

# Prevalence of Health Problems, Professional and Financial Satisfaction among Doctors Working Across Vadodara City: A Cross-sectional Study

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## ABSTRACT

**Background:** The present study was conducted to know the distribution of various health problems among doctors and to assess professional and financial satisfaction levels among doctors. **Methods:** A Google Form questionnaire-based cross-sectional study was conducted among 122 doctors in Vadodara selected purposively after taking consent. Google form was circulated by email and WhatsApp groups. The form consisted of questions related to demographic details, health problems, financial and job satisfaction. All the responses were recorded and analyzed in MS Excel 2019. **Results:** Among the 122 doctors, 89 (72.95%) were male and 33 (27.04%) were female and 101 (82.78%) doctors were taking treatment for some ailment. Around 86.9% of doctors regularly opt for a health check-up. Among the health problems reported by doctors, the most common were musculoskeletal ailments (72.13%) followed by hypertension (28.9%), diabetes (17.2), cardiac (12.3%), endocrinal (10.65%), eye (9.01), mental (6.55) problems. Approximately 37.70% of doctors answered that health problems temporarily affect their work; 5.73% of doctors felt the need to modify their work pattern. About 91.80% of doctors were satisfied by their profession, while 108 (88.52%) doctors were financially satisfied with their work. **Conclusion:** More than half of the professionals complained of musculoskeletal problems. The majority of health care professionals were professionally and financially satisfied.

**Keywords:** Health problem, doctors, professional satisfaction, financial satisfaction

Health care workers (HCWs) include doctors, nurses, health assistants and technicians who deliver care and health care services directly or indirectly to the sick patients. There have been many studies on the care and conditions of the patients receiving health care services, but very little study has been done on the health conditions of the HCW in India. Latest records of the Indian Medical Council

puts the total number of doctors in India at 1.2 million.<sup>1</sup> HCWs are known to lose sight of their own health in the services of the patients. They have higher rates of mental, psychological, physical health disorders as compared to the general population.<sup>2</sup>

Health status of doctors is an important determinant of the type of services they deliver to their patients. The health status, level of mental fatigue, burden of physical disease can determine the level of care imparted and the holistic preventative strategies suggested by the doctor to their patients. Level of job satisfaction also plays an important role in the level of health care being delivered by the doctors. Studies have shown that patients report much higher quality of services from doctors who are satisfied with their jobs.<sup>3</sup> Healthy doctors are more likely to provide healthy preventative health strategies to their patients; they act as role models and motivate the patients into incorporating these preventive measures in their lives.<sup>4</sup>

The objective of this study was to find out the prevalence of various health problems among doctors.

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## METHODS

A cross-sectional study was conducted among doctors in Vadodara city based on a Google Form questionnaire-based method. A Google Form was created and circulated by email and WhatsApp groups amongst the doctors, which included government and private MBBS practitioners and specialists. The form consisted of questions related to demographic details, health problems, financial and job satisfaction. Data form was prepared. Initially, it was sent by email and WhatsApp. Printed forms were delivered to doctors, who were not comfortable in filling up the form electronically, and collected from them. The study was conducted from 2018 to 2019. The study was approved from Institutional Ethical Committee. The participation in the study was voluntary and after taking consent. All data fields were optional. Two hundred fifty doctors were contacted on WhatsApp and email. Repeated reminders were sent. Email responses were received from 75 doctors; 47 responses were obtained via physical forms. Purposive sampling technique was used. Total 122 responses were analyzed. All the responses were recorded and analyzed in MS Excel 2019. The percentage was calculated.

## RESULTS

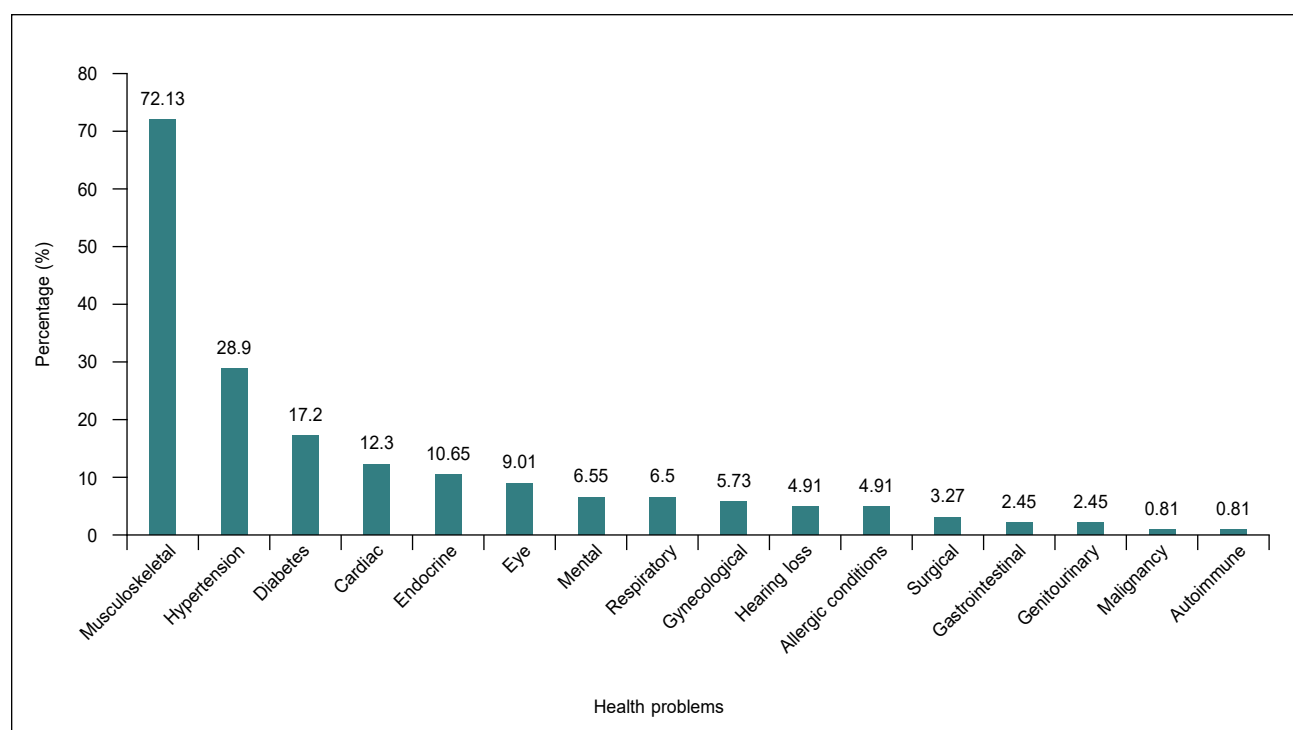
A total of 122 doctors were studied, of which 89 (72.95%) were male and 33 (27.04%) were female. Majority of

doctors belonged to the age group of 55 to 60 years (36.88%) followed by 60 to 65 years (22.13%). There were 84.43% specialists (MD/MS) and remaining were MBBS (15.57%). There were 26 (21.31%) government practitioners, while 96 (78.68%) had private jobs. Seventeen (13.93%) doctors had no health problems, while 105 (86.06%) suffered from health problems. A total of 101 (82.78%) doctors were receiving treatment of any ailment (Table 1).

Of the total doctors in this study, 86.9% opted for a health check-up regularly. The most common health issues were related to musculoskeletal problems (72.13%). This was followed by hypertension (28.9%), diabetes (17.2%), cardiac (12.3%), endocrine disorders (10.65%), eye (9.01), mental problems (6.55), respiratory problems (6.5%), gynecological conditions (5.73), hearing loss (4.91%), allergic (4.91%), surgical (3.27%), gastrointestinal (2.45%), genitourinary (2.45%), malignancy (0.81%) and autoimmune disorders (0.81%) as shown in Figure 1. About 37.7% informed that health

**Table 1.** Doctors who are on Treatment for their Health Problems (n = 122)

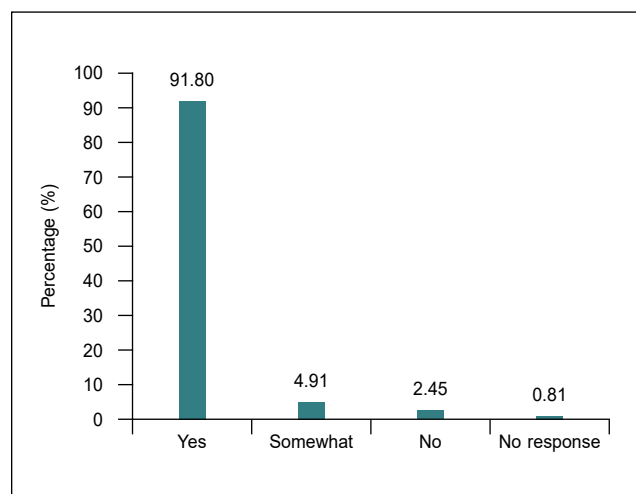
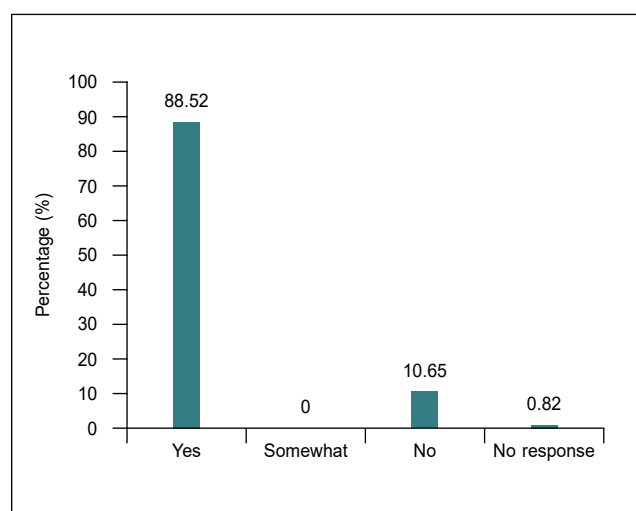
	No.	Percentage (%)
Yes	101	82.78
No	21	17.21



**Figure 1.** Distribution of health problems in percentage (%) among doctors.

**Table 2.** Effects of Health Problems on their Professional Performance

Variable	No.	Percentage (%)
Not at all	46	37.70
Need to modify work pattern	7	5.73
Temporarily affect work	46	37.70
No response	23	18.85

**Figure 2.** Professional satisfaction among doctors.**Figure 3.** Financial satisfaction among doctors (n = 122).

problems affected their professional performance as shown in Table 2; 5.73% of doctors felt that they needed to alter their work patterns and routine.

This study also reported that 91.80% of doctors were satisfied by their profession as shown in Figure 2. Of the total doctors, 108 (88.52%) doctors were financially satisfied with their work (Fig. 3).

## DISCUSSION

With increasing pressures of handling large patient populations to maintaining high standards in the competitive health care industry, doctors have been unaware of their own health care status as shown by our study. Of the total doctors studied, 82.78% of the doctors were receiving some kind of medical treatment for any ailment. This highlights the deteriorating status of health care of doctors.

In this study, data has been collected regarding all-cause treatment and ailment consideration in the physicians and that have been approached directly. We found that physicians have a high level of musculoskeletal disorders and are taking treatment for the same. In addition, there was lower occurrence of other health disorders involving cardiac disorders, respiratory disorders, etc. This shows that despite less attention to their personal health, doctors manage to follow good preventative strategies. The increased incidence of musculoskeletal disorders can be due to over exertion due to continuously being overloaded and working for longer periods of times, and working multiple shifts. A study showed that physicians who work multiple shifts consecutively are more prone to fatigue and exertion as compared to those who work fewer consecutive shifts.<sup>5</sup> The findings in this study that the occurrence of chronic health conditions is low among physicians were consistent with several studies which investigated differences in health status between physicians. A Norwegian health study amongst physicians reported that general status of self-perceived health is usually better amongst physicians than compared to general population.<sup>6</sup>

Physicians experienced significantly hospitalizations due to chronic diseases and many other specific causes like metabolic diseases, circulatory system diseases, genitourinary system diseases, etc. compared to general populations.<sup>7</sup> A study conducted amongst the HCWs in the United States of America found that the prevalence of clinical chronic venous insufficiency and venous reflux was found to be high among HCWs despite a low frequency of cardiovascular comorbidities.<sup>8</sup>

The occurrence of mental and psychological disorders amongst the doctors of our study is significantly low. HCWs are more likely to experience mental health problems because of intensely stressful and emotional situations in treating the sick, being exposed to human suffering and death, facing unique pressures from relationships with the patient, family members and employers.<sup>9</sup> In particular, HCWs experience high rates of burnout, stress and depression due to excessive workload, workplace violence and bullying.<sup>10</sup>

The low incidence of cardiovascular, respiratory, genitourinary problems and disorders in our study is also consistent with many other studies.<sup>11</sup> These findings of our study could be correlated to the fact that physicians have better knowledge and volition to practice preventative strategies, dietary factors and healthy lifestyle changes.<sup>12</sup> Several studies have shown that healthy lifestyle changes are related to decreased incidence of lifestyle disease such as diabetes, hypertension, obesity, etc. Hence, the following of healthy lifestyle trends could be the reason for lower incidence of chronic lifestyle diseases and all-cause mortality.<sup>13</sup> Studies have also shown decreased incidence of lifestyle diseases amongst those who have an active lifestyle and indulge in outdoor recreational activities like outdoor sports. Cycling as a mode of commuting is quite prevalent among HCWs in India, and this could be the potential reason for decreased incidence of lifestyle diseases. However, a study conducted in 2016 found positive association of active commuting with hypertension and central obesity which shows conflicting evidence on the relationship between active commuting and cardiovascular risk factors.<sup>14</sup>

Moreover, studies have shown that physical exercise in the form of exercise and outdoor activities can lead to decreased incidence of diabetes mellitus, hypertension, obesity and other cardiovascular diseases. This is evidently shown by our study where, 42% of nonsurgical and 34% of surgical field HCW were involved in exercise and 40% nonsurgical field and 37% surgical field HCWs were involved with some type of outdoor activities. It also showed that 31% of the total doctors engaged in any other outdoor non-specific activities reduces stress and increases physical exertion. This is consistent with other studies which have shown that outdoor activities, physical activities, exercise and recreational activities reduce stress and decrease the incidence of health disorders.

The prevalence of diabetes in India is estimated to be 7.3% with greater prevalence among the lower socioeconomic strata.<sup>15</sup>

Presenteeism is a phenomenon in which despite complaints and ill health that should prompt them to rest and take sick leave, people go to work. Currently, the highest sickness presence is largely found in the health care and educational sectors. A study conducted in Slovenia found that sickness presence was associated with psychosocial risk factors at work and their economic consequences in health care.<sup>16</sup>

In India, workplace violence is a major occupational issue concerning doctors. The common reasons for

violence against doctors are dissatisfaction and low impulse control of patients and their family members, poor administration, miscommunication, infrastructural issues, especially differences in services between private and public hospitals. The negative media portrayal of doctors also plays an important role. This has a significant impact on the physical and psychological well-being of the health care professionals.<sup>17</sup>

## CONCLUSIONS

Prevalence of musculoskeletal disorders and related morbidity is very high amongst health care professionals. Job factors such as long working hours, decreased daily exercise and psychological stress are factors influencing the health of the HCWs. Job satisfaction levels were very high amongst the doctors in the study. Overall, the study population showed good awareness regarding routine health check-ups.

## RECOMMENDATIONS

Increased awareness about musculoskeletal diseases and preventative strategies for the same should be instituted in doctors.

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## REFERENCES

1. India: number of registered doctors 2020 | Statista [Internet]. [cited 2022 May 17]. Available from: <https://www.statista.com/statistics/605347/india-registered-doctors-medical-council/>
2. Mohanty A, Kabi A, Mohanty AP. Health problems in healthcare workers: A review. *J Family Med Prim Care*. 2019;8(8):2568-72.
3. Nikic D, Arandjelovic M, Nikolic M, Stanković A. Job satisfaction in health care workers. *Acta Medica Medianae*. 2008;47:9-12. Available from: [www.medfak.ni.ac.yu/amm](http://www.medfak.ni.ac.yu/amm)
4. Skaal L, Pengpid S. Obesity and health problems among South African healthcare workers: do healthcare workers take care of themselves? *S Afr Fam Pract*. 2011;53(6):563-7.
5. Tucker P, Brown M, Dahlgren A, Davies G, Ebden P, Folkard S, et al. The impact of junior doctors' worktime

- arrangements on their fatigue and well-being. *Scand J Work Environ Health*. 2010;36(6):458-65.
6. Stavem K, Hofoss D, Aasland OG, Loge JH. The self-perceived health status of Norwegian physicians compared with a reference population and foreign physicians. *Scand J Public Health*. 2001;29(3):194-9.
  7. Ornstein SM, Nietert PJ, Jenkins RG, Litvin CB. The prevalence of chronic diseases and multimorbidity in primary care practice: a PPRNet report. *J Am Board Fam Med*. 2013;26(5):518-24.
  8. Cires-Drouet RS, Fangyang L, Rosenberger S, Startzel M, Kidwell M, Yokemick J, et al. High prevalence of chronic venous disease among health care workers in the United States. *J Vasc Surg Venous Lymphat Disord*. 2020;8(2):224-30.
  9. Healthcare Workers: Work Stress & Mental Health. NIOSH | CDC [Internet]. [cited 2022 May 6]. Available from: <https://www.cdc.gov/niosh/topics/healthcare/workstress.html>
  10. Gray P, Senabe S, Naicker N, Kgalamono S, Yassi A, Spiegel JM. Workplace-based organizational interventions promoting mental health and happiness among healthcare workers: a realist review. *Int J Environ Res Public Health*. 2019;16(22):4396.
  11. Prabhakaran D, Anand S, Watkins DA, Gaziano TA, Wu Y, Mbanya JC, et al. Cardiovascular, respiratory, and related disorders: key messages and essential interventions to address their burden in low- and middle-income countries. In: Prabhakaran D, Anand S, Gaziano TA, Mbanya JC, Wu Y, Nugent R (Eds.). *Cardiovascular, Respiratory, and Related Disorders*. 3rd Edition. Washington (DC): The International Bank for Reconstruction and Development/The World Bank; 2017 Nov 17. Chapter 1.
  12. Kao LT, Chiu YL, Lin HC, Lee HC, Chung SD. Prevalence of chronic diseases among physicians in Taiwan: a population-based cross-sectional study. *BMJ Open*. 2016;6(3):e009954.
  13. Zhang X, Lu J, Wu C, Cui J, Wu Y, Hu A, et al. Healthy lifestyle behaviours and all-cause and cardiovascular mortality among 0.9 million Chinese adults. *Int J Behav Nutr Phys Act*. 2021;18(1):162.
  14. Lerssrimongkol C, Wisetborisut A, Angkurawaranon C, Jiraporncharoen W, Lam KB. Active commuting and cardiovascular risk among health care workers. *Occup Med (Lond)*. 2016;66(6):483-7.
  15. Sadanshiv M, Jeyaseelan L, Kirupakaran H, Sonwani V, Sudarsanam TD. Feasibility of computer-generated telephonic message-based follow-up system among healthcare workers with diabetes: a randomized controlled trial. *BMJ Open Diab Res Care*. 2020;8(1):e001237.
  16. Skerjanc A, Fikfak MD. Sickness presence among health care professionals: a cross sectional study of health care professionals in Slovenia. *Int J Environ Res Public Health*. 2020;17(1):367.
  17. Kumari A, Kaur T, Ranjan P, Chopra S, Sarkar S, Baitha U. Workplace violence against doctors: characteristics, risk factors, and mitigation strategies. *J Postgrad Med*. 2020;66(3):149-54.



### Pregnancy Complications are Associated with an Increased Risk of Heart Disease

According to a study published in the journal *JAMA*, narrowing and calcification of the blood vessels of the heart are more common in women previously affected by pregnancy complications.

Although pregnancy complications are now more widely recognized as a new type of risk factor for heart disease, it is still unclear how this information may be most effectively applied in the health care industry. For the study, researchers enrolled 10,528 women from the National Medical Birth Register who later took part in the SCAPIS (Swedish CArdioPulmonary bioImage Study).

To identify blood vessel calcification, narrowing and other symptoms of heart disease, all the women underwent coronary CT angiography. Pre-eclampsia, high BP during pregnancy (gestational hypertension), preterm delivery, gestational diabetes and infants born small for gestational age were five typical problems of pregnancy that the researchers looked into for signs of heart disease.

In women whose pregnancies had not been complicated, the prevalence of coronary artery constriction was 2%, as opposed to 5% in women who had previously experienced pre-eclampsia or pregnancy-induced hypertension. (Source: <https://medicalxpress.com/news/2023-02-complications-pregnancy-linked-heart-disease.html>)