

# Prevalence of Stress and Assessment of Stressors among Private Medical Practitioners in Kanchipuram

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## ABSTRACT

**Introduction:** Medical profession by itself is open to various challenges. Challenges are in the form of handling patients individually, decision making in the mode of treatment, competency etc. Are the medical practitioners of today equipped to face these challenges? It is a known fact that doctors are prone for more stress from various previous studies. This study basically aims at analysing their stress levels and assessing their stressors and to make them think about re-modifying their life style and to inculcate measures to relieve their stress. This would enhance an opportunity to cope with the stress, thus having impact on their health.

**Aim:** To identify the prevalence of levels of stress in the medical practitioners in Kanchipuram.

**Methodology:** This cross-sectional study was conducted among private medical practitioners in Kanchipuram. The participants were allopathic doctors with MBBS and master's degree. 160 doctors were enrolled for the study by simple random sampling. These doctors were preferred area wise within 3 km radius from kanchipuram private medical college. 160 doctors were considered as it was time framed. Prior informed consent was obtained and details were explained regarding the study. A Standard Perceived stress scale (PSS 10) questionnaire was given to the doctors involved in study at their own clinical set up and was asked to answer the questionnaire with relaxed mindset was used to assess stress levels. Time duration given was fifteen minutes. Statistical analysis was done using SPSS version 20. The study was done from October to November 2018.

**Results:** Among 160 participants, Males were 82 (51.2%) and females were 78 (48.8%). Mean PSS score of doctors was  $17.74 \pm 4.513$ . Prevalence of moderate stress was (62%) and low stress was 19% and highly perceived stress was 19%. The prevalence of moderate stress was more in females (87.2%). Inadequate resources and staff was stressful to 58.8% of doctors and no time for exercise and leisure activities was stressful to 56.3% of doctors and missing meals to 53.8% of doctors.

**Conclusion:** Thus, a thought and a step forward to be healthy by incorporating mild changes like yoga, exercise, outings and a regular health check-up would improvise the health of the medical professionals.

**Keywords:** Stress levels; Cardiovascular diseases; Depression; Diabetes

## INTRODUCTION

Stress at workplace is a common phenomenon. It is perceived differently by individuals. Some are able to cope with the challenges but some are unable to accept the challenges thus proving detrimental to their health. Professional demand of prolonged study tenure, competition from co-practitioners, demanding patients, managing emergencies, lack of exercise and family time are few of the reasons contributing to it [1]. Selye defined stress as the

body's non-specific response to a demand placed on it [2]. Stress can lead to psychological ill-health and cardio vascular diseases. Previous studies have shown that high levels of stress among medical practitioners in United Kingdom have compromised with the quality care to the patients [1].

The private practitioners have to practise individually and are subjected to professional isolation. Competition from co-practitioners, not so competent staff in their clinics, evolving

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changing concepts in the medical field and a need to update the knowledge and techniques are some of the challenges they face in the professional front. Nuclear families in the trend and both spouses being employed is an additional challenge to working spouses.

Many studies have been done on medical students, interns but very few studies are done on private medical practitioners. Henceforth this study was designed to assess the stress levels among the private practitioners in Kanchipuram.

**Aim and Objectives:** To identify the prevalence of stress levels in the private practitioners of Kanchipuram and to identify the stressors.

## METHODOLOGY

This cross sectional descriptive study was conducted among private practitioners in Kanchipuram. Doctors with MBBS degree and above were enrolled for the study. Doctors in the age group below 45 were selected. The study comprised of 160 private practitioners both specialists and non-specialists. Institutional ethical committee clearance was obtained and an informed consent was taken from the participants.

### Tool used

A structured preform to collect demographic profile and history of any illness was used. Perceived stress scale PSS-10 [3] questionnaires was used to assess the level of stress. The Perceived Stress Scale (PSS) is the most widely used psychological instrument for measuring the perception of stress. The PSS-10 showed an adequate reliability and validity supporting its use in this population [4], the questionnaire had 10 questions the respondents had to choose between the options of 1. Never (score: 0), 2. Almost (score: 1), 3. Sometimes (score: 2), 4. Fairly often (score: 3) and Very often (score: 4). Items 4,5,7,8 was considered as positively stated items and thus the scores was reversed for these questions. Information related to stressors was collected using yes or no options. Confidentiality was maintained throughout the study. Categorization of total stress score according to the scores obtained were 0-13 (low stress) 14-26 (moderate stress) 27-40 (High perceived stress). 15 minutes time duration was given to each participant for filling the questionnaire. The source of stress variable was self-designed one according to the format. Ethical clearance was obtained from the respective working institute.

### Statistical analysis

SPSS version 20 was used for analysis. Chi-Square test was used to find the proportional difference across groups.  $p < 0.05$  was considered significant.

## RESULTS

Among 160 participants, Males were 82 (51.2%) and females were 78 (48.8%). Mean PSS score of doctors was  $17.74 \pm 4.513$ . Prevalence of moderate stress was (62%), low stress was 19% and highly perceived stress was 19%.

Source of stress (Tables 1-3). Inadequate resources and staff was stressful to 58.8% of doctors and no time for exercise and leisure activities was stressful to 56.3% of doctors and missing meals to (53.8%) of doctors. Amongst males and females sleep deprivation (56.4%) was stressful to females and inadequate resources to males.

**Table 1:** Prevalence of stress using PSS -10 score.

Category of stress	Overall doctors (%)
0-13 (low stress)	19% low stress
14- 26 (moderate stress)	62% moderate stress
27-40 (High perceived stress)	19% high stress

**Table 2:** Proportion of doctors with the various stressors.

Source of stress	Yes (%)	No (%)
1.Sleep deprivation	78 (48.8%)	82 (51.2%)
2.Missing meals	86 (53.8%)	74 (46.2%)
3.Ability to cope with work	148 (92.5%)	12 (7.5%)
4.Inadequate resourcesand staff	94 (58.8%)	66 (41.2%)
5.Fear of an offence	28 (17.5%)	132 (82.5)
6.Climatic condition-	56 (35%)	104 (65%)
7.Constant emotional and physical suffering	46 (27.5%)	114 (72.5%)
8.No time for exercise and leisure	90 (56.3%)	70 (43.7%)
9.Inabilityto manage time	68 (42.5%)	92 (57.5%)
10.Support from family and friends	142 (88.8%)	18 (11.2%)

**Table 3:** Chi-square analysis between gender.

Parameters meters	Females: 78 (48.8%)	Males: 82 (51.2%)	Chi-square p value
Moderate stress	87.20%	85.40%	0.21
Sleep deprivation	56.40%	41.50%	0.03
Inadequate resources	51.30%	65.90%	0.04

## DISCUSSION

In the present study, the prevalence of stress was high in the age group till 45 years which concurs with the findings [5]. The beginners trying to establish practise, taking decisions and trained skills were some of the challenges faced by the practitioners. Lack of exercise and time for leisure activity, inadequate resources and staff and skipping meals was stressful to most of the doctors according to our study. The paucity of time leads to less attention on yoga and exercise, thus they lead a sedentary life. Physicians' excessive work hours was associated with physical inactivity, skipping breakfast and less sleep hours in our study and also concurs with the study done [6]. Intake of well trained nurses, Para-medicos and increase in staff recruitment in hospital set up might alleviate stress on the medical professionals.

Medical practitioners should aim at practising yoga, meditation and exercise at least thrice a week to manage stress [7]. A study done at Vellore [8] also revealed the need of medical practitioners to improvise their interpersonal skills to alleviate stress. They also suggested that the government could bring in policies and programmes so that the private practitioners could benefit, thus helping the public and medical professionals.

Lack of resources was one of the major stressor in our study and is coherent with the study conducted [9]. Insufficient resources in the form of staff and finance was stressful to most of the practitioners. According to Makin et al. [10] the various stressors to the doctors were on long working hours, patient load, critical patient management, lack of sleep. The stress levels depend on speciality chosen by the practitioners according to Irfana baba [11]. Skipping

meals and irregular eating habits was stressful to many practitioners in our study. This had an adverse effect with symptoms of gastritis and indigestion. Insomnia was significant among the practitioners in the present study. Late meals, inadequate sleep brings about a vicious cycle hampering the mental and physical health of the practitioners. This eventually leads to depression, cardiovascular diseases, Diabetes etc. in the health care professionals. The stress among private practitioners was influenced by high expectations, poor interpersonal relationship, lack of recognition and poor climate according to [8] in Vellore district.

## CONCLUSION

This study identifies that medical practitioners are subjected to stress at workplace. Inadequate resources and sleep deprivation was more stressful to most of the practitioners. Proper incentives and employing well trained Para medical staffs would alleviate stress to a certain extent. Time management and devoting quality time with family would alleviate stress. This study gave an opportunity to reveal the stress levels to the highly stressed and moderately stressed doctors and to intervene their routine with stress relieving activities of their choice. Thus a thought and a step forward to be healthy by incorporating mild changes like yoga, exercise, outings and a regular health check-up would improve the health of the medical professionals.

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