



STUDY ON RELATION OF STRESS, DEPRESSION AND ALCOHOL USE AMONG DIFFERENT PROFESSIONALS

Psychiatry

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ABSTRACT

BACKGROUND - Stress has reached most of the professions posing great threat to mental and physical health. It is vital for the employers to recognize that work-related stress is a significant health and safety issue. Interest in professional stress is now growing because of the increasing incidence of the adverse events of profession on mental and physical health of the employees. These situations further kept lot of pressure on the professionals resulting in professional stress, then into Depression and further into alcohol abuse. **MATERIALS AND METHODOLOGY** - This is a web based online cross-sectional study conducted using google forms like Professional life stress scale, Becks depression inventory, Alcohol use disorders identification test (AUDIT). This study was conducted specifically on professionals working as Doctors, Bankers and IT Professionals. A total of 156 professionals participated in the study. **RESULTS AND CONCLUSION** - Around 52.7% of doctors, 40% of bankers and 47% of IT professionals are facing moderate level of stress. In a similar fashion 56.36% of doctors, 38% of bankers and 21.5% of IT professionals are having mild mood disturbances. In all the three groups more than 95% are under low alcohol use. The results of this study indicated that there is a significant association between stress, depression and alcohol use. This study helps us in understanding the relation of stress, depression and alcohol use among the professionals. There is an urgent need to understand the dynamics of the professional stress and its associated psychiatric morbidities so as to prevent it from assuming epidemic proportion.

KEYWORDS

stress, depression, alcohol use, doctors, bankers, IT Professionals

INTRODUCTION

Stress had pervaded our day-to-day life to the point of being considered the scourge of the modern industrial world. Stress has reached most of the professions posing great threat to mental and physical health. Stress related to work in the employee, eventually will affect the health of the entire organization^[1]. Occupational stress is a real concern for all the employees and employers because stressful job conditions are related to employee's job performance, emotional well-being and physical health.

Occupational stress primarily develops when job-related factors interact with individual factors, that results in a change of the individual's physical and mental state^[2]. Occupational stress is psychological stress related to one's job. Occupational stress usually is a chronic condition.

National Institute for Occupational Safety and Health, stated that "job stress, now more than ever, poses a greater threat to the health of workers and the health of Organizations"^[3]. Interest in professional stress is now growing because of the increasing incidence of the adverse events of profession on mental and physical health of employees^[4]. Symptoms usually include a drop in work performance, depression, alcohol abuse, anxiety, sleeping difficulties. It is necessary for employers to recognize the work-related stress as a vital health and safety issue.

Stressful working situations can also result in subpar work output, increased absenteeism, and injuries. A worker's quality of life is negatively impacted by persistently high levels of occupational stress, and the cost of the health benefits the employer offers rises as a result. Because of the nature of the work, such as target accomplishments, night shifts, work overload, long hours, excessive workload, job uncertainties, and confrontations with coworkers or superiors, these positions were extremely stressful.

Knowledge workers who experience stress usually have performance swings, a decline in concentration, poor sensorimotor coordination and an increase in error rates, while those who experience stress over an extended period of time experience problems like dissatisfaction, resignation, depression and general psychosomatic illness and disease. It has been hypothesized that stress has negative consequences on motivation, communication, cooperative work, maintainability and requires management. Employee stress needs to be efficiently assessed, tracked and reduced.^[5]

This stress was finally leading to Depression. Depression is a mental disorder that is characterized by loss of interest and pleasure

(anhedonia), decreased energy (anergy), feeling guilt, disturbed sleep and appetite, and poor concentration^[6]. With a 3.2% global prevalence of depressive episodes, depression significantly contributes to the burden of disease and affects people in all nations^[7].

These professionals so started seeking alternate pleasures to decrease their pressure, one such practice is consumption of alcohol. This consumption is more than normal in most of the professionals leading to health issues.

Therefore, it was crucial to comprehend the dynamics of professional stress and the psychiatric morbidities in order to stop it from reaching epidemic proportion^[8]. There is no study that is currently accessible that examined and linked professional stress, risk for developing depression, and harmful alcohol use among various Professionals in India. Doctors, bankers, and information technology professionals were the chosen professions for this study.

OBJECTIVES

- To screen for the prevalence of professional stress, risk for developing depression and harmful alcohol use among different professionals.
- To study the association between professional stress, risk for developing depression and harmful alcohol use.

MATERIALS AND METHODOLOGY

Study was conducted after getting clearance from Institutional Ethics Committee, AMC. The study was a web based cross-sectional survey conducted by Questionnaires designed using Google forms in English language. Doctors, Bankers and IT professionals are included in the study. Snowball sampling technique was used.

The Questionnaires includes the screening test for professional stress, depression and alcohol use. To enable the data collection, the questionnaires were sent through links on social platforms like WhatsApp etc. The survey comprised of questions pertaining to demographic and personal characteristics, substance use, depression, stress. The questionnaires stated that the participation was voluntary, and completion of survey reflected their consent to participate. Additionally, it also explained the purpose of survey along with an option to "opt out." Confidentiality of the information was maintained and no personal information of participants was disclosed to anyone.

Subjects whose age was 25 – 45 years were included in the study. Subjects with a work exposure for a minimum duration of 6 months were included. Subjects who do not give consent were excluded from study. Subjects with psychiatric diagnosis and traumatic head injury

were also excluded from the study.

For the sake of maintaining anonymity and enabling balanced reporting, the subject's name, workplace, and city of employment were left as options. A total of 156 completed interview were obtained at the end of the study.

SCALES USED-

1) Semi-structured proforma for obtaining information about socio-demographic

2) Professional life stress scale –^[9]

David Fontana created the screening technique in 1989. It has 22 questions that evaluate many aspects of a career, such as workload, work environment, rewards, etc., to screen for professional stress. The possible scores are between 0 and 60. Subjects that receive scores of 15 or higher are deemed to not have a problem with stress. Subjects who scored between 16 and 30 were thought to be under moderate amounts of stress. Stress is obviously a problem for Subjects with a score of 31 to 45, and it is obvious that a solution is needed. And for subjects who scored 46 to 60, stress is a serious issue that requires quick attention.

3) Beck depression inventory -

It is a self-report inventory with 21 multiple-choice questions that was developed by Aaron T. Beck. One of the most often used psychometric tests to assess Depression. It comprises of 21 questions on the respondents' moods throughout the previous week. There were at least four different choices for each question. Each response on the question is given a score between 0 and 3, and the overall score is then compared to a key to calculate the depression. A score between 1 and 10 is regarded as normal. Scores between 11 and 16 are regarded as mild mood disturbances, 17 to 20 are indicative of borderline clinical depression, 21 to 30 are regarded as moderate depression, 31 to 40 are indicative of severe depression, and >40 are indicative of major depression.

4) Alcohol use disorders identification test -^[10]

The alcohol use disorders identification test (AUDIT) developed by WHO is straightforward screening tool that is sensitive to the early identification of low risk and high risk (hazardous and harming) drinking. Adult's alcohol consumption frequency and amount are included in the AUDIT. Drinking that is detrimental or hazardous is connected with a score of 8 or higher. Subjects in our study who received a score of 8 or higher were deemed to be engaging in problematic alcohol use.

STATISTICAL ANALYSIS

Data was analyzed using SPSS version 25. Demographic, clinical and psychological variables were analyzed using Descriptive statistics. Contingency coefficient tests were applied to study the association using SPSS for windows.

ETHICAL CONSIDERATION

Participants were provided with information about the survey's purpose and asked to affirm their willingness to participate before beginning. No one was required to finish the survey, and if any of the questions made them uncomfortable, they were allowed to stop at any time. None of the methodologies were ever used in this investigation in a dubious manner.

RESULTS AND OBSERVATIONS

Table 1 – Sociodemographic Profile

DEMOGRAPHIC DATA	FREQUENCY	PERCENT
AGE	21 - 30	60.3%
	31 - 40	33.3%
	41 -50	6.4%
SEX	MALE	49.4%
	FEMALE	50.6%
MARITAL STATUS	UNMARRIED	52.6%
	MARRIED	47.4%
OCCUPATION	DOCTOR	35.3%
	BANKER	32.1%
	IT Professional	32.7%

This study includes 35.3% of Doctors, 32.1% of them are Bankers and 32.7% of them are IT Professionals. 60% of the study population are aged between 21-30 years of age, with an almost equal males and females in the population.

Table 2 – Prevalance Of Stress, Depression And Alcohol Use

		FREQUENCY	PERCENT
STRESS	ISN'T A PROBLEM	58	37.2%
	MODERATE STRESS	73	46.8%
	CLEAR PROBLEM	21	13.5%
	MAJOR PROBLEM	4	2.6%
BECK DEPRESSION INVENTORY	ALMOST NORMAL	97	62.2%
	MILD MOOD DISTURBANCE	52	33.3%
	BORDERLINE CLINICAL DEPRESSION	6	3.8%
	MODERATE DEPRESSION	1	0.6%
AUD	LOW RISK USE	147	94.2%
	HIGH RISK USE	9	5.8%

The study conducted revealed that 46.8% of them are facing moderate stress, 33.3% of them are facing mild mood disturbance and 94.2% are under low risk of alcohol use.

Table 3 – Comparison Of Stress, Depression And Alcohol Use In Doctors, Bankers And It Professionals

		Doctors	Bankers	IT Professional	Value Of P
STRESS	ISN'T A PROBLEM	18	20	20	0.782
	MODERATE STRESS	29	20	24	
	CLEAR PROBLEM	7	9	5	
	MAJOR PROBLEM	1	1	2	
AUD	LOW RISK	54	46	47	0.295
	HIGH RISK	1	4	4	
BECK DEPRESSION	ALMOST NORMAL	31	30	36	0.307
	MILD MOOD DISTURB	22	19	11	
	BORDERLINE DEPRESSION	2	1	3	
	MODERATE DEPRESSION	0	0	1	

Table 4 – Association Between Stress And Depression

		ALMOST NORMAL	MILD MOOD DISTURB	BORDERLINE DEPRESSION	MODERATE DEPRESSION	
STRESS	ISN'T PROB	55	3	0	0	p=0.000
	MODERATE	45	32	0	0	
	CLEAR PROB	1	16	4	0	
	MAJOR PRO	0	1	2	1	

The association between stress and depression yielded a $p < 0.05$ which is statistically important. It indicates that more stressful patient becomes, more the chances of landing to Borderline clinical or moderate depression.

Table 5 – Association Between Stress And Alcohol Use

		AUD LOW	AUD HIGH	
STRESS	ISNT A PROBLEM	58	0	p = 0.000
	MILD STRESS	73	0	
	MODERATE STRESS	15	6	
	MAJOR STRESS	1	3	

From the given study, it was understood that association between Stress and Alcohol use is statistically significant. The more stressed the patient is, more the amount of alcohol taken by patient leading to harmful alcohol use.

49.6% of study population have mild stress with low alcohol use, 66.6% have a clear stress problem and are harmful alcohol users.

Table 6 – Comparison Between Depression And Alcohol Use

		AUD LOW	AUD HIGH	
BECK DEPRES SION	ALMOST NORMAL	97	0	p= 0.000
	MILD MOOD DISTURBANCE	49	3	
	BORDERLINE CLINICAL DEPRESSION	1	5	
	MODERATE DEPRESSION	0	1	

From the given study, it was understood that association between Depression and Alcohol use is statistically significant. The more depressed the patient is, more the amount of alcohol taken by patient leading to harmful alcohol use 33.3% of study population tend to have mild mood disturbances with low risk of alcohol use and 55.5% of this population tend to have harmful alcohol use

DISCUSSION

A total of 156 subjects participated in this study, out of them 49.4% were males and 50.6% were females. Almost equal males and females participated in the study indicating growth of female employment.

Around 60.3% of study population were aged 21-30 years, 33.3% were 31-40 years and 6.4% were 41-50 years of age. And 35.3% of them were Doctors, 32.1% of them were Bankers and 32.7% of them were IT Professionals. In this study population 52.6% were unmarried and 47.4% were married.

About 46.8% were moderately stressed. And 33.3% of professionals were having mild mood disturbances. Approximately 5.8% of study population alone were using alcohol at harmful level. Around 52.7% of Doctors, 40% of Bankers and 47% of IT Professionals are facing moderate level of stress. In a similar fashion 56.36% of Doctors, 38% of Bankers and 21.5% of IT Professionals were having mild mood disturbances.

Job stress is a typical issue at work. experienced Regardless of the type of work they do, all professionals encounter stress at work. However, professions that are deadline-driven are more likely to experience this phenomenon.

Software companies are one of these industries that are severely impacted by this difficulty, and the experts who work for these companies frequently experience significant levels of stress. The IT industry is characterized by a number of elements that can create stress, such as customer interaction, ongoing technological change, fear of obsolescence, long working hours, work overload, etc.^[11]

Individually, stress among doctors has been linked to worse professional satisfaction, increased absenteeism, a larger likelihood of quitting the field early or retiring early, and a higher risk of struggling in interpersonal relationships, such as those with partners and family.^[12,13]

Changing organization's rules and practices, such as reducing working hours, caseloads, and on-call times, has been the main focus of interventions to lessen occupational stress and burnout among physicians.

Previous research also noted the high incidence of stress among IT professionals. Software developers from South India were surveyed online, and the results showed that 32.4 percent of the sample were depressed and 8.1 percent experienced significant psychological stress.^[14]

Stress in the job is linked to psychological and physical issues in the banking industry. The distinctiveness of the workplace stress elements and individual characteristics like affective temperament are correlated with intensity of work-related stress experiences. A study indicated that the uniqueness of job stress causes and personal characteristics like affective temperament are connected to how intensely people experience work-related stress.^[15]

Etiological research has demonstrated a strong relationship between professional stress and adverse health events, notably cardiovascular disease and mental health disorders.^[16] Many studies done on professionals have found that professional stress have increased the risk of harmful alcohol consumption. Using longitudinal data, Crum and colleagues reported that men holding jobs that were high in demands and low in job control were more likely to develop either an

alcohol abuse or alcohol dependence disorder than were men in jobs that lacked one or both of these two job stressors.^[17]

Vasse and colleagues had reported that high work demands and poor interpersonal relations with supervisors and coworkers were positively related to anxiety, which were in turn positively related to average weekly alcohol consumption.^[18]

LIMITATIONS

Although there are several causes of stress, only work-related stress was evaluated in this study; no other causes of stress or depression were included.

Though the study includes 156 participants, each group of occupation comprises around 50 participants which is less in number.

It being a cross-sectional study, results cannot be generalized.

Harmful alcohol use is not further differentiated into abuse and dependence.

CONCLUSION

This study is unique as three different factors i.e., professional stress in professionals, risk for depression and harmful alcohol use were assessed and association among them were studied. It states that 66.6% of stressed professionals have harmful alcohol use and 55.5% of population with borderline depression have harmful alcohol use.

According to the study's findings, a significant percentage of working professionals in Indian settings report feeling stressed or depressed. Understanding the dynamics of professional stress and its psychiatric morbidities is urgently needed in order to stop it from spreading like an epidemic.

Therefore, it's crucial to develop methods for assessing the stress and depression that professionals experience due to their jobs, while also giving them stress-management tools and reducing the stigma attached to mental health issues, to enable them to seek treatment when they need it.

CONFLICT OF INTEREST

There are no financial interests to disclose and no declared conflicts of interest between the author and co-author.

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