Research Article

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PREVALENCE OF DEPRESSION IN COMMON POPULATION: A COMMUNITY BASED STUDY

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Abstract

Depression is a common cause of disability and reduced life satisfaction and also the most prevalent mental disorder. This is a community-based study in the common population. A total of 150 people were recruited in this study. The study population includes males and females, married and unmarried, students, farmers, govt. employees, IT professionals as well as health professionals randomly. The questionnaire is based on the Montgomery and Asberg Depression Rating Scale (MADR Scale). The result of the study shows the existence of depressive symptoms in the community. Based on the score obtained, the symptoms were classified as mild, moderate, and severe. About 23.3% of people affected with chronic depressive symptoms. Females affected with severe depressive symptoms (30 females) than in males (15 males). In the case of different age groups younger adults (35 people) shows more severe elder adults (15 people).symptoms than elder adults (15 people).

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INTRODUCTION

Depression is negatively affects how we feel, the way we think and how we act. It causes the feeling of sadness and /or a loss of interest in activities once we enjoyed. It can even lead to physical and emotional problems and also can decrease a person's ability to work [1]. Depression is a common cause of disability and reduced life satisfaction in old age and also a most prevalent mental disorder. Along with the increase in number of older adults worldwide, a better understanding about depression is highly valuable [2] Various types of psychopathology like depression, suicide, aggression anxiety and bulimia has shown the low brain serotonin (5-HT) levels or function [3]. Current evidences points out the complex interactions of neurotransmitter availability and receptor regulation and sensitivity underlying the affective symptoms. Clinical and preclinical studies suggests that the disturbances in the central nervous system serotonin (5-HT) activity as the major factor. Other neurotransmitters noticed includes the norepinephrine (NE), dopamine (DA), glutamate and the brain derived neurotrophic factor (BDNF) [4].

There are a number of reasons that can increase the chances of depression like the past sexual, mental or physical abuse, certain medications such as isotertinoin, INF-α etc, death or loss of loved ones, a family history of depression, depression as a comorbidity of certain major illness, and substance abuse. Moreover, job loss and unemployment on workers has got a major impact on their stress and mental health. Job loss and unemployment reflects

on the social and psychological functioning as well as the physical health and on the family [5] .There are different types of depression like major depression, chronic depression (dysthymia), atypical depression, postpartum depression, bipolar depression, seasonal depression, psychotic depression and treatment resistant depression [5].

Most of them with depression will be presented with a normal appearance. Patients may show psychomotor retardation, loss of emotional expression, restlessness, significant weight loss or loss of appetite, insomnia, loss of energy [15]. Women experience depression twice likely as men from early adolescence through childhood, across many nations, cultures and ethnicities [13].This is true in the cases whether depression is marked as a diagnosed mental disorder or as subclinical symptom. Diagnosable depressive disorder is common among women, who have lifetime prevalence for major depressive disorder compared with men [4]. Depressive symptoms are affected by the poor quality of sleep. Epidemiological studies show that the disturbances in sleep are significant risk factor in healthy subjects on the later development of depression [3].

Assessing the depressive symptoms early can help to determine the possible treatment options. Assessment of depression is made possible through instruments which include both interview and self-report measures and are used to screen, diagnose and or to decide the treatment options [17]. Depression assessment is made possible through Beck Depression Inventory (BDI), Center for Epidemiological Studies Depression Scale (CES-D), EQ-5D, Hamilton Depression Rating Scale (HAM-D), Montgomery- Asberg Depression Rating Scale (MADRS), Social Problem Solving Inventory Revised (SPSI-RTM), Behavior Assessment System for Children (BASC), Children Behavior Checklist (CBCL), Children Depression Inventory (CDI), Children Depression Rating Scale (CDRS), Beck Hopeless Scale, Quick Inventory of Depression Symptomatology Self- Report (QIDS-SR), Patient Health Questionnaire (PHQ-9), Reminiscence Functions Scale (RFS), Short Form Health Survey(SF-36), Social Adjustment Scale- Self Report (SAS-SR), Social Functioning Questionnaire (SFQ), Geriatric Depression Scale (GDS), Life Satisfaction Index.

METHODOLOGY

STUDY POPULATION

A Total of 150 people were recruited in this study.A criteria for exclusion and inclusion are not formulated previously. People above 10 years old are included in this study. Study population includes males and females, married and unmarried, students, farmers, govt.employees, IT professionals as well as health professionals randomly. Healthy individuals as well as people with major illness(ischemic heart disease, CAD, stroke, COPD, TB, Cancers, Cirrhosisetc) and minor illness (coughs, dressings, eye soreness, rash, ear ache, minor lacerations/burns, flu, sore throats, sinusitis etc) were enrolled.

DATA COLLECTION

The data collectected randomly using a pre-formulated questionnaire. The questionnaire is based on the Montgomery and Asberg Depression Rating Scale (MADR Scale). Datas regarding age, education, job, marital status, use of antidepressants, living place, diagnosis of any depression or self-reported depression, living arrangements, presence of underlying disease, medication history, family history, social history are collected through the baseline interviews. Some are refused to give interviews where their informations are collected through their family members.

ASSESSMENT OF DEPRESSION

Montgomery and Asberg Depression Rating Scale is used to determine the depression severity in the present study. it includes criteria such as Apparent sadness, reported sadness, inner tension, reduced sleep, reduced appetite, concentration difficulties, lassitude, inability to feel, Pessimistic thoughts and finally suicidal thoughts. Each of the criteria have subdivisions with scores 0-6.Based on the total score for which the symptoms they experience, the disease severity are divided in to mild (2-3) moderate (3-6) and severe (>6).

STATISTICAL ANALYSIS

A sample size of 150 is recruited. In the current study, chi-square test is used. P value less than 0.05 are considered to be statistically significant. Correlation between depression with age category and that of the males and females are determined in the present study.

RESULTS

In this study a total of 150 samples were taken. Based on the demographic data they were classified into various groups.

Table 01: Demographic profile

Variables	subgroup	n	%
Age group	10-20	20	13.3
	21-45	70	46.6
	Above 45	60	40
Sex	Males	70	46.6
	Females	80	53.3
Marital status	Married	120	80
	Unmarried	30	20
Occupation	Students	20	13.3
	Farmers	40	26.6
	Govt. employees	25	16.6
	IT professionals	25	16.6
	Health care professionals	30	20
Disease status	Healthy individuals	50	33.3
	Major illness	35	23.3
	Minor illness	55	36.6

Here 20 were taken as students between the age group of 10-20. 70 adults in the range between 21-45 and the remaining 60 were the age of above 60. In the total population, 70 (46.6%) were males and 80 (53.3) were females. About 120 were married whereas 30 unmarried. In the population, majority are farmers (26.6%) followed by health care professionals (20%). About 16% were IT professionals. The least were students of 13%. Majority of the population (36.6%) had minor ailments followed by healthy people (33.3%) About 23% have had the major illness like cardiovascular diseases, respiratory diseases, cancer etc.

Table 02: Course of Depression

Course	n	%
Never depressed	17	11.3
Incident of depression with remission	53	35.3
Incident of depression without remission	45	30
Chronic depression	35	23.3

Course of the depression was analysed from the population. Majority in the population (35.3%) having incident of depression with remission followed by having incident of depression without remission. About 23.3% had chronic depression. Only a 11.3% of the population never depressed.

Table 03: Analysis based on Montgomery-Åsberg Depression Rating Scale (MADRS)

Parameters	Score, n(%)			
	0	2	4	6
Apparent sadness	**20 (13.3)**	**50 (33.3)**	**30 (20)**	**50 (33.3)**
Reported sadness	**19 (12.6)**	**71 (47.3)**	**40 (26.6)**	**20 (13.3)**
Inner tension	**20 (13.3)**	**30 (20)**	**25 (16.6)**	**75 (50)**
Reduced sleep	**25 (16.6)**	**40 (26.6)**	**40 (26.6)**	**45 (30)**
Reduced appetite	**17 (11.3)**	**30 (20)**	**43 (28.6)**	**60 (40)**
Concentration difficulties	**30 (20)**	**45 (30)**	**55 (36.6)**	**20 (13.3)**
Lassitude	**26 (17.3)**	**60 (40)**	**40 (26.6)**	**24 (16)**
Inability to feel	**25 (16.6)**	**50 (33.3)**	**50 (33.3)**	**25 (16.6)**
Pessimistic thoughts	**40 (26.6)**	**31(20.6)**	**59 (39.3)**	**20 (13.3)**
Suicidal thoughts	**30 (20)**	**60 (40)**	**42 (28)**	**18 (12)**

The score of depression was calculated using Montgomery-Åsberg Depression Rating Scale (MADRS). Major parameters included are apparent sadness, reported sadness, inner tension, reduced sleep, reduced appetite, concentration difficulties, lassitude, inability to feel, pessimistic thoughts and suicidal thoughts. The high score (6) seen in40% with reduced appetite followed by 33.3% with apparent sadness. The least score of 0 was higher in with pessimistic thoughts (26.6%) followed by concentration difficulties and suicidal thoughts (20%).

Table 04: Depression among males and females

	Males	Females	P value
Mild	25	18	0.04197
Moderate	30	32	
Severe	15	30	
Total	70	80	

Based on the depression scale the classification of mild, moderate and severe were done. About 25 males and 18 females had mild depressive symptoms. Moderate symptoms of males and females were 15 and 30 respectively. About 30 females had severe symptoms whereas 15 males in that category. P value was calculated by using chi-square test and a statistically significant result was obtained.

Table 05: Depression in different age category

	10-20	21-45	Above 45	P value
Mild	13	10	30	0.1
Moderate	5	25	15	
Severe	2	35	15	
Total	20	70	60	

Within the age group of 10-20 majority had minor symptoms whereas within 21-45, majority with severer depressive symptoms followed by moderate symptoms. About 30 had mild symptoms in age group above 45 followed by moderate and severe. P valve calculated using chi-square test and there was no statistically significant results obtained.

DISCUSSION

Depression is one of the most prevalent mental disorders and a common cause of disability and reduced life-satisfaction [6]. The aetiology of depression in community samples has been intensively investigated in twin studies that can broadly distinguish genetic from environmental factors. The existing literature suggests that the key vulnerability factors are neuroticism, family history of depression and early abuse/neglect or trauma, whereas the precipitating factor is often an adverse life event [7].

In the table [1], both the onset and the course of depressive syndromes were not only predicted by demographic variables, such as age, sex, marital status and level of education. This is in accord with studies carried out in clinical psychiatry (Cole, 1990). Different aspects of physical health did predict both the onset and the course of depressive syndromes. In this study we also included the disease status of the sample as healthy individuals, major illness and minor illness. It is found that the presence of diseased condition increases the depressive symptoms. Several studies there are an

association between social relationship and marital status [10]. Generalization of these findings is limited by the nonresponse which, at baseline, was related to age and sex. Age and sex do not appear to be important predictors of the course of depression. Age was, however, associated with physical health, indicating that some selective nonresponse for those with physical illnesses has probably occurred.8 Here also consider the course of depression, Only 11.3% were have never felt depression situations in their life so far and 35.3% had incident of depression with remission. These, can be defined as a level of depressive symptoms basically indistinguishable from that of someone who has never been depressed. Being in remission means that the depressed individual has been able to return to a normal level of social functioning. Remission is one of several outcomes for patients with depression. Before a patient is considered to be in remission, the patient must respond to treatment. Typically, response is defined by a 50% change in symptom intensity. Functionally, the difference between response and remission is simply the level of improvement: a patient in remission has a greater level of improvement than one who is a responder. If a patient's remission is not sustained, then the patient experiences a relapse Remission leads to recovery. Generally, a patient needs to be in remission for at least 6 to 9 months before he or she is declared to be in recovery. Remission leads to recovery. Generally, a patient needs to be in remission for at least 6 to 9 months before he or she is declared to be in recovery9 .With 30% had incident of depression without remission and 23.3% was suffering from chronic depression.

From table 3 the depression is analyzed based upon MADRS, from the result it was clear that 33.3% people scored 2 who Looks dispirited but does brighten up without difficulty and scored 6 who Looks miserable all the time. Extremely respondent.With highest percentage 47.3% scored 2 in reported sadness showed Sad or low but brightens up without difficulty. Due to inner tension 50% were scored 6 showing Unrelenting dread or anguish and overwhelming panic. Due to reduced sleep to less than two or three hours scored 6 with 30%. Also 40% showed Needs persuasion to eat at all in reduced appetite criteria. About 36.6% showed worsening symptoms in concentration to particular matter. Due to depression about 40% faces difficulties in starting activities. About 33.3% showed Loss of interest in the surroundings. Loss of feelings or friends and acquaintances. About 39.3% showed Persistent self-accusations, or definite but still rational ideas of guilt or sin. Increasingly pessimistic about the future.Due to Weary of life40% having suicidal thoughts. The study describes the prevalence of depression among males and females. The study shows that there is increased level of depressive symptoms among females than that of males. The results of our study was concordance with study conductes by Renee D et al11 .Neuroticism plays a major role in the gender difference of depressive state in community. Environmental factors, complex interaction of hormones also play a major role in this association. Females experiences more physical strains as compared to males and has less power and status than men in many societies4. The study also describes about the association of depression among different age groups. This study shows the elevated adolescent depression level. This can may leads to depressive disorders. The results of our stusy show similarity with the study conducted by Poulin et al12. Use of alcohol, cigarettes and other drugs can leads to depressive symptoms in adults. We also analyse that academic performance also a factor for depression among students. We also analysed that physical disability, chronic illness, social support, cognitive impairment and economic status serves for depressive symptoms in elderly.

The major limitation of study was depression is only a self assessment tool not a diagnostic tool. Hence the reliability cannot be assure with the scoring system. The sample size need to expand inorder to understand more easier. The main aim of this study to analyse the depressive symptoms as searly as possible and to find the suitable remedial actions. Because theses depressive symptoms can leads to various physical, mental and social problems.

CONCLUSION

Depression is a serious mental disability in the common population. Various factors can leads to depressive disorders. The analysis of the depressive state is essential inorder to avoid further complications. We found that the prevalence of depressive state is higher among the public. Early assessment and preventive action is necessary.

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