

# A Survey Depression in Students of Pharmacy

Mr. Manthan Prajapati<sup>1</sup>, Mr. Madhav Oza<sup>2</sup>, Ms. Mansi Bhagat<sup>3</sup>, Mr. Kenil Choksi<sup>4</sup>, Mr. Jaydev Patel<sup>5</sup>,  
Dr. Mrudangsinh Rathod<sup>6</sup>

<sup>1,2,3,4,5</sup>Parul Institute of Pharmacy, Parul University, Vadodara, Gujarat, India

<sup>6</sup>Project Manager and Subject Matter Expert, Octalsoft – Glorant, Ahmedabad, Gujarat, India

**Abstract-Background and Objective Depression is a common mental health condition that is clinically serious and a cause of public concern. The physiological, psychological, and social changes during adolescence raise the risk of Major Depressive Disorder (MDD) and other depressive disorders. Teenagers' MDD symptoms are similar to those of adults, but they are often milder. Although depression can hit at any age, it is most common in late adolescence and early adulthood. To assess the scoring of depression in students. Method An online survey using Zung's Self-assessment scale was done over three months, and people who wanted to participate were included. Result A total of 164 responses were collected using an online questionnaire. According to Zung's scale, the overall score shows the number of people in the depression stage. Males had a mean of 39.24, 51.67, 0, and 72.50, while females had a mean of 38.69, 53.74, 62.82, and 0. On a scale of 100, most people suffering from depression score 25 to 49, with scores ranging from 50 to 59. Conclusion For those suffering from the disease, early detection and treatment are critical. Depression is a serious ailment that requires the same level of attention as heart disease. The Zung's Self-Rating Depression Scale is a quick self-assessment tool for determining a patient's depression level. The scale has 20 items that assess the general effect, physiological equivalents, other issues, and psychomotor activity, the four main characteristics of depression.**

**Keywords: Zung's Self-assessment scale, Depression, Depression scoring, Major depressive disorders.**

## INTRODUCTION

Depression is one of the common mental health disorders, clinically important, and a matter of concern in the general population [1,2]. It is estimated that globally 5% of adults and 5.7% of people older than 60 years suffer from this disorder [3]. Over days and weeks, everyone goes through various emotions, which vary depending on events and situations. People are frequently sad when they are disappointed and grieve when they experience a loss. These emotions usually come and go and are additive reactions to changes and input.

Depression, on the other hand, seems weighty and persistent. Depressed people are less likely to be encouraged, reassured, or consoled. People who have recovered from depression often appreciate the freedom to experience normal grief again, to have a "hard day," rather than a heaviness on their minds and souls every day [4]. According to the American Psychiatric Association, depression is a common, serious medical illness that negatively affects one's feelings, thinking, and acting. Depression greatly provides the global burden of disease as a foremost cause of disability. Around 1 out of every 15 people endure depression (6.7%). 1 in every 6 people (16.6 %) will live through depression sooner or later in their lives. Depression can develop at any age, but it is most common during late adolescence and young adulthood. Females are more presumable to have depression than males. According to a research, One-third of women will have a significant depressive event at any point in their lives. When first-degree relatives (parents/children/siblings) suffer from depression, there is a high degree of heritability (about 40%) [5]. Because of developmental processes that enhance their sensitivity and a cognitive framework favouring negativity and rumination, girls may have Major Depressive Disorder (MDD) more frequently than boys [6].

Major Depressive Disorder (MDD) can make the stressful teenage years even more difficult. Adolescence brings physiological, psychological, and social changes that increase the risk of MDD and other depressive illnesses. As a result, MDD might encourage teenage risk behaviours, such as substance misuse. Adolescent impulsivity mixed with MDD can result in death by suicide. According to practice guidelines, MDD in teenagers can be successfully treated when diagnosed and treated [6]. The mechanism of the cause of depression is still poorly understood. Decreased functioning of monoaminergic neurotransmitters (serotonin, norepinephrine, dopamine, or all of these neurotransmitters) in the brain has historically been

implicated, assuming that effective antidepressant therapy will rectify these functional abnormalities [2]. Additionally, medical diseases (e.g., thyroid disorders, a brain tumour, or lack of vitamins) can imitate depression indications; therefore, it is critical to eliminate other possible causes [5]. It is understood that the neuroplastic process is associated with the brain in response to environment and exposure; the monoaminergic mechanisms are the biology of cellular and molecular mechanisms that control emotions [2].

MDD symptoms in teenagers are similar to those in adults; however, they are often milder. In teenage girls, symptoms include weight and appetite changes and feelings of worthlessness and shame [6].

As it is a heterogeneous condition, the appearance may vary with a wide range of symptoms [2]. Depression is generally characterized by symptoms extending from mild to severe, which are [5]:

- Enduring from a sad or depressed temperament.
- Losing interest or pleasure in previously appreciated activities.
- Appetite alters - weight variations unrelated to diets.
- Sleeping difficulties or oversleeping.
- Increased lethargy or a decrease in energy.
- Increased unproductive physical activity (e.g., difficulty to remain still, pacing, hand-wringing) or slower motions or speaking (these actions must be severe enough to be observable by others).
- Feelings of worthlessness or remorse.
- Problems are thinking, focusing, or making choices.
- Suicidal or death-related thoughts.

For a depression diagnosis, symptoms must last at least two weeks and show a change in your former level of functioning [5]. Even those who appear to live in reasonably optimal conditions might be affected by depression [4].

Depression can be caused by a variety of circumstances, including:

- Biochemistry: Differences in some brain chemicals may have a role in depressive symptoms [4].
- Genetics: Depression can be passed down across generations. For example, Identical twins are at a 70 % higher risk of developing depression if the other has developed depression [4].

- Personality: People who have low self-esteem, are quickly swamped by stress, or are habitually gloomy appear to be predisposed to depression [4].
- Environmental factors: People who are constantly exposed to violence, neglect, abuse, or poverty may be more susceptible to depression [4].

## METHODS

This study was conducted between December 2021 to February 2022. The duration of the survey was of 3 months. The main objective of this survey was to find the depression rate, as it is the most common disorder that affects people of any age. In this survey, we used the self-assessment depression scale by Zung, which consists of criteria of the most typically seen features of depression.

### Participation

People who voluntarily engaged in the poll were included, whereas those who refused to participate were eliminated.

### Data Collection

Students of the pharmacy department were included in this survey to assess the scoring of depression using Zung's Self-assessment scale by using an online questionnaire.

## RESULTS

A total of 164 responses were collected using an online questionnaire, out of which 54 (33%) were male, and 110 (67%) were females. The majority of participants, 157, belong to the age group of 18-24 years, and 7 were in the age group of 25-34 years. The overall scoring shows the number of people in the stage of depression according to the Zung's scale, and the results show the number of people as 9, 116, 26, 11, and 2 for <25, 25 to 49, 50 to 59, 60 to 69 and  $\geq 70$  respectively.

As the numbers of females were more than that of males, the scoring for female participants were higher that are 76, 23, 11, and 0, respectively, and for male were 49, 3, 0, and 2 for the scoring levels of 25 to 49, 50 to 59, 60 to 69 and  $\geq 70$  respectively. The mean for females was 38.69, 53.74, 62.82, and 0, respectively and for males was 39.24, 51.67, 0, and 72.50, respectively, for the scoring level.

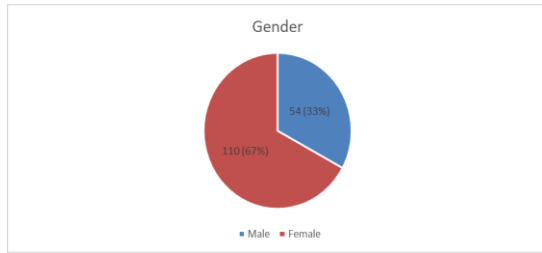


Figure 1 Gender distribution.

Table 1 Number of individuals in score range.

Score	No. of participants
<25	9
25 to 49	116
50 to 59	26
60 to 69	11
≥70	2

## DISCUSSION

Depression is a serious disorder, and it should not be allowed untreated. Prompt identification and treatment are the most necessary steps to be taken, yet due to numerous factors, individuals linked to depression and other disorders have undermined the condition's progression. Nevertheless, it is the most treatable condition; approximately 80-90% of people respond to the treatment [5]. There are many studies carried out on diagnosing depression and related conditions and advances in diagnosing it. Here we used a pre-established questionnaire to evaluate the scoring of the individuals, and we found that most of the people were in the score level of 25 to 49, then 50 to 59, followed by 60 to 69 and less in ≥70 and <25 separately. Here in this survey, 10 questions are positively phrased, and ten are negatively worded. Each question is graded on a 1-4 scale (a little of the time, some of the time, good part of the time, most of the time). Scores range from 25 to 100, where a scoring of 25 – 49 represents normal levels, 50 – 59 mildly depressed, 60 – 69 moderately depressed, and a score of 70 or more represents extremely depression.

## CONCLUSION

The self-assessment scoring surveys offer the basic questions that may assist in scoring individuals, but it should not be concluded entirely on the question's score; it requires further evaluation of other clinical techniques and evaluation. Many research indicated an increasing percentage of teenagers with untreated depression. The Zung's Self-Rating Depression Scale is a short-self-assessment questionnaire

designed to measure a patient's depression status. The scale comprises 20 items that measure the extensive effect, physiological equivalents, other issues, and psychomotor activity, which are the four main features of depression.

### Declarations

### Ethical Considerations

Not applicable.

### Funding

This research did not receive any specific grant from funding agencies in the public, commercial, or not-for-profit sectors.

### Conflict of interests

The authors report no conflicts of interest. The authors alone are responsible for the content and writing of this article.

### Authors' contributions

All the authors have equal contributions to the literature review, drafting of the manuscript, and edits.

## REFERENCE

- [1] Lim GY, Tam WW, Lu Y, Ho CS, Zhang MW, Ho RC. Prevalence of depression in the community from 30 countries between 1994 and 2014. *Scientific reports*. 2018 Feb 12;8(1):1-0.
- [2] Park LT, Zarate Jr CA. Depression in the primary care setting. *New England Journal of Medicine*. 2019 Feb 7;380(6):559-68.
- [3] Depression [Internet]. [cited 2022 May 13]. Available from: <https://www.who.int/news-room/fact-sheets/detail/depression>
- [4] Psychiatry.org - Depression [Internet]. [cited 2022 May 12]. Available from: <https://www.psychiatry.org/Patients-Families/Depression>
- [5] Psychiatry.org - What Is Depression? [Internet]. [cited 2022 May 4]. Available from: [https://www.psychiatry.org/patients-families/depression/what-is-depression#section\\_0](https://www.psychiatry.org/patients-families/depression/what-is-depression#section_0)
- [6] Hauenstein EJ. Depression in adolescence. *Journal of Obstetric, Gynecologic & Neonatal Nursing*. 2003 Mar 1;32(2):239-48.