

## Factors Affecting Job Satisfaction among Doctors in Sana'a City, Yemen

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**Abstract:** This study aimed to determine the overall level and aspects of job satisfaction among doctors in Yemen. The 11 item Warr-Cook-Wall scale was used to measure ten aspects of work and the overall job satisfaction among 563 doctors in Sana'a City, Yemen. The majority of doctors (61%) were dissatisfied with their job. Doctors were less satisfied with remuneration, salary given and physical working conditions. Females, non specialists and those who did not have their own houses were less satisfied by their job. Job satisfactions among doctors should be taken into consideration by the management to improve health care.

**Key words:** Doctors • Job satisfaction • Yemen

### INTRODUCTION

Job satisfaction can play an important role in the health of workers and their performance. Workers who stated they were satisfied with their work had been found to be healthier than those who did not [1]. Previous research suggests that job satisfaction and job performance were positively correlated [2]. Job dissatisfaction leads to increased absenteeism, lower productivity and increased turnover. Job satisfaction is correlated with patient satisfaction with the services they receive, patient compliance and continuity of care [3].

The perception of health care practitioners may affect the way they treat patients both medically and personally [4]. Dissatisfied physicians were much more likely to report difficulties in caring for patients, continuing good doctor-patient relationship, spending adequate time with patients and providing quality care [5]. Doctor's job satisfaction can also affect patient's satisfaction. Patients of physicians who rated themselves to be very or extremely satisfied with their work were more satisfied with their health care and most recent physician visit [6].

In a systematic literature review by Irene *et al.* (2006) [7], the most important aspects of job satisfaction were the amount of responsibility given, the freedom to choose own method of work, the amount of variety in work, colleagues and fellow worker (s), remuneration, the physical working conditions, the opportunity to use ability, rate of pay, the recognition good work and hours of work.

Republic of Yemen is a Middle Eastern developing country located on the Arabian Peninsula in Southwest Asia with a population of 23, 5 million people. No study has been conducted on job satisfaction among doctors in Yemen. This study has been conducted to determine the overall level of job satisfaction and the different aspects of job dissatisfaction among Yemeni doctors. This study was a part of a project that investigated burnout, psychological morbidity and job satisfaction among doctors in Sana'a city, Yemen.

### MATERIALS AND METHODS

There are four main government hospitals in Sana'a city. A total of 800 questionnaires were distributed to all doctors in those hospitals. Doctors who worked in the

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private sector only, those with less than one year duration of work and non Yemeni doctors were excluded from this study. Five hundred sixty three doctors returned complete questionnaire with observed response rate 70.4%. Approval of this study was obtained from the research committee of UKM Medical Centre. Objectives and benefits of the study were explained to respondents in a written information sheet included with the questionnaire. They assured that participation is voluntary and information obtained would be managed in a strictly confidential manner by the researchers. Consent was obtained from all participants.

**Research Instruments:** A self administrated questionnaire was used in this study. It consisted of two parts; Job Satisfaction and Socio-demographic and work characteristics.

The 11 item Warr-Cook-Wall scale was used to measure ten aspects of work and the overall job satisfaction (global rating of job satisfaction). Each item was rated on a seven-point Likert scale, where a value of one denotes extreme dissatisfaction and a value of seven reflects extreme satisfaction [5, 8-10]. The scores were summed so as to show each participant's satisfaction level ranging from 10 to 70.

Questions on socio-demographic factors included sex, age, qualification (junior general practitioners or specialist), marital status, type of residence and chewing *khat*. Chewing the fresh leaves of *khat* (*catha edulis*) is common and legal in East Africa and Yemen. It is used as a stimulant as it contains cathine and cathinone that have an amphetamine like effect. Work characteristics included length of employment, type of employment, number of working hours per week and total income.

**Statistical Analysis:** Data analysis was done using "Statistical Package for Social Sciences (SPSS version 16). All the continuous socio-demographic and work characteristic variables were categorized. Job Satisfaction scores were summed and the mean and median were computed. In addition, total job satisfaction was dichotomized into two categories; satisfied and not satisfied. Frequency distribution and descriptive statistics of socio-demographic and work characteristics variables were obtained to provide the sample profile. Reliability analysis for the ten items of job satisfaction was done. As total

score of job satisfaction was not distributed normally, we used Mann-Whitney test (in case of two groups) and Kruskal-Wallis test (in case of more than two groups) to compare the level of job satisfaction across the socio-demographic and work characteristic variables.

## RESULTS

### **Socio-Demographic and Work Characteristics:**

Three hundred and thirty five (59.5%) of the respondents were males, 169 (30.0 %) were specialists, 195 (34.6%) were single, 352 (62.6%) were married and 16 (2.8%) were divorced or widowed. The mean age of doctors was 33.3±5.7 years and the age ranged from 25 to 55 years. Only sixty-seven (11.9%) had their own houses while 496 (88.1%) did not have their own houses. Two hundred and forty-eight (44%) chewed *khat*. One hundred fifteen doctors (20.4%) had spent more than ten years at their work. The median number of working hours with the government was 40 hours per week and ranged from 24 to 92 hours. Two hundred and ninety-four doctors (52.2%) were employed by the government only, while two hundred and sixty nine (47.8%) were employed by the government and also worked in the private sector. Four hundred and thirty-three doctors (77.5%) received less than 40,000 Yemeni Rial/month (Table 1).

**Job Satisfaction:** Cronbach's alpha coefficient for the ten items of job satisfaction in this study was 0.77. Doctors were less satisfied with remuneration, salary given, physical working conditions, amount of variety in job and recognition they get for good work. They were more satisfied with colleagues and fellow workers, hours of work, amount of responsibility given, freedom to choose method of working and opportunity to use abilities. Table 2 shows the ten aspects of job satisfaction ranked by mean.

**Global Rating of Job Satisfaction:** Median global rating of job satisfaction was three (ranged 1.00 to 5.9). Global rating of job satisfaction of doctors was very low; the majority of doctors (344, 61%) were extremely dissatisfied, very dissatisfied or dissatisfied with their job, 129 (23.9%) were undecided while only 90 (16%) reported they were satisfied to extremely satisfied with their job.

Table 1: Socio-demographic and work characteristics of respondents (N=563)

Variables	N	%
<b>Gender</b>		
Male	335	59.5
Female	228	40.5
<b>Age groups (years)</b>		
<30	180	32.0
30-39	308	54.7
≥ 40	75	13.3
<b>Qualification</b>		
Specialist	169	30.0
Non-specialist	394	70.0
<b>Marital status</b>		
Single	195	34.6
Married	352	62.6
Divorce or widowed	16	2.8
<b>Chewing <i>khat</i></b>		
Yes	248	44.0
No	315	56.0
<b>Residence</b>		
House owner	67	11.9
Not a house owner	496	88.1
<b>Type of employment</b>		
Government only	294	52.2
Government and private sector	269	47.8
<b>Duration of work in years</b>		
≤ 10	448	79.6
>10	115	20.4
<b>Hours of work with the government/week</b>		
≤ 40	306 *	54.9
> 40	251	45.1
<b>Income from the government/month (YR)</b>		
≤ 40,000	433 *	77.5
>40,000	126	22.5

\* Total is not 563 due to non response, \*\* YR=Yemeni Rial

Table 2: Aspects of job satisfaction ranked by mean (N=563)

Item	Mean	SD
Remuneration	1.6	1.3
Salary given	1.7	1.4
Physical working conditions	2.4	1.7
Amount of variety in job	2.9	1.8
Opportunity to use abilities	3.1	1.7
Recognition you get for good work	3.4	1.9
Freedom to choose method of working	3.6	1.9
Amount of responsibility given	3.7	1.7
Hours of work	3.7	2.0
Colleagues and fellow workers	4.6	1.8

**Job Satisfaction by Socio-Demographic Variables:**

Mean job satisfaction of the 10 items was 33.9±10.9. Level of job satisfaction by socio-demographics is shown in Table 3. Female were significantly less satisfied than males (p=0.002), non specialists were less satisfied than

Table 3: Job satisfaction by socio-demographic characteristics (N=563)

	Median Job Satisfaction	IQR	p value
<b>Gender</b>			
Male	34.0	13.0	
Female	32.5	16.8	0.002
<b>Age groups (years)</b>			
≤ 29	32.5	14.0	
30-39	33.0	13.0	
≥ 40	36.0	14.0	0.047*
<b>Qualification</b>			
Specialist	38.0	14.5	
Non specialist	32.0	13.0	<0.001
<b>Marital status</b>			
Single	34.0	14.0	
Married	34.0	14.0	
Divorce or widowed	28.0	15.75	0.026*
<b>Chewing <i>khat</i></b>			
Yes	38.0	13.0	
No	33.0	16.0	0.002
<b>Residence</b>			
House owner	36.0	15.0	
Not house owner	38.0	10.0	0.005

specialists (p<0.005, those who did not chew *khat* were less satisfied than those who did (p=0.002), those who stayed in their parents' houses or rent houses were less satisfied than those who had their own houses (p= 0.005). Regarding marital status, Kruskal-Wallis test showed that there was a significant association between marital status and job satisfaction (p= 0.026). For pairwise comparisons, Mann-Whitney test was used and to protect against type 1 error, Bonferroni correction was used (correction for multiple comparisons). This involved dividing the desired level of significant by the number of comparisons made (0.053 = 0.0167). For a comparison to be considered significant, it must have a significance level of less than 0.0167, and not 0.05 [11]. Divorced or widowed were less satisfied than singles (p=0.029) and married doctors (p= 0.019) but this difference was not significant after taking into consideration correction for type 1 error (p>0.0167). Regarding age, there was a significant difference in job satisfaction between age groups before adjustment for type one error (p= 0.047) but after using Bonferroni correction, the difference was not significant (p=0.017) which was more than 0.0167. Non specialists scored significantly lower than specialists in four aspects of job satisfaction: amount of variety in job, amount of responsibility given, freedom to choose method of working and opportunity to use abilities indicating non specialists were less satisfied than specialists in these aspects of work (Table 3).

Table 4: Job satisfaction by work characteristic variables (N=563)

	Median Job Satisfaction	IQR	p value
<b>Duration of work in years</b>			
≤ 10	33	14.0	
>10	37	14.0	0.003
<b>Employment</b>			
Government only	31	13.3	
Government and private	36	14.0	<0.001
<b>Hours of work with the government/week</b>			
≤ 40	38	15.0	
> 40	34	11.5	0.025
<b>Hours of work with the private/week</b>			
≤ 24	38	16.0	
>24	35	15.0	0.030
<b>Income from the government/month YR</b>			
≤ 40,000	33	11.0	
> 40,000	40	10.8	<0.001

**Job Satisfaction by Work Characteristics:** Those who had worked less than 10 years were less satisfied than those of more than 10 years duration ( $p=0.003$ ), doctors who work for the government only were less satisfied than those who work for both government and private sector ( $p<0.005$ ), those who work more than 40 hours/week were less satisfied than those who work less than 40 hours ( $p=0.025$ ) and those who work more than 24 hours/week in the private sector were less satisfied than those who work less than 24 hours ( $p=0.025$ ). Those who had higher income from the government ( $>40000$  YR/month) were more satisfied with their job than those who had lower income ( $p<0.005$ ) (Table 4).

## DISCUSSION

One of the important finding in this study was the high level of job dissatisfaction among Yemeni doctors as 61.1% of doctors were dissatisfied with their jobs. This demonstrated the wide gap between Yemeni doctors (developing country) and other developed and rich countries where the overall job satisfaction was reported to be high, for example, ninety-two percent of Canadian gynaecologic oncologists [12], 68% of Canadian doctors [13], 81% of a Dutch doctors [14] and 61.8% of Kuwaiti doctors [4] were highly satisfied with their job. The high level of job dissatisfaction in this study is comparable to other studies in developing countries e.g. Pakistan and Nigeria (68% and 54% respectively) [1, 5].

Yemeni doctors were more satisfied with colleagues and fellow workers, hours of work, amount of responsibility given, freedom to choose method of

working and opportunity to use abilities. They were less satisfied with remuneration, salary given, physical working conditions and amount of variety in job and this indicates the important of these aspects in job satisfaction particularly the financial aspects. Higher individual wages were expected to be associated with higher job satisfaction and a lower probability to intend to quit [15]. These findings are in keeping with those reported in a previous study in Al-kwait where the results showed that doctors were less satisfied with their rate of pay and job variety but they were more satisfied with their colleagues and their job responsibility [4]. Lack of financial incentives was also one of the most important aspects of work which affect job satisfaction in a sample of primary health physicians in Saudi Arabia [16]. Scottish doctors were most satisfied with their colleagues, variety in the job and amount of responsibility given but were less satisfied with remuneration and hours of work [17]. These previous three studies confirmed that the financial aspect was an important source of job dissatisfaction for doctors. However, in contrast to the Scottish doctors, Yemeni doctors were more satisfied with hours of work and this can be explained by the fact that most of Yemeni doctors work less than 40 hours per week and usually the working day ends at 2:00 pm so, working hours were not an issue but the rate of pay, remuneration and physical working conditions were.

This study found that Females were significantly less satisfied than males. This finding was similar to those found in three previous studies [5, 18 and 19]. However, Dowell *et al* (2001) [20] found that female were more satisfied with their work than their male counterparts. Simoens *et al.* (2002) [3] also found that women reported higher levels of job satisfaction and lower levels of stress than men and this was explained by the author as “women were more likely to work part-time”. Doctor’s age and duration of work were significantly associated with overall job satisfaction. These findings are consistent with other studies which showed that older doctors are more generally satisfied with their jobs than younger doctors [4,19,20]. This could be explained the fact that young doctors have greater demands and age advances for the possibility of adaptation.

This study showed that non specialists were significantly less satisfied with their jobs than specialists. Non specialists were significantly less satisfied in some aspects of job including amount of variety in job, amount of responsibility given, freedom to choose method of working and opportunity to use abilities whereas, there was no aspect of job satisfaction in which specialists were

less satisfied than non specialists. Our finding that doctors who had school age children were more satisfied than those who did not have school age children was similar to that found by a previous study in Nigeria [1]. Doctors who chewed *khat* were more satisfied than those who didn't chew *khat*. This can be explained indirectly by the significant difference in income between the two groups because this study found that doctors who chewed *khat* had higher income than those who didn't. In addition, the financial issue was the most important aspect in job dissatisfaction in this study. However, further research is needed to explore this area.

It was not surprising to find that doctors who did not have their own houses were less satisfied with their jobs because their low salaries were not enough to enable them to purchase their own houses. This can be supported by our finding regarding the association between job satisfaction and financial income. It was reported in the literature that the promotion of personal growth and security in finance and employment influenced job satisfaction levels positively [14, 15]. Long working hours in this study was associated with low job satisfaction. This finding was comparable to a previous study which found that doctors who worked more than or equal to 50 hours per week, were less likely to be satisfied with their job than part-time doctors [3].

### CONCLUSION

The present study and showed two thirds of Yemeni doctors (61%) were dissatisfied with their job. They were less satisfied with remuneration, salary given, physical working conditions, amount of variety in job and recognition they get for good work. Females, non specialists, those with lower income and those who did not have their own houses were less satisfied with their job. All these aspects should be taken into consideration by the management and Ministry of Health and more attention should be given to women and younger doctors.

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