $P > 0.05$.

## Discussion

Up to our knowledge, this is the first study conducted in KSA among Saudi physicians working in PHC centers in a city in the Western region to assess the level of job satisfaction and associated factors. In the current study, only 7.6% of physicians were satisfied, while 42% were dissatisfied about their job. Al Juhani and Kishk conducted a study among PHC physicians in Al-Madinah Al-Monawarah and reported that 52.4% of the physicians were dissatisfied.$^{[9]}$ Aldress et al. conducted a study among tertiary care physicians in Riyadh and reported 30% of physicians are dissatisfied which a lower dissatisfaction than the current study taking into consideration the differences in work conditions and duties in tertiary care facilities compared to PHC centers.$^{[10]}$

According to present study, contingent rewards and fringe benefits represent the main domains leading to job dissatisfaction of PHC Saudi physicians in Jeddah. This result may be due to the difficulty of obtaining financial incentives. Many studies showed that the salary and financial incentives have much effect on job satisfaction. A study conducted by Shi et al. in China showed that primary-care workers were least satisfied with their income level (only 8.6% are either satisfied or very satisfied).$^{[11]}$ Conversely, 63% of participants in the present study were satisfied about the nature of work in PHC centers. Nevertheless, 70.6% of them were dissatisfied about operating conditions. Similarly, a study done by Gu et al. showed that physicians were more satisfied with management conditions and less satisfied with working conditions and job rewards.$^{[12]}$

As regards the factors associated with job satisfaction, many studies have shown that older workers are more satisfied than younger workers. Al Juhani and Kishk demonstrated that physicians aged 50 years and older had higher overall mean score of job satisfaction than those in younger age group of 20–35 years (mean score of job satisfaction $68.65 \pm 12.85$ vs. $62.05 \pm 12.25$, respectively) although this finding was not statistically significant ($P = 0.219$).$^{[9]}$ The current study documents that age is not associated with job satisfaction as younger physicians (mean age 29.9 ± 4.1 years) were satisfied while the mean age of those dissatisfied was higher (32.7 ± 5.0 years) but this did not reach statistical significance as well.

The percentage of satisfaction among female physicians in the current study was found to be lesser than that of males, although not statistically significant. This is in agreement with the study in Al-Madinah Al-Monawarah, KSA, that showed similar finding as female physicians had a lesser mean
satisfaction score than males (64.49 ± 12.64 vs. 66.32 ± 12.94, \( P = 0.471 \)). The later study also documents that specialists have higher mean satisfaction score (68.48 ± 13.92) compared to general practitioners (64.61 ± 12.35), but this was not statistically significant (\( P = 0.188 \)). McGlone and Chenoweth reported that only 50% of general practitioners were satisfied while the current study confirms that specialists have significantly higher dissatisfaction than general practitioners (\( P = 0.029 \)).

A multicenter cross-sectional survey in Saudi Arabia showed that years of work experience is positively independently associated with greater job satisfaction (64.61 ± 12.35), but this was not statistically significant (\( P = 0.188 \)). McGlone and Chenoweth reported that only 50% of general practitioners were satisfied with their work while the current study confirms that specialists have significantly higher dissatisfaction than general practitioners (\( P = 0.029 \)).

Overall, this study shows that the percentage of satisfied physicians is less than half. The highest level of satisfaction was noticed toward the nature of work in the PHC centers, while the range of dissatisfaction is mainly toward operating conditions, promotion, fringe benefits, and contingent rewards. Policy makers would invest in the areas of satisfaction and undertake actions to improve areas of dissatisfaction among physicians to reach a higher quality of care.

### Table 3 Differentials of the overall level of job satisfaction according to sociodemographic characteristics and work experiences and duration of work of the PHC physicians in Jeddah, KSA (n=119)

| Level of Satisfaction | Satisfied | Ambivalent | Dissatisfied |
|-----------------------|-----------|------------|--------------|
|                        | No   | N   | %   | N   | %   | N   | %   | N   | %   |
| Gender                |       |     |     |     |     |     |     |     |     |
| Male                  | 4    | 22  | 8.3 | 22  | 45.8| 22  | 45.8| 0.457| 0.796|
| Female                | 5    | 37  | 7.0 | 29  | 40.8|     |     |     |     |
| Marital status        |       |     |     |     |     |     |     |     |     |
| Married               | 7    | 51  | 7.1 | 40  | 52.0| 11  | 52.4| 1.348| 0.510|
| Unmarried             | 2    | 8   | 9.5 | 11  | 52.4|     |     |     |     |
| Qualification         |       |     |     |     |     |     |     |     |     |
| No specialty          | 9    | 45  | 10.6| 31  | 65.6| 5   | 10.6| 7.109| 0.029*|
| Specialist            | 0    | 14  | 0   | 20  | 58.8|     |     |     |     |
| Job title             |       |     |     |     |     |     |     |     |     |
| General practitioner  | 5    | 26  | 9.6 | 21  | 40.4|     |     |     |     |
| Resident              | 4    | 21  | 10.3| 14  | 35.9|     |     |     |     |
| Specialist            | 0    | 5   | 0.0 | 11  | 68.8|     |     |     |     |
| Consultant            | 0    | 7   | 0.0 | 5   | 41.7|     |     |     |     |
| Monthly income        |       |     |     |     |     |     |     |     |     |
| <20,000 SR            | 7    | 34  | 10.9| 23  | 55.9| 23  | 55.9| 3.993| 0.136|
| ≥20,000 SR            | 2    | 25  | 3.6 | 28  | 50.0|     |     |     |     |
| Age (years) (mean±SD) | 29.9±4.1| 33.5±6.3| 32.7±5.0|     |     |     |     | 0.200|
| Overall duration of work experience (years) (mean±SD) | 1.7±0.7| 2.0±0.8| 2.1±0.8|     |     |     |     | 0.271|
| Duration of work experience in the same PHC facility (years) (mean±SD) | 1.1±0.3| 1.6±0.7| 1.4±0.7|     |     |     |     | 0.054*|

### Conclusion

Slightly less than half of the physicians are satisfied. Financial incentives (contingent rewards and fringe benefits) were found to impose a negative impact on job satisfaction for Saudi physicians. On the other side, the nature of work had the most positive impact on job satisfaction for Saudi physicians. Specialists were found to have less satisfaction. There is evidence for the need to address these factors and implement corrective actions for increasing the level of satisfaction among Saudi physicians. It is recommended to invest in the doctor’s satisfaction about the nature of work in the PHC facilities to create a sense of ownership that would be reflected on the quality of patient care. There is a need to conduct further studies on the fiscal privileges that lead to job satisfaction among physicians.

### Financial support and sponsorship

Nil.

### Conflicts of interest

There are no conflicts of interest.

### References

1. Lohia S, Bedi P. An analysis of job satisfaction in CE Infosystems Pvt Ltd. Glob J Finance Manag 2014;6:691-6.
2. Lam T, Baum T, Pine R. Study of managerial job satisfaction in Hong Kong’s Chinese restaurants. Int J Contemp Hosp
3. McNeese-Smith D. Increasing employee productivity, job satisfaction, and organizational commitment. Hosp Health Serv Adm 1996;41:160-75.

4. Gyekye SA. Workers’ perceptions of workplace safety and job satisfaction. Int J Occup Saf Ergon 2005;11:291-302.

5. Crosson FJ, Casalino L. Physician Practice Satisfaction: Why We Should Care [Internet]. Health Affairs Blog. 2013 [cited 2015 Oct 11]. Available from: http://healthaffairs.org/blog/2013/05/09/physician-practice-satisfaction-why-we-should-care/.

6. Brunetto Y, Farr-Wharton R. Using social identity theory to explain the job satisfaction of public sector employees. Int J Public Sect Manag 2002;15:534-51.

7. Spector PE. Job Satisfaction Survey, JSS Page [Internet]. 1994 [cited 2015 Oct 10]. Available from: http://shell.cas.usf.edu/~pspector/scales/jsspag.html.

8. Spector PE. Measurement of human service staff satisfaction: Development of the job satisfaction survey. Am J Community Psychol 1985;13:693-713.

9. Al Juhani AM, Kishk NA. Job satisfaction among primary health care physicians and nurses in Al-madinah Al-munawwara. J Egypt Public Health Assoc 2006;81:165-80.

10. Aldrees T, Al-Eissa S, Badri M, Aljuhayman A, Zamakhshary M. Physician job satisfaction in Saudi Arabia: Insights from a tertiary hospital survey. Ann Saudi Med 2010;35:210-3.

11. Shi L, Song K, Rane S, Sun X, Li H, Meng Q. Factors associated with job satisfaction by Chinese primary care providers. Prim Health Care Res Dev 2014;15:46-57.

12. Gu J, Zhen T, Song Y, Xu L. Job satisfaction of certified primary care physicians in rural Shandong Province, China: A cross-sectional study. BMC Health Serv Res 2019;19:75.

13. McGlone SJ, Chenoweth IG. Job demands and control as predictors of occupational satisfaction in general practice. Med J Aust 2001;175:88-91.

14. Abu-Helalah ASM, Jorissen LS, Niaz K, Al Qarni AMA. Job stress and job satisfaction among health care professionals. Eur Sci J 2014;32:156-73.