

# Lifestyle, Happiness and Job Satisfaction in Iranian Specialist Physicians

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Received 2017 June 19; Revised 2017 July 22; Accepted 2017 August 13.

## Abstract

**Background:** Satisfaction of physicians could effect on their quality of life and quality of care of their patients.

**Objectives:** The aim of current study was to determine the job satisfaction and lifestyle of specialist physicians in Tehran.

**Methods:** Using a cross-sectional survey between October 2014 and April 2015, convenience samples of 645 specialist physicians were evaluated. We used a self-administered questionnaire included items about demographic variables, lifestyle, overall health status, happiness, and job satisfaction. Physicians based on specialty type are categorized to two groups included surgical and non-surgical.

**Results:** Mean age was 44.22 ( $\pm 8.23$ ) years old. The body mass index (BMI) had a mean of 25.07 ( $\pm 2.98$ ). Overall, 413 (64.5%) of participants were rated their happiness as "extremely happy" and happy. Four hundred and eight (69.5%) physicians were in an excellent or good status of health. Almost 70% (453) of studied specialist physicians were satisfied with their job. Orthopedic surgeons and obstetricians had the bests and worst general health respectively. The neurologists were happiest physicians. The general surgeons had the highest BMI.

**Conclusion:** Majority of studies physicians were in a good status of health and almost two third were happy. More than two third of physicians were satisfied with their job. About 40% had less than once physical activity per year and more than 45% were overweight and obese.

**Keywords:** General Health, Happiness, Lifestyle, Physicians, Satisfaction

## 1. Background

Physician's satisfaction is an important aspect of their quality of life. It has been shown satisfactions of physicians are related with satisfaction of patients (1). It is also was revealed that satisfied physicians have better outcomes for their patients (2).

The evidences support that many physicians experience high levels of dissatisfaction with their job (3-7). This problem could be associated with physicians stress, medical error, decrease patient care quality, reduce patients' compliance, and finally increase cost of cares (8).

The results of a national survey on physicians' satisfaction revealed geriatricians are among 10 top satisfied doctors and diagnostic radiologist is among the bottom 10. They found physicians with higher free time and better life styles are more satisfied than versus group (dermatology compared to family medicine and general surgery) (9). This study concluded that physicians are moderate satisfied with their profession in Canada (9). Murray et al. showed a decreasing satisfaction with most aspects of practice among general internists and family practitioners in Massachusetts, USA (10). A survey on 2000 physicians was conducted to determine the predictors of satisfaction in medical doctors. Report of this study was showed control over schedule and work hours are most important predictors of career satisfaction in

physicians (11).

Richard Smith in an editorials was published in BMJ titled "why are doctors so unhappy?" has mentioned the most obvious cause of unhappy in doctors is work load and feeling of not having support (12).

In a study was done by Arab et al. in Tehran, quality of life and job satisfaction of specialist physicians were assessed. They concluded the working quality of life of physicians is not acceptable. They did not any analysis by specialty and some other important related factors (13). The other study on family physicians in Mazandaran (a city in north of Iran) showed the quality of life of about half of these doctors is moderate to poor (14).

We could not find any study on lifestyle and job satisfaction of specialist doctors in our setting.

## 2. Objectives

The aim of current study was to determine the job satisfaction and lifestyle of specialist physicians in Tehran. As a secondary objective, we would like to determine the predictors of these two characteristics too.

## 3. Methods

### 3.1. Sample

Using a cross-sectional study between October

2014 and April 2015, a convenience sample of specialist physicians was evaluated. We selected these physicians from participants of national congresses. All these congresses were held in Tehran, capital city. We offered the questionnaire to participants when they were registering the congress. They had 10 minutes to fill out questionnaires. Participation in the study was optional. Inclusion criteria were being specialist in medicine and having verbal informed consent to participate in the study. The questionnaires were offered to a sample of 730 practitioners. Seven hundred questionnaires were returned and finally 645 complete questionnaires were analyzed (response rate 88%). The ethics committee of Iran University of Medical Sciences approved the study.

### 3.2. Measures

We used a self-administered form about the physicians' lifestyle. The form had three sections. Part one included items about demographic characteristics of physicians (age, sex, weight, height, specialty, marital status, number of children, etc.). The physician specialty reported as specialty that they were educated, graduated and working on it. We categorized this variable to two groups as "surgical" and "non-surgical" specialties. Therefore specialty such as general surgery, anesthesiology, otolaryngologist, obstetric gynecology, orthopedic surgery, ophthalmology, urology and neurosurgery are classified in surgical group. The other specialties like dermatology, infectious diseases, neurology, radiology, internal medicine, cardiology, pediatrics, pathology and emergency medicine are categorized in non-surgical group.

The second part asked about the lifestyle with 16 items. The lifestyle items asked about smoking and alcohol consumption, physical activity, nutrition status, entertainment, benevolence activities, doing exercise, status of living with family, using fast food, using nutritional supplement, and using alternative medicine. We got the items of this section of questionnaire from the physician lifestyle report 2014 (15).

Finally, the last part included three items about overall health status, happiness, and job satisfaction. These last items framed in a likert scale. About overall health the item was "In general, how do you evaluate your health?" This item framed from excellent to poor. The physicians were asked to rate a scale from extremely happy to extremely sad the question "How do you evaluate your happiness?" On a similar likert scale we asked the participants about their job satisfaction using the item "How satisfied are you with job you are doing?". This item was framed from very satisfied to extremely dissatisfied.

### 3.3. Statistical analysis

All descriptions and analyses were done using SPSS software package version 20.0 (SPSS, Inc. Chicago, IL). We use tables and graphs to describe and present the nominal and categorical variables. The mean and standard deviation were used as summary measures for numeric variables. Chi-square and t-tests were used to compare categorical and numeric variables across sub groups respectively. The level of significance was considered at 0.05.

## 4. Results

### 4.1. Descriptive

Out of 730 questionnaires that were offered to the doctors, 645 completed ones were put in final analysis. Mean age was 44.22 ( $\pm 8.23$ ) years old. Mean for the number of children of physicians was 1.73 ( $\pm 0.88$ ). The body mass index (BMI) as an index of obesity had a mean of 25.07 ( $\pm 2.98$ ). About 54% of male physicians were overweight or obese versus 30% of female physicians. Overall, 413 (64.5%) of participants were rated their happiness as "extremely happy" and happy. Four hundred and eight (69.5%) physicians were in an excellent or good status of health. Almost 70% (453) of studied specialist physicians were satisfied with their job. About half of the single physicians did not like to marry. Table 1 illustrates the other demographic characteristics of participants (Table 1).

**Table 1.** Demographic characteristics of physicians (n = 645)

Variable	Number*	Percent
Gender		
Male	421	65.8
Female	218	34.1
Specialty		
Surgical	305	47.3
Non-surgical	340	52.7
Level of education		
Specialty	512	80
Sub-specialty	68	10.6
Fellow	60	9.4
Marital status		
Single	64	10
Married	560	87.4
Separated or widowed	17	2.6
Living with family		
Yes	548	89.4
No	65	10.6
Family living in overseas		
Yes	51	8.6
No	543	91.4
Body mass index (BMI)		
Underweight	9	1.5
Normal	307	50.7
Overweight	258	42.6
Obese	31	5.1

\*There was some missing data

Figure 1 illustrates the general health of physicians based on specialty. More than 80% of orthopedic surgeons have rated their general health as good or excellent. The worst status of general health was seen for obstetrician & gynecologist. After orthopedic surgeons, the radiologist and internist physicians had the best general health.

The neurologists were happiest physicians. More than 90% of them rated their happiness as happy to extremely happy. About 80% of otolaryngologists were rated their happiness as happy and extremely happy too. The worst status of happiness was for

neurosurgeons and pediatricians. Less than 50% of them reported their happiness as happy or extremely happy. These findings are illustrated in Figure 2.

The internist physicians were satisfied with their job more than other physicians. More than 90% of them rated the satisfaction with their job as satisfy and very satisfy. The lowest level of satisfaction with job was reported by obstetricians & gynecologists (less than 50%). radiologists, general surgeons, and urologists were most satisfied physicians with their job after internists (Figure 3).

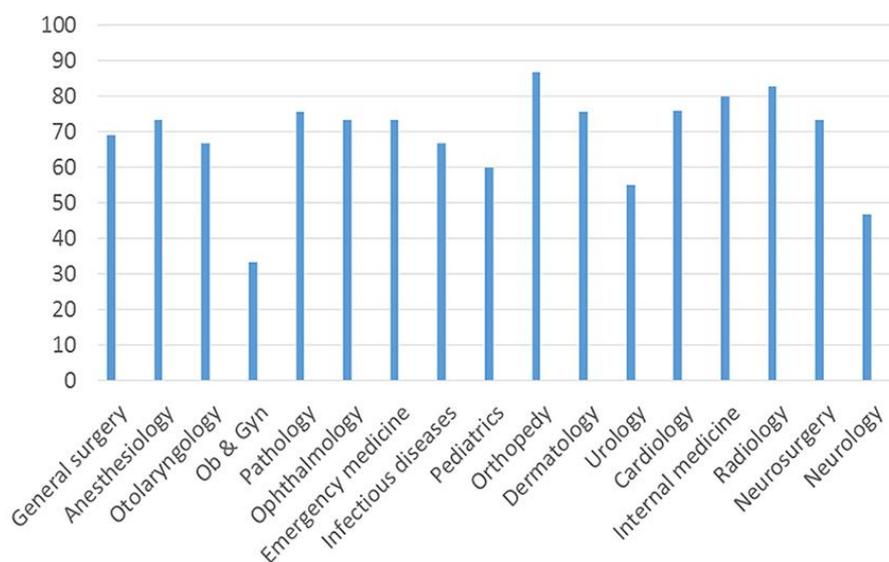


Figure 1. Percentage of physicians who rated their general health as good or excellent by specialty

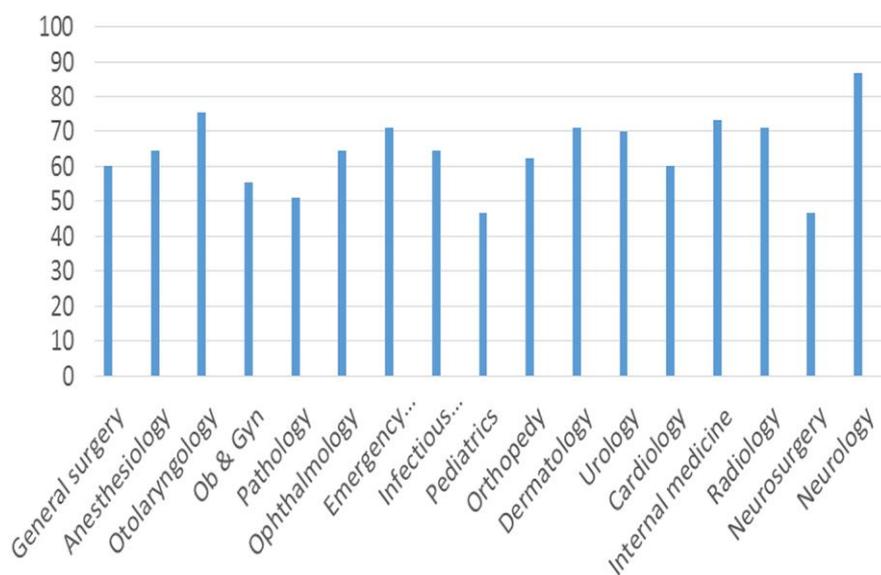


Figure 2. Percentage of physicians who are happiest by specialty

General surgeons, radiologists, and orthopedic surgeons had the highest BMI as overweight and obese respectively. Dermatologists and cardiologists were in the best weight among physicians. Just one fourth of dermatologists were obese or overweight versus 70% of general surgeons (Figure 4).

Table 2 illustrates some measured aspects of lifestyle in physicians. Forty two percent of physicians reported taking of supplements. About half of the physicians reported eating out less than once a month (rarely). Majority of them do not have any specific diet. Around one third of physicians had 2 to 4 week vacation per year. Just 9% of physicians had more than 4 times exercise per week. Cigarette smoking was reported by 14.5% of physicians. Consumption of

alcohol was reported by 15% of physician weekly.

#### 4.2. Analytic

About 72.5% of males versus 62.8% of females rated their health as good or excellent. This difference was statistically significant (P= 0.01). Difference between level of happiness and satisfaction of males and females physicians were not statistically significant. The index of body mass was normal in 66.5% of females versus 42.8% of male physicians. This difference was statistically significant (P=0.0001). Having more than two week vacation per year for males and females were 64% and 57% respectively (P= 0.09). Female's physicians were more active than males slightly. About 34% of

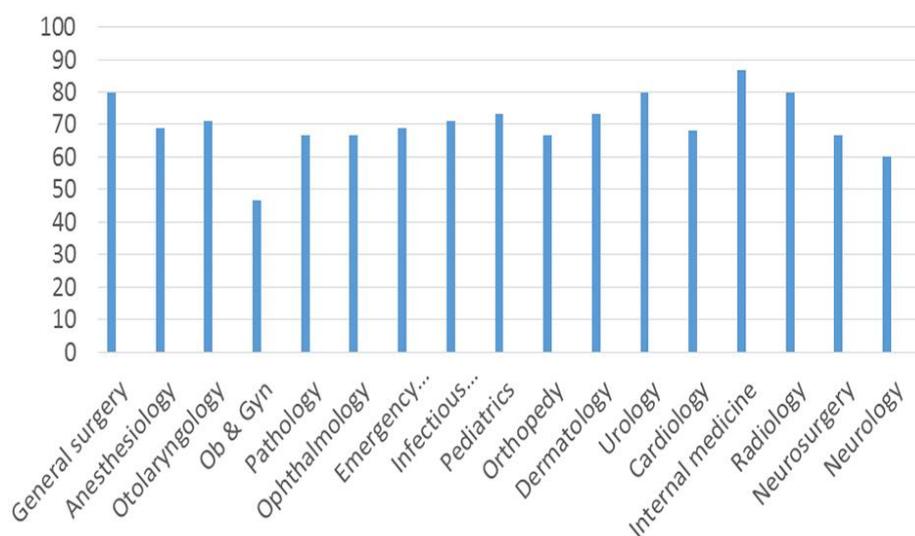


Figure 3. Percentage of physicians who are most satisfied with their job by specialty

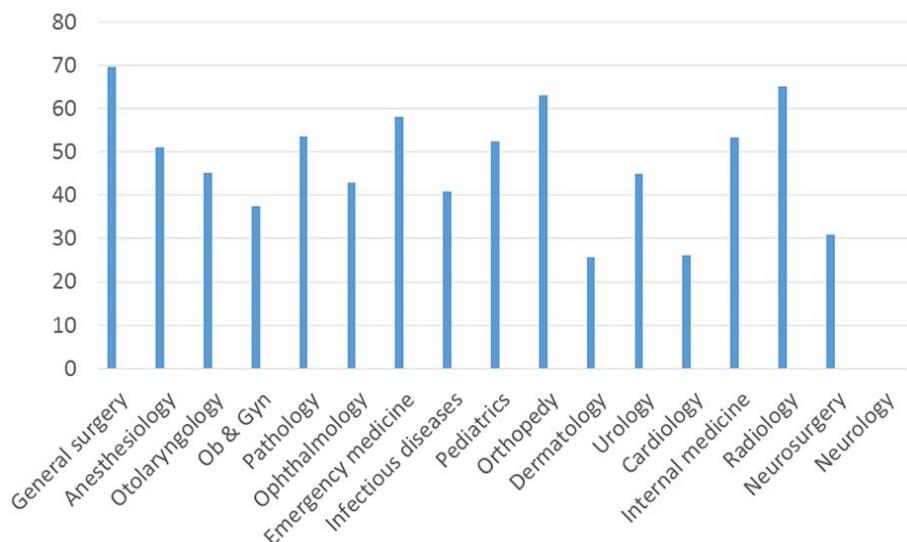


Figure 4. Percentage of physicians who are overweight and obese by specialty

**Table 2.** Lifestyle of studied physicians (n=645\*)

Variable	Number	Percent
Do physicians take supplements?		
Yes	279	42
No	366	58
Which diets do physicians Choose?		
Typical Iranian	67	10.5
Mediterranean type	8	1.3
American heart association type	12	1.9
Weight loss restriction	67	10.5
Vegan	20	3.1
Not specific	439	68.7
How often do physicians eat out?		
Rarely (less than once a month)	372	47.9
Sometimes (a couple of times a month)	265	41.1
Often (weekly)	58	9.0
Frequently (daily)	11	1.7
Where do physicians eat out?		
Institutional restaurant	31	5.1
Fast food	186	30.4
District restaurant	255	41.7
Traditional restaurant	66	10.8
All of them	73	11.9
What are the entertainments of physicians?		
Reading book	78	12.6
Exercise	26	4.2
Art activities	108	17.4
Economical activities	53	8.5
Traveling	39	6.3
Others	46	7.5
More than one item	295	46
What is the duration of vacation of physicians per year?		
Less than one week	70	10.9
Between 1 and 2 weeks	178	27.6
Between 2 and 4 weeks	221	34.3
More than one month	174	27
How many times do physicians exercise per week? (at least 30 minutes)		
Less than once	250	39.2
Once to two times	191	29.9
Between 2 and 4	140	21.9
More than 4 times	57	8.9
Do physicians smoke?		
Never	509	79.3
Current smoker	93	14.5
Ex-smoker	40	6.2
Do physicians drink alcohol?		
Yes	96	15.1
No	541	84.9

\*There was some missing data

females versus 29% of males had more than two times physical activity per week ( $P = 0.32$ ). Consumption of any amount of alcohol was 20% among males versus 5% in female's physicians ( $P = 0.0001$ ). About 20% of male physicians versus 2.8% of females were current smoker ( $P = 0.0001$ ).

Happiness, overall health and satisfaction of surgical physicians were not different with non-surgical group. Although 50% of surgical physicians versus 45% of non-surgical group were overweight or obese, but this difference was not statistically significant ( $P = 0.49$ ). Surgical physicians were 19.5% current smoker versus 10% of non-surgical

physicians ( $P = 0.001$ ). Alcohol consumption was reported about 12% versus 18% in non-surgical and surgical physicians respectively ( $P = 0.10$ ).

## 5. Discussion

In the present study we assessed general health, happiness, job satisfaction, BMI and lifestyle of physicians. Based on our results, more than 80% of orthopedic surgeons had good or excellent general health; while, the neurologist were the happiest physicians. The highest satisfaction of job was observed among internist physicians. Moreover, the

general surgeons, radiologists, and orthopedic surgeons had the highest BMI as overweight and obese, respectively. The results of some measured aspects of lifestyle of physicians also showed that majority of physicians were non-smoker and a small percent of them consumed alcohol.

Previous study was done by Paul Leigh (16) showed conflicting results about job satisfaction of neurologist, but in case of obstetrics and gynecology specialties results of Paul Leigh study and Keeton (11) was consistent with our results. The low career satisfaction for obstetrics and gynecology specialties may have several causes: Irregular hours, medical malpractice lawsuits; loss of autonomy and night emergency. In line with our result, Lambert et al (17) find evidence that younger physicians in England reject surgical specialties and obstetrics and gynecology for reasons relating to "quality of life" and work hours. Work hours (>60, 51-60 hours per week) are strongly and positively associate with dissatisfaction (11). Considering the most of obstetrics and gynecology specialists are women and women are more dissatisfied than men (18), probably sex can be involved in the dissatisfaction. In contrast to obstetrics and gynecology specialists, internist physicians had a high job satisfaction and more than 90% of them rated the satisfaction with their job as satisfy and very satisfy. Some control over schedule and hours worked maybe two factors affecting job satisfaction of internists. Duffy and colleagues (19) examined how the 18 critical factors predicted job satisfaction within the six specialties. For internal medicine, 50% of the variance in job satisfaction was accounted for by four critical factors: sense of accomplishment, income satisfaction, pressure, and expertise.

The inter-specialty comparisons include some expected and some unexpected results. The neurologists were happiest physicians. In the other hand, more surprising is the relatively high proportion (more than 50%) of unhappiness physicians among neurosurgeons. This is puzzling, especially given the high income and prestige associated with the "procedural" specialties. One of the reasons for this finding may be related to presence and work in the hospital environment and also working with critically ill patients.

According to the latest US Centers for Disease Control and Prevention (CDC) report on obesity, about 35% of the US population is obese, which is a body mass index (BMI) of  $\geq 30$  (20), while far fewer physicians of the total number who responded to the Medscape survey are obese (8%), but being overweight is still a problem for 34% of them (15). Results of present study demonstrated that general surgeons, radiologists, and orthopedic surgeons had the highest BMI as overweight and obese respectively; on the other hand, dermatologists and cardiologists were in the best weight among

physicians. Medscape physician lifestyle report of 2014 also mentioned general surgeons as the most overweight physicians with 49% confessing to being overweight to obese, moreover consistent with our results, dermatologists are the least heavy, with less than a quarter of them (23%) reporting a BMI > 25 (15). Circadian desynchrony in humans, a characteristic of shift work, jet lag, and/or sleep disruption, can have profound effects on both normal body weight regulation and glucose/ lipid homeostasis (21). Improper circadian entrainment is associated with the onset of metabolic syndrome, obesity, and type 2 diabetes (22). General and orthopedic surgeons due to unspecified hours of sleep because of night emergency and shifts are subject to circadian desynchrony. In addition to, having high level of stress and work load for these physicians can cause accumulation of fat in the body due to secretion of stress hormones such as cortisol.

Adherence to special diets such as typical Iranian, American heart association type, Mediterranean diet, weight loss restriction and vegan diet were asked. About seventy percent of doctors do not have any specific diet. When Medscape survey respondents were asked which diets they routinely chose, 62% of normal- to underweight physicians (but only 39% of those who are overweight or obese) indicated diets that recommend this healthy daily amount of fruits and vegetables. Even worse, among the heavier group, 44% reported that they routinely choose either "meals on-the go" or a typical American diet (meat most days; carbs most days from white rice, potatoes, or white flour products; high fat) compared with only 28% of healthier-weight physicians. Surprisingly, only 16% in the obese and overweight groups were on weight-loss or calorie-restriction diets (15).

About supplement use, our results show that 42% of physicians taking supplement routinely. In comparison with Medscape survey (15); in the case of persons less than 45 years, percent of physician who taking supplement was almost the same, whereas 62% of physicians over 46 years old who answered the Medscape survey take supplements.

#### *Limitations*

We know present study have several limitations. Firstly, the data are self-reported. However, this is true for survey data sets. Moreover, only the physician knows his or her level of satisfaction. Secondly, due to cross-sectional design of present study, the causal relations are subjects to interpretation. For example, our findings indicate that neurologists are happiest physicians. We cannot determine, however, whether it is worked in this specialty that improve happiness or whether it is the type of physicians (already happy) who chooses to work in this field. Thirdly, given the limited contribution of each sex, statistical analysis was not

possible in the gender groups. Even with these limitations, the information from this study is a significant addition to the limited literature on physician lifestyle. Results of this study provide information about the job satisfaction, happiness, general health, weight status and other aspects of physician's lifestyle. In future studies, it is important that physician lifestyle not merely be assessed overall but rather by additional demographic factors such as age and sex groups, marital or family status, and geographic region.

## 6. Conclusion

Majority of studied physicians were in a good status of health and almost two third were happy. More than two third of physicians were satisfied with their job. About 40% had less than once physical activity per year and more than 45% were overweight and obese. Consumption of alcohol by physicians was about 15% and less than 15% were current smoker. The Orthopedic surgeons had the best general health and neurologists were the happiest. The internist physicians were satisfied with their job more than other physicians.

## Conflicts of interest

None.

## Footnote

**Funding support:** This study was supported by Iran University of Medical Sciences

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