

# Anxiety, stress and depression of doctors across gender and experience status

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**Abstract:** Spielberger, CD. and Reheiser, EC. 2009, defined anxiety as the negative emotional state with intensified feelings of nervousness, worry and apprehension associated with activation or arousal of the body. Pestonjee 1992, defined stress as a challenging event which require physiological, emotional, cognitive, and behavioral adaptations. Depression is a state of low mood and strong dislikes to the activities that can have a negative effect on a person's thoughts, behavior, feelings, world view and physical wellbeing. The present study tries to explore that Gender and experience status has an impact on the level of anxiety and stress in doctors. 160 doctors from various organizations have been taken through simple random sampling. Eight state questionnaire by Kapoor and Bhargava (1991) were administrated for collecting the data. Results of the structural model shows that high experienced doctors have a higher level of anxiety, stress and depression as compared to low experience doctors. Experience status and its interaction with the gender have no impact on the level of anxiety and stress in doctors whereas in general male doctors have a higher level of stress in comparison to female doctors. The result also indicates that experience status and its interaction with the gender of doctors have impact on the level of depression in doctors.

**Key words:** Anxiety, stress, depression, doctors, gender, experience status.

## 1. INTRODUCTION:

Medicine is a stressful profession that involves responsibility for life and death decisions involving urgent clinical problems, ethical problems, distressed patients and relatives, conflicting priorities, and long hours of work. Boorman, 2009a, 2009b, said that some Concern has been raised regarding the wellbeing of employees across all grades of medical and nursing professionals. However there is lacking evidences about the wellbeing of many professional groups as reported by Harvey, Laird, Henderson, & Hotopf, 2009. Coomber et al., 2002; Ramirez, Graham, Richards, Cull, & Gregory, 1996; Taylor, Graham, Potts, Richards, & Ramirez, 2005, further explained that there is an exception to the above studies that hospital consultants have a high levels of psychological distress and it has been reported in a number of given studies, which is higher than the levels reported in the normal population or the general population.

Anxiety, stress and depression are the psychological states and are the indication of individual's psychological well being. The relevance of the problem is to study whether the doctors are at a good mental states or a positive psychological state or in other sense a negative mental state. Our research comprises of both male and female genders and we want to examine whether both the gender are affected by the professional situation differently or in the same manner. Here status comprises of experience status. Experience status is further divided into the category of high experience status and low experience status. The relevance of our study is to focus whether the level of anxiety, stress and depression in doctors is influenced by their gender and experience status.

The environment we are living in is physically, mentally, emotionally, socially and morally dynamic and challenging for us. We possess effective mechanisms to meet every day stress. Sometimes, normal adaptive mechanisms can be over-activated and, thus, become maladaptive. A common outcome of such over-activation is anxiety and insomnia (Spinella, 2001). Anxiety is a subjective feeling of unease, or discomfort, or fearful concern. Anxiety is a normal state which is emotional and reasonable responses to the real dangers of day to day life. However, if the symptoms of anxiety are carried for a longer period of time or in other words severe in nature; or they occur in the absence of stressful events and started interfering with everyday activities of the individual, it is turned into a disorder called Anxiety Disorder (DSM IV-TR, 2000). Anxiety is our body's way of telling us that something is going wrong and we need to correct it. Anxiety is an essential signal, necessary for the survival and well being of the individuals. If a worker is not productive for a day, the possible criticism from the supervisor will lead him to do work. These are some of the valid reasons for feeling that action is needed to avoid trouble. The complexity, confusion, and commonness of anxiety is reflected in the many words in the English language for anticipated troubles: tension, feeling on edge, up-tight, hassled, nervous, jittery, jumpy, wound up, scared, terrified, insecure, pressured, alarmed, anxious, worried, dreading what might happen, uncertain, vulnerable, apprehensive, edgy, troubled, and many more. Anxiety is one of the most common symptoms seen in a psychologist's or psychiatrist's office.

Doctors also do not differ from the general working population. It may be surprising for the people to know that all doctors are not happy with their personal and professional life. Stress among health care professionals, including doctors, are among the highest of all professions. The occurrence of stress among the general working population is around 18%, while among doctors it is 28%. The modern medical place or the hospitals are one of the most stressful places. Doctors learn new skills in this type of stressful environment. Stress also arises from long working hours, constantly caring for ill people, facing death of people they know and also facing death of people they don't know. They know that their occupation carries a lot of responsibilities people's lives depend on them. (Other factors are fatigue; high demands on time interfering with doctors' other responsibilities; work conflicting with doctors' personal lives; dealing with emergencies; uncertainty and error; patient consumerism; increasing demands from patients; financial pressures; information overload; administration; and personality factors. It has been emphasised that stress levels are highest among doctors caring for terminally and chronically ill patients. Doctors also have to deal with stress from litigation threats. This stress experienced by doctors results in high rates of marital problems, which sometimes end in divorce, physical illness, social isolation, decreasing satisfaction with work, suicide, substance abuse and depression.

Hans Selye (1976) defined Stress as "a non specific response of the body to any demand made upon it". He found that the same arousal response could be evoked by various differing situations. Selye (1976) defines stress as "a state manifested by a syndrome which consists of all the non-specifically induced changes in a biological system." As a positive influence, stress can compel us to action. As a negative influence, it can result in feelings of disruption, rejection, anger, and depression, which in turn can lead to health problems such as headache, upset stomach, rashes, insomnia, ulcers, high blood pressure, heart disease, and even stroke etc The stress results in constant arousal and anxiety, causing the body to react with heart palpitations, continual sweating, stomach acidity, muscle spasms, and high blood pressure.

Depression is a state of low mood and aversion to activity that can have a negative effect on a person's thoughts, behavior, feelings, world view and physical wellbeing. Depressed people may feel sad, anxious, empty, hopeless, worried, helpless, worthless, guilty, irritable, hurt or restless. They may lose interest in activities that once were pleasurable, experience loss of appetite or overeating, have problems concentrating, remembering details, or making decisions and may contemplate or attempt suicide. Insomnia, excessive sleeping, fatigue, loss of energy, or aches, pains or digestive problems that are resistant to treatment may also be present. Depressed mood is not necessarily a psychiatric disorder. It is a normal reaction to certain life events, a symptom of some medical conditions and a side effect of some medical treatments. Depressed mood is also a primary or associated feature of certain psychiatric syndromes such as clinical depression.

This study reviews relevant literature on anxiety in relation to gender and experience status of doctors. The studies indicated an increased role complexity towards stress for both the genders. It was founded that due to the occupational and domestic roles of male and female doctors, the complexity in their life increases. Role complexity leads to decrease in occupational work load for women only and an increased domestic work load for both the genders of doctors. Chamber & Campbell 1996, Bynoe 1994 & Rout 1996 had founded a conflicting condition between the work and personal life of female doctors which leads to stressful conditions and negative thoughts. C.P.Khokhar, M.Chatterjee, 2010, also founded that role stress, work schedule and personality of working women affected the way they think, from positive to negative and therefore, leading to a high level of suicide in them. C.P.Khokhar, 2007, founded high levels of depression in women working outside their home as compared to the housewives. Cherniss, 1980 carried out one research on young professionals that are new on the job (1-10 years) and founded that most of them expressed frustration, tiredness, apathy and job dissatisfaction. The findings revealed that the demographic variables had significant roles to play in job satisfaction of nurses and doctors in various health care settings. U. Rout, 2010 compared job stress, job satisfaction and mental wellbeing of male and female doctors from a questionnaire study. Female doctors showed positive signs of mental wellbeing in comparison with the normal public. Conversely, male doctors showed higher level of anxiety and depression scores than the normal people. Valko and Clayton founded that doctors working in emergency units for >10 years had the highest depression (18.4%) and anxiety (26.3%) scores in their study.

*The following hypothesis is framed to verify in reference to anxiety, stress and depression through separate ex post-facto experiments:*

- Level of anxiety, stress and depression will not differ significantly between male and female doctors.
- Level of anxiety, stress and depression will not differ significantly between high and low experience doctors.
- Gender and experience status of doctors will not interact mutually in determining anxiety, stress and depression in doctors.

## **2. METHODOLOGY:**

Sample and design: A total sample of 160 doctors from various specialties, age groups, designation, and marital status has been selected randomly from the various rural and urban government hospitals of uttarakhand, Uttar Pradesh and Haryana. A 2 x 2 Ex post-facto research design is used to analyze the data and testing of hypothesis.

**Tools:** Eight state questionnaires (8SQ) by researchers and a well established 96 items questionnaire and measure the eight states as factors. Anxiety, Stress, Depression, Regression, Fatigue, Guilt, Extraversion and Arousal.

### 3. DISCUSSION:

Experience status and its interaction with the gender have no impact on the level of anxiety and stress in doctors whereas in general male doctors have a higher level of stress in comparison to female doctors. The result also indicates that experience status and its interaction with the gender of doctors have impact on the level of depression in doctors. While this is not consistent with the earlier studies. Abrol 1990; Olsson et al., 1990 noticed that men doctors deal more patiently to crisis as compared to female doctors. Thoits 1995 found that Women in general lose concentration and reveal their feeling and seek emotional and social support. Helbig-Lang S, Lang T, Petermann F, Hoyer J (2012), stated that females doctors were significantly found more prone to have anxiety than males doctors, no significant impact of gender on depression scores was also found. Literature also revealed that females doctors are more at risk to develop anxiety and depression, and psychological stress, which was six times higher as compared to the male doctors. Godlee F, found that Male and female doctors showed different but non- significant depression scores in this study and the same observation for anxiety level were also found between both the genders. However, anxiety levels in female doctors were different from those in male doctors. The present study contradicts the above study and the results indicate that male doctors have a higher stress level as compared to female doctors. Valko and Clayton founded that doctors working in emergency units for >10 years had the highest depression (18.4%) and anxiety (26.3%) scores in their study. The present study is consistent with our study experience status and its interaction with the gender of doctors has impact on the level of depression in doctors.

### 3. RESULT AND INTERPRETATION:

The obtained data were analyzed by using ANOVA. The results are recorded in the tables.

**TABLE 1: ANOVA SUMMARY ANXIETY**

| Sources of variance        | S.S     | Df  | M.S    | F    | P    |
|----------------------------|---------|-----|--------|------|------|
| Gender                     | 60.03   | 1   | 60.03  | 2.58 |      |
| Experience status          | 198.03  | 1   | 198.03 | 8.5  | <.01 |
| Gender × Experience Status | 18.22   | 1   | 18.22  | 0.78 |      |
| Within Error               | 3634.5  | 156 | 23.3   |      |      |
| Total                      | 3910.78 | 159 |        |      |      |

The results indicates that gender and its interaction with the experience status of doctors have no impact on the level of anxiety in doctors whereas in high experience status doctors have a higher level of anxiety in comparison to low experience doctors.

**TABLE 2: ANOVA SUMMARY FOR STRESS**

| Sources of variance        | S.S     | Df  | M.S    | F    | P    |
|----------------------------|---------|-----|--------|------|------|
| Gender                     | 88.51   | 1   | 88.51  | 4.25 | <.01 |
| experience status          | 120.76  | 1   | 120.76 | 5.8  | <.01 |
| Gender × experience Status | 18.9    | 1   | 18.9   | 0.91 |      |
| Within Error               | 3249.02 | 156 | 20.83  |      |      |
| Total                      | 3477.19 | 159 |        |      |      |

The results indicates that experience status and its interaction with the gender of doctors have no impact on the level of stress in doctors whereas in general male doctors have a higher level of stress in comparison to female doctors. The result also states that high experience doctors have a higher level of stress as compared to low experience doctors.

**TABLE 3: ANOVA SUMMARY FOR DEPRESSION**

| Sources of variance        | S.S     | Df  | M.S   | F    | P    |
|----------------------------|---------|-----|-------|------|------|
| Gender                     | 32.4    | 1   | 32.4  | 1.93 |      |
| experience status          | 65.03   | 1   | 65.03 | 3.87 | <.01 |
| Gender × experience Status | 96.1    | 1   | 96.1  | 5.73 | <.01 |
| Within Error               | 2618.25 | 156 | 16.78 |      |      |
| Total                      | 2811.78 | 159 |       |      |      |

The results indicates that Genders have impact on the level of interaction in doctors. In general male doctors have a high level of depression as compared to female doctors. Further low experience doctors have a higher level of depression in comparison to high experience doctors. The result also indicates that experience status and its interaction with the gender of doctors have impact on the level of depression in doctors.

### 3.1 Break up of Bivariate Interaction-

| Gender | High  |      | Low    |      | SE <sub>D</sub> | CR   | P    |
|--------|-------|------|--------|------|-----------------|------|------|
|        | Mean  | SD   | Mean   | SD   |                 |      |      |
| Male   | 17.97 | 3.88 | 18.25  | 4.64 | 6.04            | 0.29 | N.S  |
| Female | 18.62 | 3.69 | 15.8   | 4.09 | 5.50            | 3.28 | <.01 |
|        | Male  |      | Female |      |                 |      |      |
|        | Mean  | SD   | Mean   | SD   | SE <sub>D</sub> | CR   | P    |
| High   | 17.97 | 3.88 | 18.62  | 3.69 | 5.35            | .766 | N.S  |
| Low    | 18.25 | 4.64 | 15.8   | 4.09 | 6.18            | 2.50 | <.05 |

### 3.2 The results indicate that:

- Experience of doctors promotes depression in male doctors whereas it demotes depression in female doctors.
- The level of depression is high in doctors with low experience as compared to the doctors with high experience.

### 4. CONCLUSION:

The results of the above study points to the fact that doctors with higher experience status have a higher level of anxiety and stress as compared to the doctors with low experience status. It is further noticed that male doctors experience a higher level of stress as compared to female doctors. The study also reveals that the higher the experience status the higher is the amount of depression in doctors. With the emerging economic crisis as more and more unmarried doctors and women doctors add to the medical workforce, it is imperative to formulate appropriate measures to support a stress free work life.

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### REFERENCES:

1. Khokhar, C.P. & Chatterjee, M., (2010). Suicide in relation to role stress, work schedule and personality of working women. *Indian journal of psychological science*, Vol. 01, (1), ISSN 0976-9218; 57-68
2. Khokhar, C.P., (2007). Depression in out side working women and house wives: A comparative study. *Asian journal of psychology and education*, 40, (7-8), 41-44
3. Pestonjee D M and Misra P K (1999), —Role Stress and Job Satisfaction Amongst Doctors, *Journal of Health Management*, Vol. 1, No. 1.pg 117-31.
4. Thoits P A (1995), —Stress, Coping and Social Support Process: Where are We? What Next?, *Journal of Health and Social Behaviour*, Vol. 7, pp. 231-870.
5. Boorman, S. (2009b). NHS Health and Well-being. Interim Report: The Health and Well-being Review Team, Department of Health.
6. Spinella, M. (2001). *The Psychopharmacology of Herbal Medicine: Plant Drugs That Alter Mind, Brain and Behavior*. Cambridge, MA: The MIT press.
7. Selye, H. (1976). *The Stress of life*. New York, McGraw-Hill.
8. Godlee F. Stress in junior doctors. 2—Stress in women doctors. *BMJ* 199030176
9. Valko R J, Clayton P J. Depression in the internship. *Dis Nerv Syst* 19753626–29
10. Harvey, S. B., Laird, B., Henderson, M., & Hotopf, M. (2009). The mental health of health care professionals: A review for the Department of Health. London: Department of Health.
11. Coomber, S., Todd, C., Park, G., Baxter, P., Firth-Cozens, J., & Shore, S. (2002). Stress in UK intensive care unit doctors. *British Journal of Anaesthesia*, 89, 873-881.
12. Ramirez, A. J., Graham, J., Richards, M. A., Cull, A., & Gregory, W. M. (1996). Mental health of hospital consultants: the effects of stress and satisfaction at work. *Lancet*, 347, 724-728.
13. Taylor, C., Graham, J., Potts, H. W., Richards, M. A., & Ramirez, A. J. (2005). Changes in mental health of UK hospital consultants since the mid-1990s. *Lancet*, 366(9487), 742-744.

14. American Psychiatric Association. Diagnostic and Statistical Manual of Mental Disorders (DSM-5), Fifth edition. 2013.
15. Chambers, R., & Campbell I.(1996). Anxiety and depression in general practitioners: associations with type of practice, fundholding, gender and other personal characteristics. *Fam Pract.* 13(2):170-3.
16. Bynoe G. (1994). Stress in Women Doctors. *Br J Hosp Med.* 51(6): 267-8.
17. Rout U. Stress among general practitioners and their spouses: a qualitative study. *Br J Gen Pract* 1996;46:157-60.
18. Cherniss, C. (1986). *Staff Burnout, Job Stress in Human Service.* Beverly Hills, CA: sage