



A Study on Factors Associated with Depression Among the Working Men and Women with Special Reference to Coimbatore City

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ABSTRACT

Depression is a mood disorder that causes persistent feelings of sadness, emptiness, and loss of joy. It is different from the mood fluctuations that people regularly experience as a part of life. Major life events, such as bereavement or the loss of a job, can trigger depression. But depression is distinct from the negative feelings a person may temporarily have in response to a difficult life event. Depression often persists in spite of a change of circumstances and causes feelings that are intense, chronic, and not proportional to a person's circumstances. It is an ongoing problem, not a passing one. While there are different types of depression, the most common one is major depressive disorder. It consists of episodes during which the symptoms last for at least two weeks. Depression can last for several weeks, months, or years. For many people, it is a chronic illness that gets better and then relapses. The World Health Organization recognizes work as a major social determinant of physical and mental health (World Health Organization, 2021a). Job-related factors such as wages, work hours, workload, interactions with co-workers and supervisors, and access to paid leave impact the wellbeing of workers, their families, and their communities (CDC, 2021). More than half the world's population are currently in work and 15% of working-age adults live with a mental disorder. Without effective support, mental disorders and other mental health conditions can affect a person's confidence and identity at work, capacity to work productively, absences and the ease with which to retain or gain work. Mental health conditions can also impact families, careers, colleagues, communities, and society at large.

Keywords: Depression, Mental health, Factors, Work pressure, Insomnia

Introduction

Depression, in psychology, a mood or emotional state that is marked by feelings of low self-worth or guilt and a reduced ability to enjoy life. A person who is depressed usually experiences several of the following symptoms: feelings of sadness, hopelessness, or pessimism; lowered self-esteem and heightened self-depreciation; a decrease or loss of ability to take pleasure in ordinary activities; reduced energy and vitality; slowness of thought or action; loss of appetite; disturbed sleep or insomnia. Depression differs from simple grief or mourning, which are appropriate emotional responses to the loss of loved persons or objects. Where there are clear grounds for a person's unhappiness, depression is considered to be present if the depressed mood is disproportionately long or severe vis-à-vis the precipitating event. The distinctions between the duration of depression, the circumstances under which it arises, and certain other characteristics underlie the classification of depression into different types. Examples of different types of depression include bipolar disorder, major depressive disorder (clinical depression), persistent depressive disorder, and seasonal affective disorder.

Depression is probably the most common psychiatric complaint and has been described by physicians since before the time of ancient Greek physician Hippocrates, who called it melancholia. The course of the disorder is extremely variable from person to person; it may be mild or severe, acute or chronic. Untreated, depression may last an average of four months or longer. Depression is twice as prevalent in women than in men. The typical age of onset is in the 20s, but it may occur at any age. Depression can have many causes. Unfavourable life events can increase a person's vulnerability to depression or trigger a depressive episode. Negative thoughts about oneself and the world are also important in producing and maintaining depressive symptoms. However, both psychosocial and biochemical mechanisms seem to be important causes; the chief biochemical cause appears to be the defective regulation of the release of one or more naturally occurring neurotransmitters in the brain, particularly norepinephrine and serotonin. Reduced quantities or reduced activity of these chemicals in the brain is thought to cause the depressed mood in some sufferers. This study focuses on the major factors associated with depression among the men and women employees and the effects of depression in their personal and social lives. This study also focuses on the methods to overcome the problems faced by employees due to depression.

1.1 Objectives of the study

- To study the various factors of depression among the employees.
- To know about the impact of depression among both working men and women.

- To identify the problems due to depression and stress.
- To analyze the distinctive causes and effects of depression in gender-wise.
- To study the methods through which the employees recover from depression.
- To examine the age and gender specificities associated with depression and personality.

1.3 Statement of the problem

Depression is a mental disorder and it causes many problems to the normal life of a human. It causes a persistent feeling of sadness or loss of interest. It causes trouble doing normal day-to-day activities and sometimes the depressed patient may feel as if life isn't worth living. For many people with depression, symptoms usually are severe enough to cause noticeable problems in day-to-day activities, such as work, school, social activities or relationships with others. Some people may feel generally miserable or unhappy without really knowing why. Several factors can make depression more likely such as Family History and Genetics, Chronic Stress, History of Trauma, Gender, Poor Nutrition, Unresolved Grief or loss, Personality Traits, Medication and Substance use, etc. Depression among employees due to work stress can affect their work as well as the personal life. It is said that women are about twice as likely to be diagnosed with depression as men, with depression being the leading cause of disease burden among women. Thus the causes and effects of depression may vary from working women and men in different ways. This study helps to know the various factors associated with the depression among working men and women in urban cities and the diversified causes and effects among them.

1.3.1 Scope of the study

- To focus on the various factors affecting the depression among the employees.
- To know the effect of depression among the working people other than the non – working people.
- To distinguish between the effects of depression on working men and women.
- To show the rate of depression among the employees.
- To identify the various factors associated with depression in various workplaces.
- To know the impact of depression on the regular living of the employee.

1.4 Limitations of the study

- The results and findings are confined to a limited area.
- The opinions of the respondents may be biased.
- Time and resource constraint.

1.5 Methodology of the Study

Research methodology systematically solve research problem, why the research has been undertaken, how the research problem has been defined and what data defined, has been adopted why a particular technique of analysis for the study. The study is intended to analyze the factors affecting depression among the working men and women in urban cities. The methodology of the study includes

- Area of the study
- Source of data
- Sample size
- Statistical tools

1.5.1 Area of the Study

The area of the study is confined to Coimbatore City.

1.5.2 Source of Data

The study uses only primary data confined questionnaire have been prepared and collected from various employees. Primary research is done to gather original data required for the research. The research is focused on both qualitative and quantitative issues. Secondary data are collected from websites, books, journals etc.

1.5.3 Sample Size

154 questionnaires were collected from different employees. Convenient sampling method is applied.

1.5.4 Statistical Tools

Tools used for the study were following:

- Rank Analysis
- Chi-square Analysis

2. Review of Literature

Journal of Family Medicine and Primary Care (2019)¹ This study examined that Depression is the leading cause of disease burden in most regions of the world. But depression among the elderly is usually unrecognized and they have higher morbidity and mortality than those without depression. This is a community-based cross-sectional study conducted in three villages in Puducherry. Systematic random sampling is done to select households. Any person above the age of 60 years is considered as elderly. After obtaining informed consent, a pretested questionnaire is administered to obtain sociodemographic characteristics. Height and weight were measured. Chronic illnesses such as diabetes, hypertension, asthma, osteoarthritis, reduced vision, hard of hearing, and substance use were self-reported. Geriatric Depression Scale–Short form questionnaire was used as a screening tool for depression. And stated that the prevalence of depression among elderly in this rural area is high. All elderly persons must be screened for depression and appropriate treatment should be initiated.

JAMC (2019)² Reported that Depression is more prevalent in women than in men. Among women's population subgroups, there is paucity of research regarding occupational factors associated with depression in Pakistani nurses. This cross-sectional study was conducted on 250 female nurses working in a Federal Government tertiary care hospital in Islamabad. Pretested modified form of Agha Khan University Anxiety and Depression Scale was used to collect primary data. The questionnaires collected data on depressive symptoms, work experience, working hours, working environment, harassment by patients or attendants, job satisfaction and job stress. SPSS version 20 was used for data analysis. Chi-square test was used to see the association between different variables and depression. This study concluded that occupational factors play a very important role in determining depression in Pakistani nurses.

Umma Salma, Md Mahmudul Hasan, patient care (2020)³ This study reports the high workload, psychosocial stressors, physical labour, emotional labour, shift work and so on puts nurses at risk for short-term and long-term health problems, including sleep disorders, depression, psychiatric disorders, stress-related illnesses and illness in general. The context of Bangladesh is also not that different, since it has the lowest number of nurses in the subcontinent which results a staggering shortage. The main objective of this study was to find out the relationship between job satisfaction and depression, anxiety & stress among the female nurses in Dhaka Medical College and Hospital, Bangladesh. This cross-sectional study was conducted among purposively selected 310 female nurses for the period of six months. It concluded that job satisfaction level has a significant relationship with anxiety & depression but not with the stress. Low back pain and owning a house has been identified as significant variables for developing stress. The job satisfaction level and age group both been observed as significant variables for depression and anxiety along with other factors. Due to shortage of man power, nurses are at high risk of developing mental disorder in Bangladesh. Therefore, proper interventions need to be placed for preventing this phenomenon to happen.

Middle East Current Psychiatry (2020)⁴ reports that there is high prevalence of depression among medical personnel whether it is a student or an on-duty doctor. The most common symptom among both groups was sleep changes while the least common symptom among doctors was concentration problem and among students was feeling of helplessness. It was also found that 26% of the students were having suicidal thoughts while only 16% of the doctors were having suicidal intentions. It is concluded that depression is highly prevalent among medical students when comparing with on-duty doctors, so they should be screened with regular intervals and good counselling sessions to prepare them for a better health care system.

LR Abd Rahman, IB Idris.... (2020)⁵ This research has determined the prevalence of depression, anxiety and stress among adults attending primary clinics in a Klang Valley city and associated factors. The prevalence for each DASS subscale was lower compared to other studies but relatively similar to NHMS 2015 results. The significant protective factor for depression, anxiety and stress was history of being abused. It indicates that the risk of

¹ Karthik Balajee Laksham, Ramya Selvaraj, C Kameshvell "Depression and its determinants among elderly in selected villages of Puducherry–A community-based cross-sectional study" *Journal of Family Medicine and Primary Care* 8 (1), 141, 2019.

² GMJ Bukhari, S Habibullah... - "Occupational factors associated with depression in nurses working in a federal government tertiary care hospital in Islamabad" *Journal of Ayub Medical College Abbottabad* 31 (3), 397-401, 2019.

³ Umma Salma, Md Mahmudul Hasan "Relationship between job satisfaction and depression, anxiety and stress among the female nurses of Dhaka Medical College and Hospital, Bangladesh" *Public Health Research* 10(3): 94-102, 2020.

⁴ MFH Qureshi, D Mohammad, S Sadiq... - "A comparative cross-sectional analysis on prevalence of depression and associated risk factors among medical students and doctors of Karachi, Pakistan" *Middle East Current Psychiatry* 27 (1), 1-6, 2020.

⁵ Raudah Abd Rahman, Idayu Badilla Idris, Husnina Ibrahim "Risk Factors of Depression, Anxiety and Stress Among Adults Attending Primary Health Clinics in an Urban Area in Klang Valley, Malaysia" *Malaysian Journal of Medicine and Health Sciences* 16(1): 240-246, Jan 2020.

depression, anxiety and stress was not increased among those with history of being abused in this study as the odd ratio was less than one. However, the results should be carefully interpreted. Other independent variables were not statistically significant in this study. Mental health screening should be continued and be analyzed to see the burden of the mental illnesses in the country. More community-based cohort study with bigger sample size should be conducted in the future. Respondents with high DASS-21 score should be followed-up and assessed with confirmatory psychiatric test according to DSM-V. This can be accomplished by co-operation with psychiatrists and psychologists. Subsequent intervention should be implemented to reduce the burden of these mental health problems. Health education and awareness program on mental health among community should also be included in this interventional study. Besides, factors like history of being abused either physically, mentally and/or sexually should be explored among adults in the community and early intervention to prevent mental disorder among this particular group of people should be emphasized in the future.

Malaysian Journal of Psychiatry (2020)⁶ This study determined the prevalence of anxiety, depression and psychological distress among healthcare workers, and their associated factors in primary health clinics setting. This was a cross-sectional study conducted in 2014 among healthcare workers in primary health clinics in Sepang, Selangor. All staff consisting of doctors, nurses, pharmacists and allied healthcare professionals were recruited. Anxiety, depression and psychological distress were measured using the Hospital Anxiety and Depression Scale (HADS) and the General Health Questionnaire 12 (GHQ-12). Socio- demographic data, workload and length of service were also collected and concluded in overall that the mental health status of primary healthcare workers is good. Being a nurse was found to be associated with lower anxiety and depression.

YK Cheah, M Azahadi, SN Phang..., (2020)⁷ In light of the seriousness of mental health issue in Malaysia, the objective of the present study was to examine sociodemographic, lifestyle, and health factors associated with depression and GAD among Malaysian adults. The research question was that what kind of population were more or less likely to suffer from depression and GAD. This study found that younger adults, females, Indians, less educated people, unmarried individuals and individuals with poor self-rated health were more likely to develop depression and GAD. There were sociodemographic (age, gender, ethnicity, education, and marital status) and health (self-rated health) profiles that were significantly associated to the risk of depression and GAD. These findings may be utilized to enable policy-making decisions and policy outputs for the benefit of patients in Malaysia with mental health illnesses.

C Mazza, E Ricci, S Biondi, M Colasanti..., (2020)⁸ This study reported a nationwide survey of psychological distress among Italian people during the COVID19 pandemic: Immediate psychological responses and associated factors. Overall, female gender, negative affect, and detachment were associated with higher levels of psychological distress. Having an acquaintance infected with COVID-19 increased both depression and stress, whereas a history of stressful situations and medical problems raised depression and anxiety levels. Finally, having a family member infected with COVID-19 and being young in age and needing to leave one's domicile to go to work were found to increase anxiety and stress levels, respectively. It concluded that the psychological impact of COVID19 on the Italian population, providing a baseline for future research on the impact of COVID19 throughout the rest of the pandemic. However, further studies should carry out multilevel analysis (e.g., grouping for age, gender, or geographical location), with the aim of differentiating distress level in order to develop more targeted interventions.

Journal of Health Science and Medical Research (2022)⁹ Reported the Psychological distress screening for depression, anxiety and stress among medical ward patients in hospital Tapah, Malaysia: a cross-sectional study using the Depression and stated that the mental health (MH) issue has emerged as one of the great public health concerns worldwide, and its prevalence is escalating substantially among Malaysians. An individual's daily living, physical health, and relationships can be hard-hit by an MH disorder. This study detected a two-fold increase in the risk of anxiety compared to stress and depression. Further studies should be conducted to identify the factors related to the high DASS-21 scores in detail.

Heliyon (2022)¹⁰ Reported that Depression in physicians emerges early in their academic and professional careers. Lengthy and irregular duty time, high levels of obligation, job dissatisfaction, workstation culture, organizational rules, and so on significantly increased the psychological pressure on physicians. The findings of this study indicate that providing appropriate organizational support, proper work assignments, and an adequate opportunity to develop their professional skills and career irrespective of sex may increase overall job satisfaction. Ultimately, this will serve to improve patient care as well as the whole health system's output.

2.1 Research Gap

The above research papers were only about the depression among a particular type of work such as physicians, nurses, etc., but this study briefly portrays the various kind of works such as medical practitioners, IT employees, police men, army, teachers, etc., as a whole. This study is also differentiated from

⁶ STE Zhen, TAMT Mohd, SMM Ismail... - "Mental health status of healthcare workers in primary health clinics in Sepang" *Malaysian Journal Of Psychiatry* 29(2):p 73-89, December 2020.

⁷ YK Cheah, M Azahadi, SN Phang... - "Sociodemographic, lifestyle, and health factors associated with depression and generalized anxiety disorder among Malaysian adults" *Journal of Primary Care & Community Health* Volume 11: 1-8, 2020.

⁸ C Mazza, E Ricci, S Biondi, M Colasanti... - "A nationwide survey of psychological distress among Italian people during the COVID-19 pandemic: immediate psychological responses and associated factors" *International journal of environmental research and public health* 17 (9), 3165, 2020.

⁹ XY Yong, CF Sui, MY Liew... - "Psychological distress screening for depression, anxiety and stress among medical ward patients in hospital Tapah, Malaysia: a cross-sectional study using the Depression" *Journal of Health Science and Medical Research*, 2022.

¹⁰ MN Islam, DP Dasgupta, N Sultana, F Yesmine... - "Factors associated with depression and determining dimensions of job satisfaction among physicians in Bangladesh" *Heliyon* 8 (9), e10589, Sept 2022.

the others as it takes into consideration of both working men and women. It also mainly focuses on the urban workers in Coimbatore city. This study analyses the various factors associated with the depression along with their causes and effects.

3. Analysis and Interpretation of Data

Data analysis and interpretation is the next stage after collecting data from empirical methods. The dividing line between analysis of data and interpretation is difficult to draw as the two processes are symbolical and merge imperceptibly. Interpretation is inextricably interwoven with analysis. The analysis is a critical examination of the assembled data. Analysis of data leads to generalization. Interpretation refers to the analysis of generalization and results. A generalization involves concluding a whole group or category based on information drawn from particular instances or examples. Interpretation is a search for the broader meaning of research findings. Analysis of data is to be made regarding the purpose of the study.

Data should be analysed in light of hypothesis or research questions and organized to yield answers to the research questions. Data analysis can be both descriptive as well as a graphic in presentation. It can be presented in charts, diagrams, and tables. The data analysis includes various processes, including data classification, coding, tabulation, statistical analysis of data, and inference about causal relations among variables. Proper analysis helps classify and organize unorganized data and gives scientific shape. In addition, it helps study the trends and changes that occur in a particular period.

The following tools were used:

1. Rank Analysis
2. Chi-square Analysis

3.1 Rank Analysis

A ranking is a relationship between a set of items such that, for any two items, the first is either "ranked higher than", "ranked lower than" or "ranked equal to" the second. In mathematics, this is known as a weak order or total preorder of objects. It is not necessarily a total order of objects because two different objects can have the same ranking. The rankings themselves are totally ordered. For example, materials are totally preordered by hardness, while degrees of hardness are totally ordered. If two items are the same in rank it is considered a tie.

Table 3.1.1 showing the effects of depression during work

Effect of Depression	R1	R2	R3	R4	R5	Total	Rank
Easily get irritated	45	38	61	10	0	344	2
Often get angry	35	49	48	19	3	368	4
Sudden feeling of emptiness	26	52	53	21	2	383	5
Increase in anxiety	50	43	43	14	4	341	1
Lack of confidence	25	31	52	31	15	442	7
Lack of motivation	21	30	48	32	23	468	8
Difficulty in concentrating	25	45	60	18	6	397	6
Boredom	41	48	51	10	4	350	3

Interpretation:

The above table depicts the effects of depression among the employees during work. It states that the highest rank is for the feeling of increase in anxiety, second rank is for the feeling of easily getting irritated, third rank belongs to the feeling of boredom, fourth rank is for the feeling of often getting angry, fifth rank belongs to the sudden feeling of emptiness, sixth rank belongs to difficulty in concentrating, seventh rank belongs to the lack of confidence and the last rank belongs to the lack of motivation.

3.2 Chi-Square Analysis

Chi-square test is the non-parametric test of significant differences between the observed distribution of data among the observed distribution of data among categories and the expected distribution based on the null hypothesis. The test (Pronounced as chi square test) is one of the simplest and most widely used non-parametric test in statistical work. The symbol is the Greek letter Chi. The test was first used by Karl person in the 1900.

Table 3.2.1 showing the Occupational status and the Influence of depression in social and personal lives of the employees

Occupation/Influence of depression in social and personal lives	Business	Professional	Self-employed	Employee	Total
Only social life	8	10	6	8	32
Only personal life	10	20	8	12	50
Both	7	3	10	12	32
None	9	5	12	14	40
Total	34	38	36	46	154

O	E	O-E	(O-E) ²
8	7.06	0.94	0.8836
10	7.89	2.11	4.4521
6	7.48	-1.48	2.1904
8	9.55	-1.55	2.4025
10	11.03	-1.03	1.0609
20	12.33	7.67	58.8289
8	11.68	-3.68	13.5424
12	14.93	-2.93	8.5849
7	7.06	-0.06	3.6
3	7.89	-4.89	23.9121
10	7.48	2.52	6.3504
12	9.55	2.45	6.0025
9	8.83	0.17	0.0289
5	9.87	-4.87	23.7169
12	9.35	2.65	7.0225
14	11.94	2.06	4.2436
Total	154		166.8226

$$\begin{aligned}\text{Chi-square Value } X^2 &= \sum (\text{O}-\text{E})^2/\text{E} \\ &= 166.8226/154\end{aligned}$$

$$= 1.083263636$$

$$\begin{aligned}\text{Degree of Freedom} &= (r-1)(c-1) \\ &= (4-1)(4-1) \\ &= (3)(3) \\ &= 9\end{aligned}$$

$$\text{Table value} = 16.919$$

HYPOTHESIS

H₀ There is no significant relationship between occupational status and the influence of depression in social and personal lives of the employees.

H₁ There is significant relationship between occupational status and the influence of depression in social and personal lives of the employees.

Level of Significance= 0.5% or 0.05

Interpretation:

In the above analysis the calculated value (1.083263636) is less than the Table Value (16.919) at the level of 5% Significance. Hence null hypothesis is accepted thus there is no significant relationship between the occupational status and the influence of depression in social and personal lives of the employees.

4. Findings and Suggestions of the Study

4.1 Findings

The objective of the study is to know the various factors of depression among the employees, to know about the impact of depression among both working men and women. to identify the problems due to depression and stress, to analyze the distinctive causes and effects of depression in gender-wise, to examine the age and gender specificities associated with depression and personality and to study the methods through which the employees recover from depression. For achieving these objectives, the study has been analysed using the techniques of Simple percentage method, Rank analysis and Chi-square analysis. The final chapter is an attempt to summarize the findings of the study based on which few suggestions have been made.

4.1.1 Rank Analysis

The rank analysis for the effects of depression among the employees during work states that the highest rank is for the feeling of increase in anxiety, second rank is for the feeling of easily getting irritated, third rank belongs to the feeling of boredom, fourth rank is for the feeling of often getting angry, fifth rank belongs to the sudden feeling of emptiness, sixth rank belongs to difficulty in concentrating, seventh rank belongs to the lack of confidence and the last rank belongs to the lack of motivation.

4.1.2 Chi-Square Analysis

There is no significant relationship between occupational status and the influence of depression in social and personal lives of the employees.

4.2 Suggestions

- Employees should be paid properly for their work and they shouldn't be put into extra hours of work continuously.
- The employees should be motivated by the higher officials and they should be clarified with their job roles.
- The organization's should conduct medical campaigns and sessions to create awareness about controlling and managing depression, stress and anxiety.
- Women employees face more depression than men so they should be treated properly and scheduled with appropriate working hours.
- Having a strong support system and an active social life is important for our mental health. Make sure that you're regularly connecting with friends and family, even when your lives are busy.
- Strategically plan your time off and vacations so you have something to look forward to, as well as boundaries between work and personal time. Looking forward to a vacation away can help ease feelings of depression in the workplace.
- Get up and walk, stretch, or plan a lunch break outside. Taking a few moments a day away from your work area may help with mood and give you fresh focus.
- Depression, stress and anxiety are common occurrences at work. But, playing games at work may actually help reduce stress. Playing games can be fun as it triggers the release of endorphins. It relieves stress and promotes wellbeing.

Conclusion

Depression is one of the most common conditions in primary care, but is often unrecognized, undiagnosed, and untreated. Depression has a high rate of morbidity and mortality when left untreated. Patients, who live with depression, and their family and friends, have enormous challenges to overcome. Depression in workplaces have been increasing rapidly, therefore, it is imperative for employers to handle this aspect with maximum care and attention. Depression is an issue and a growing one at that. Given the harsh implications that it has in the workplace, it must be dealt with swiftly.

In this study it is stated that people working in all kind of occupations undergoes depression as their work life is challenging. Depression in workplace affects productivity and it also affects the employees personal and social lives. Some of the factors includes poor work environment, irregular working hours, unsafe working conditions, effort-reward imbalance, etc., The gender differences in depression is widened over time and women are more likely to get affected by depression than men. The employees are found with various symptoms of depression such as anger, anxiety, irritation, difficulty in concentrating, etc., so it is important to understand the factors affecting the depression and their effects on employees to treat it properly. The employees should also take steps to overcome the depression and work with a peaceful mindset.

WEBSITES

1. <https://www.psychiatry.org/patients-families/depression/what-is-depression>
2. <https://www.mayoclinic.org/diseases-conditions/depression/symptoms-causes/syc-20356007>

3. <https://www.who.int/news-room/fact-sheets/detail/depression>
4. <https://my.clevelandclinic.org/health/diseases/9290-depression>
5. <https://employsure.com.au/guides/workplace-health-and-safety/depression-at-work/>
6. <https://ro.co/health-guide/8-types-of-depression/>
7. <https://doi.org/10.3390/ijerph17093165>
8. <http://sagepub.com/journals-permissions>
9. <https://psychcentral.com/depression/what-are-the-risk-factors-for-depression#depression-risk-factors>
10. <https://www.careeraddict.com/stressful-jobs>