

Exploring the Effectiveness of Hamilton Rating Scale for Depression in Pharmaceutical Research

1. Vijaya kumar S, 2. Senthil Kumar K L, 3. Gokulan P D, 4. Vasanthan V, 5. Amrin S R

Sri Vijay Vidyalaya college of Pharmacy
Sri Vijay Vidyalaya college of Pharmacy
Sri Vijay Vidyalaya college of Pharmacy
Sri Vijay Vidyalaya college of Pharmacy

Date of Submission: 01-05-2024

Date of Acceptance: 10-05-2024

ABSTRACT

AIM:The aim of a project focusing on working persons in an industrial area using the HRSD is to improve understanding, prevention, and management of depression within the workplace, ultimately enhancing the mental health and well-being of industrial workers. The project may aim to identify specific risk factors within the industrial workplace that contribute to depression among employees. Through HRSD assessments and accompanying surveys or interviews, researchers could examine factors such as job demands, organizational culture, interpersonal relationships at work, and exposure to hazardous working conditions and to assess the prevalence of occupational out among employees within the pharmaceutical company and its association with depressive symptoms.

METHODOLOGY:In order to accomplish the previously mentioned goals, a project aimed at surveying working employees of a pharmaceutical business using the Hamilton Rating Scale for Depression (HRSD) would require a well-designed as Study Design, Study Location, Duration of Study, Population of the Study, Data Collection

RESULTS & CONCLUSION:This study concluded that the depression was measured by Hamilton score scale. Depression has been Identifying and treating depression in the terminally ill, confusion remains four stable factors that reflected anxiety, depressed mood, insomnia, and somatic symptoms, and were similar. In case of continuing the use of Hamilton Depression Rating Scale, research needs to be done to decide whether all the seventeen items are really required and whether it is possible to cut down he redundant items, if any, that unnecessary inflates the score found in assessment of severity measurement of depression in the study population

I. INTRODUCTION:

The Hamilton Depression Rating Scale (HDRS), formerly known as the Hamilton Rating Scale for Depression (HRSD), is a commonly used tool to evaluate an individual's level of depression. It is a clinician-administered scale that was created by Max Hamilton in 1960 to assist measure the intensity of depression symptoms. The 17 elements that make up the HRSD each have a unique set of questions and requirements. The patient's answers are rated by the doctor based on a variety of criteria, including mood, guilt, agitation, sleeplessness, and other psychological and physical symptoms of depression. Higher scores denote more severe symptoms. The total score offers a quantitative assessment of the severity of depression. It's crucial to remember that the HRSD is only one instrument among many that medical practitioners use to evaluate depression. The measure is often used by mental health practitioners, clinical trials, and research projects to track changes in depression symptoms over time and assess the efficacy of therapy. Determining the degree of depression is essential for making an accurate diagnosis and developing a treatment plan in the actual world of mental health evaluation and research. The Hamilton Rating Scale for Depression (HRSD) is a significant instrument that has shown to be reliable in this quest throughout time. The HRSD was created in 1960 by renowned psychiatrist Max Hamilton and has since grown to be a vital tool in the assessment of depression symptoms.

1.2. Historical Background

To understand the significance of the Hamilton Depression Rating Scale, it is essential to trace its historical background. The 20th century

saw an increased focus on psychiatric measurements and the need for standardized instruments to assess mental disorders. This background led to Max Hamilton's ground breaking work to create a systematic and objective means of assessing depression. The Hamilton scale was developed to compensate for the limitations of previous assessment methods, which often relied heavily on subjective interpretation. HRSD has introduced a structured interview format that allows clinicians to explore specific aspects of depression symptoms, from mood disturbances to somatic complaints. As this scale gained recognition, it became an integral part of clinical practice and research, laying the foundation for a more nuanced understanding of depression.

1.3. Structure and Components

The Hamilton Depression Rating Scale consists of 17 items, each carefully designed to capture different aspects of the experience of depression. These factors include a variety of symptoms such as mood, guilt, insomnia, and physical symptoms, providing a comprehensive overview of the patient's psychological state. The structure of the scale ensures consistency across assessments and allows clinicians to track changes in symptoms over time. Delving into each point in detail reveals the depth of Hamilton's insight into the complex nature of depression. For example, item 3 assesses guilt and examines not only the presence of guilt but also its intensity and impact on daily life. The scale's ability to analyze and quantify such subtle aspects makes it a valuable tool in your mental health toolkit.

1.4. Clinical and Research Applications

The Hamilton Depression Rating Scale has been widely applied in both clinical and research settings. In clinical practice, this scale helps medical professionals diagnose depression, determine the severity of symptoms, and tailor treatment plans to individual needs. Its structured format facilitates communication between health care providers and promotes a standardized approach to mental health assessment. In the field of research, HRSD has played an important role in advancing our understanding of depression and its treatment. Clinical trials often use this scale to measure the effectiveness of interventions and provide quantitative data that contributes to evidence-based practice. Consistent use of this scale in research studies has facilitated comparisons between studies and meta-analyses,

enriching our collective knowledge about depression.

1.5. Criticism and Development

Despite its widespread use, the Hamilton Depression Rating Scale is not free of criticism. Some argue that the scale's reliance on physician judgment introduces subjectivity and can affect the reliability of the assessment. Additionally, cultural and demographic factors may influence the interpretation of specific items, raising questions about the universality of the scale. Recognizing these criticisms, researchers and clinicians have attempted to refine and extend Hamilton's original work. Modified versions of the scale have been proposed that add items or adjust scoring criteria to improve sensitivity and specificity. As the field of psychiatry continues to evolve, continued efforts to improve assessment tools and adapt them to diverse populations continue to shape the landscape of depression assessment. Against this background of historical importance, structural complexity, and application. This project aims to delve deeper into the Hamilton Depression Rating Scale and also to contribute to the existing body of knowledge surrounding the assessment of depression through a comprehensive investigation of its origins, components, and applications. Furthermore, this project aims to provide a nuanced understanding of the role of HRSD in contemporary mental health practice and research by addressing criticisms and considering possibilities for scale development.

1.6. Historical Significance of the HRSD

To truly appreciate the Hamilton Depression Rating Scale, it is important to delve deeper into the historical context of its development. In the mid-20th century, interest in psychiatry increased and the need for standardized instruments to measure mental disorders was recognized. Working on this intellectual process, Max Hamilton wanted to develop a tool that could objectively assess the severity of depression symptoms and reveal the complex layers of this prevalent mental illness. Hamilton's pioneering work was influenced by the psychiatric paradigms prevalent at the time, including psychoanalysis and behaviorism. As psychiatry changes from a primarily theoretical discipline to one that incorporates empirical methods, Hamilton's scale provides a structured and systematic approach to assessing the subjective experience of depression. By doing so, we have filled an important gap. The historical importance of this scale lies not only in

its introduction but also in its role in shaping the development of measurement and evaluation methods in psychiatry.

1.7. HRSD Components and Dimensions

A careful examination of the Hamilton Depression Rating Scale reveals the strengths of its structure. The 17 items in the scale are not arbitrary. Rather, they represent a carefully curated selection that explores different aspects of the experience of depression. Each item captures a unique aspect, from pervasive feelings of sadness (item 1) to physical symptoms of depression such as weight loss and gastrointestinal problems (items 5 and 6). Of note is the scale's ability to assess symptom severity within each item. For example, item 2 assesses feelings of guilt and distinguishes between mild, moderate, and severe levels. This granularity allows physicians to not only detect the presence of symptoms, but also assess their intensity, providing a more nuanced understanding of a patient's mental state. The multifaceted nature of HRSD is consistent with contemporary views of depression as a complex interaction of biological, psychological, and social factors. By incorporating various dimensions, the scale provides a comprehensive overview of a patient's condition and lays the foundation for a more targeted holistic treatment approach.

1.8. Clinical Use of the HRSD

In clinical practice, the Hamilton Depression Rating Scale has proven to be an invaluable tool for mental health professionals. Its structured format improves communication between clinicians and promotes standardized language for discussing symptoms of depression. This not only helps with accurate diagnosis, but also makes it easier to monitor changes in symptoms over time. The utility of this scale extends beyond the initial assessment stage. Clinicians use her HRSD to tailor treatment plans to individual needs, track the effectiveness of interventions, and adjust strategies as needed. The scale's ability to quantify symptom change provides a tangible measure of treatment progress, guides clinical decisions, and promotes patient-centered care. Additionally, HRSD serves as a bridge between physicians and patients, facilitating a common dialogue about the complexity of depression. When patients articulate their experiences within the framework of a scale, clinicians can gain insight beyond the dichotomy of "depressed" or "not depressed." This patient-

centered approach is consistent with contemporary models of mental health care that emphasize the importance of individualized and holistic interventions.

1.9. Contributions to HRSD Research

Beyond its clinical utility, the Hamilton Depression Rating Scale has contributed significantly to the landscape of depression research. In the field of clinical research, this scale serves as the gold standard for evaluating treatment efficacy. When used consistently across studies, meaningful comparisons can be made and researchers can draw conclusions about the relative effectiveness of different interventions. Her HRSD role in research extends beyond treatment evaluation. Epidemiological studies often use this scale to estimate the prevalence of depression in different populations, contributing to our understanding of the public health burden associated with this mental illness. The widespread use of this scale in research has facilitated the development of evidence-based guidelines and shaped the standard of care for patients with depression.

1.10. Criticisms and Ongoing Development

Like other widely used instruments, the Hamilton Depression Rating Scale has been criticized over the years. Some argue that relying on physician judgment introduces subjectivity and can affect the reliability of the assessment. Cultural and demographic factors can influence the interpretation of specific items and raise questions about the universality and applicability of the scale to different populations. Recognizing these criticisms, there have been ongoing efforts to refine and improve HRSD. Modified versions of the scale have been proposed that include additional items or adjust scoring criteria to address limitations. Researchers and clinicians alike recognize the importance of continuing to evolve assessment tools to meet the diverse needs of patients with depression. This historical significance, structural complexity, and variety of uses underline the goals of this project. This effort aims to comprehensively examine the Hamilton Depression Rating Scale and highlight its origins, components, and diverse applications in both clinical and research settings. Furthermore, the project aims to address criticisms and consider possibilities for scale development. The aim is to provide a nuanced understanding of the role of her HRSD in contemporary mental health practice and research through a critical

examination of its strengths and limitations. Through this study, this project aims to contribute to the ongoing dialogue on the assessment of depression and foster a deeper understanding of the complexity of this common mental illness.

1.11. Development of the HRSD: Adaptations and Versions

As the Hamilton Depression Rating Scale became the basis for assessing depressive symptoms, researchers and clinicians recognized the need for adaptations to address its limitations. Various modifications of this scale have emerged, each aiming to improve sensitivity, specificity, and cultural relevance. One notable adaptation is the 21-item version of the HRSD. It expands on the original 17 items to include additional symptoms such as anxiety, insomnia, and somatization. The idea behind these modifications is to capture the broader experience of depression, while recognizing the link between mental and physical symptoms. Although these adjustments are intended to improve scale completeness, debate remains as to whether longer scales necessarily result in greater precision or clinical utility. Additionally, efforts are underway to develop culturally sensitive versions of the HRSD. Recognizing that cultural nuances can have a significant impact on the expression of depressive symptoms, researchers have suggested changes to make certain factors better adapted to different cultural contexts. However, balancing cultural sensitivity with the psychometric properties of scales remains a complex challenge. In today's mental health assessment landscape, the Hamilton Rating Scale for Depression exists alongside a variety of tools and methods. The advent of self-report measurements, neuroimaging techniques, and digital health tools has expanded the toolkit available to clinicians and researchers. The integration of patient-reported outcomes and technological advances is reevaluating traditional assessment approaches. Although the HRSD remains a valuable tool, its limitations have led to the search for complementary assessment methods. For example, patient-reported outcomes provide direct insight into an individual's subjective experience of depression and complement clinician observations. Neuroimaging studies provide insight into the neural basis of depression and contribute to a more comprehensive understanding of its biological basis.

The overlap between traditional and modern evaluation approaches raises questions

about integrating multiple data sources into a comprehensive evaluation. As mental health assessment continues to evolve, there is an increasing focus on personalized, data-driven care that incorporates a combination of objective measures and subjective experience into treatment decisions.

1.12. Global Impact and Cultural Considerations

The global impact of depression requires a nuanced consideration of cultural considerations in assessment tools. The Hamilton Depression Rating Scale is rooted in the Western psychiatric tradition and its applicability in various cultural contexts has been investigated. Cultural differences in the expression of symptoms, stigma around mental health, and differences in conceptions of well-being highlight the importance of tailoring assessment tools to specific populations. Cross-cultural studies using the HRSD have revealed both universal aspects of depression and culture-specific symptoms. Understanding these nuances is important to ensure accurate and fair evaluations. A collaborative effort by researchers from diverse cultural backgrounds has contributed to the development of a culturally adapted version of the HRSD, recognizing the need for a tool that resonates with the lived experiences of individuals around the world.

1.13. Limitations and Challenges in the Assessment of Depression

Although the Hamilton Depression Rating Scale has proven valuable in the field, it is important to recognize broader limitations and challenges in the assessment of depression. The inherent subjectivity of self-report measures, potential cultural bias in clinician-administered measures, and the influence of external factors on symptom expression highlight the complexity of mental health assessment. Furthermore, the dynamic nature of depression makes it difficult to understand its fluctuating course. Single-item assessments may not fully capture the variation in symptoms over time. Longitudinal studies and ecological momentary assessments have emerged as strategies to address this limitation and provide a more dynamic picture of individuals' mental health trajectories. Developments in psychiatric nosology and the ongoing debate over dimensional versus categorical models of mental disorders also influence the assessment of depression. Recognizing that mental health exists on a

continuum challenges the limits of traditional diagnosis and leads to a reassessment of how we conceptualize and assess symptoms of depression.

1.14. Future Directions and Implications

We are at the intersection of tradition and innovation in depression diagnosis, it is of paramount importance to consider future directions. The integration of advanced technologies such as machine learning and artificial intelligence promises to improve diagnostic accuracy and treatment prediction. Wearable devices and digital phenotyping enable continuous monitoring and provide real-time data for a more comprehensive understanding of an individual's mental health. The concept of precision psychiatry, which tailors interventions to an individual's unique profile, is becoming increasingly important. Integrating genetic, neurobiological, and psychosocial markers into assessment frameworks can pave the way for individualized treatment strategies. However, ethical considerations regarding privacy, algorithmic bias, and the potential medicalization of common mood swings highlight the importance of implementing these technologies carefully and responsibly. The global mental health movement is calling for a re-evaluation of assessment tools to ensure cultural sensitivity, accessibility, and inclusivity. Interdisciplinary collaboration involving researchers, clinicians, policy makers, and individuals with lived experience is essential to developing a holistic and context-specific approach to the assessment of depression. Depression assessment transcends the boundaries of psychiatry and involves many different disciplines. Interdisciplinary collaboration has proven to be fundamental in refining assessment methods. Psychologists bring expertise to understand cognitive and emotional processes, and neuroscientists decipher the complex neural circuits involved in depressive states. Sociologists study the social determinants that influence mental health, revealing the interaction between individual experiences and broader social contexts. This collaborative approach not only enriches our understanding of depression but also facilitates the development of comprehensive assessment tools. Interdisciplinary insights recognize the complex relationships between biological, psychological, and social factors and advocate for a holistic understanding of mental health that transcends traditional disciplinary boundaries.

1.15. A Patient - Centered Approach to the Assessment of Depression

The paradigm shift towards patient-centered care is re-evaluating the way depression is assessed and understood. Patient-reported outcomes that tap into individuals' subjective experiences will play a central role in this change. Incorporating the patient's narrative, preferences, and goals emphasizes the importance of tailoring assessments to address the individual needs and perspectives of patients with depression. Moreover, patient involvement in the assessment process goes beyond data collection. Collaborative decision-making, shared goal setting, and ongoing communication can put individuals on the path to mental health. Recognizing patient expertise challenges traditional hierarchical care models and promotes a more egalitarian and empowering approach to depression assessment.

1.16. Ethical Considerations in the Assessment of Depression

Ethical considerations in the assessment of depression are coming to the fore as the field continues to evolve. Potential for stigma, the impact of diagnostic labels on self-perception, and issues of informed consent require careful consideration. Ensuring the autonomy and dignity of those being evaluated is of paramount importance, especially given advances in technology and the potential for unintended consequences. Furthermore, ethical considerations extend to the dissemination and use of assessment data. Questions about data ownership, privacy protection, and the responsible use of new technologies highlight the need for ethical guidelines that keep pace with advances in the field. To navigate the ethical landscape of depression assessment, it is important to balance the advancement of knowledge with the protection of individual rights. The era of big data brings new opportunities and challenges to the assessment of depression. Large datasets containing diverse demographic and clinical information provide a comprehensive overview of factors influencing mental health. Machine learning algorithms leveraging these datasets are showing promise in identifying patterns, predicting outcomes, and personalizing interventions. However, integrating big data into depression diagnosis raises ethical, methodological, and interpretive issues. Biases in data collection, algorithmic transparency, and the potential to exacerbate existing health inequalities require careful consideration. Address these

complexities from a critical and ethical perspective when harnessing the power of big data, ensuring that progress benefits everyone, regardless of demographic or sociocultural factors. That is essential. The Hamilton Depression Rating Scale is evidence of the evolution of mental health assessment. Their historical significance, structural complexity, and wide range of applications have shaped our understanding of depression for decades. Incorporating multidisciplinary insights, patient-centered approaches, ethical considerations, and big data analysis,

HRSD remains a fundamental tool among diverse methodologies as we navigate the complexities of modern assessment environments. Through a comprehensive examination of historical roots, structural elements, clinical and scientific applications, cultural considerations, and future directions, this project provides a nuanced perspective on the assessment of depression and its multidimensional. The purpose is to recognize the characteristics of This project aims to foster a deeper understanding of the complexities of depression assessment by synthesizing historical foundations, current challenges, and future possibilities. In doing so, we contribute to the ongoing dialogue that shapes the mental health assessment process and emphasize the importance of a holistic, patient-centered assessment.

1.17. Components of the Hamilton Depression Rating Scale (HRSD)

The Hamilton Depression Rating Scale (HRSD), also known as the Hamilton Depression Rating Scale (HDRS), is used to assess the severity of depression in individuals. It is a tool managed by doctors. This scale consists of several components, each representing a specific symptom or aspect of depression. The main components of the Hamilton Depression Rating Scale are: Each component contributes to the overall assessment of depression and provides clinicians with a structured framework for assessing different manifestations of depressive symptoms. The Hamilton Depression Rating Scale total score reflects the cumulative severity of these factors and is useful for

determining treatment and monitoring changes over time.

The brief title of each of his 17 items on the Hamilton Depression Rating Scale is

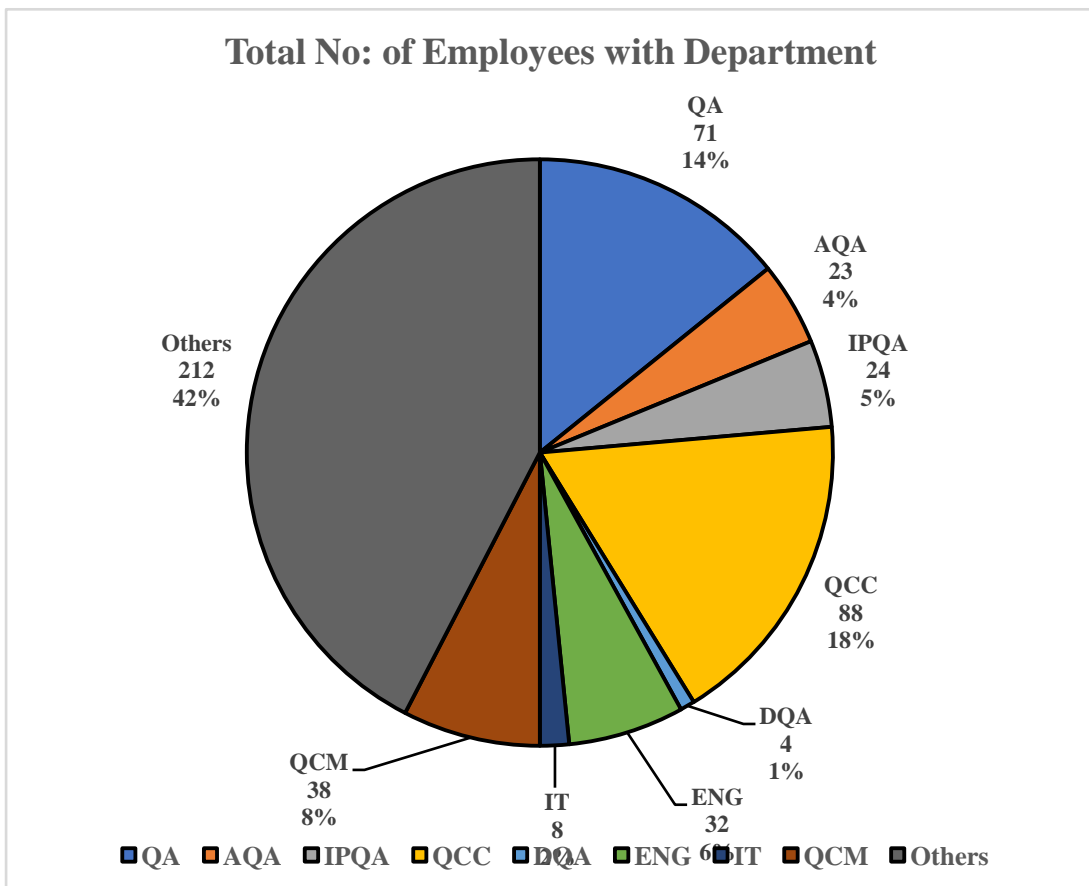
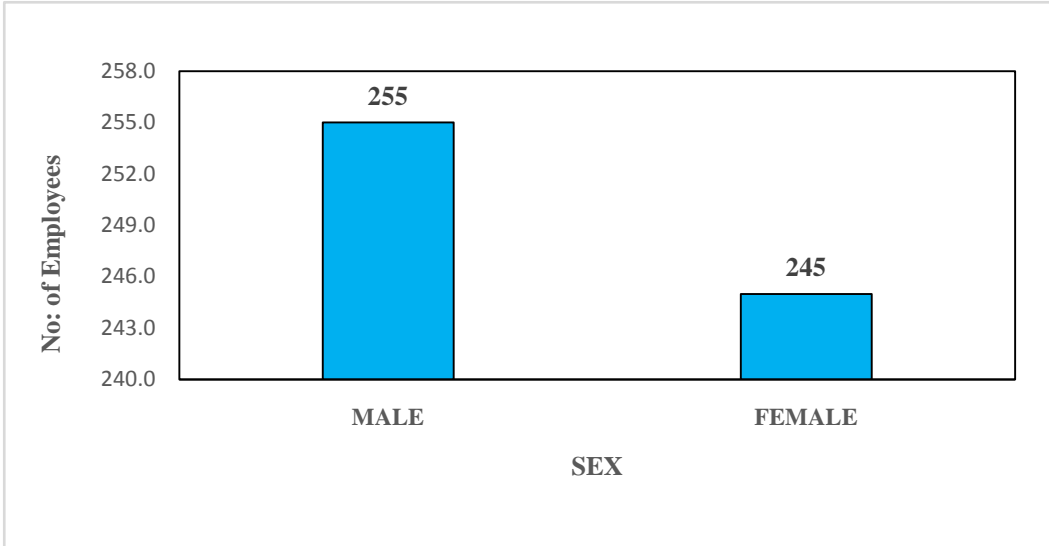
1. Depressed Mood (Sadness)
2. Feelings of Guilt
3. Suicide
4. Insomnia - Initial
5. Insomnia - Middle
6. Insomnia - Late-Night Insomnia
7. Work and Activities
8. Retardation
9. Agitation
10. Anxiety - Psychic
11. Anxiety - Somatic
12. Somatic Symptoms - Gastrointestinal
13. Somatic Symptoms - General
14. Genital Symptoms
15. Hypochondriasis
16. Weight Loss
17. Insight

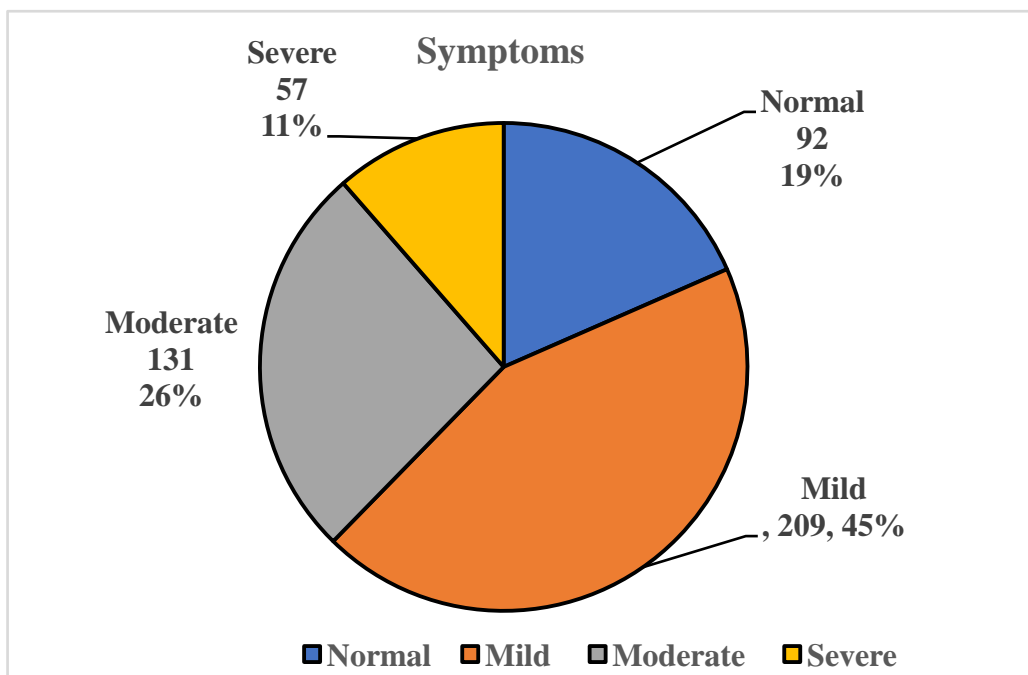
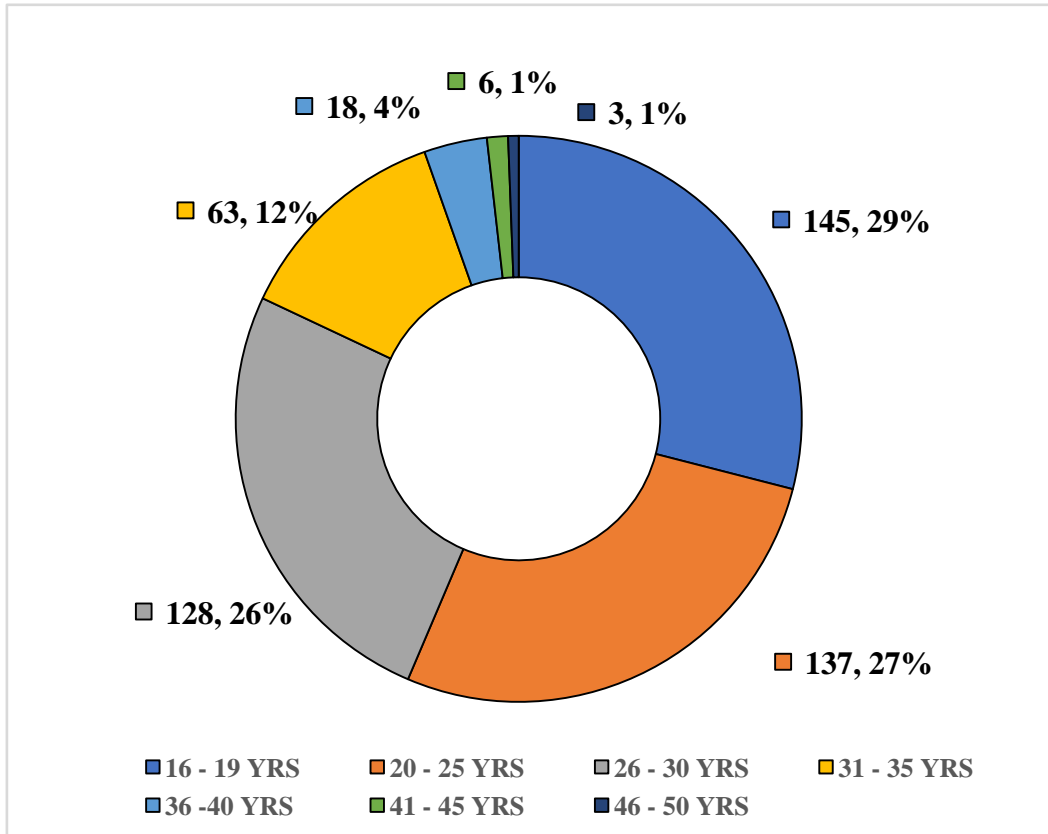
II. METHODOLOGY

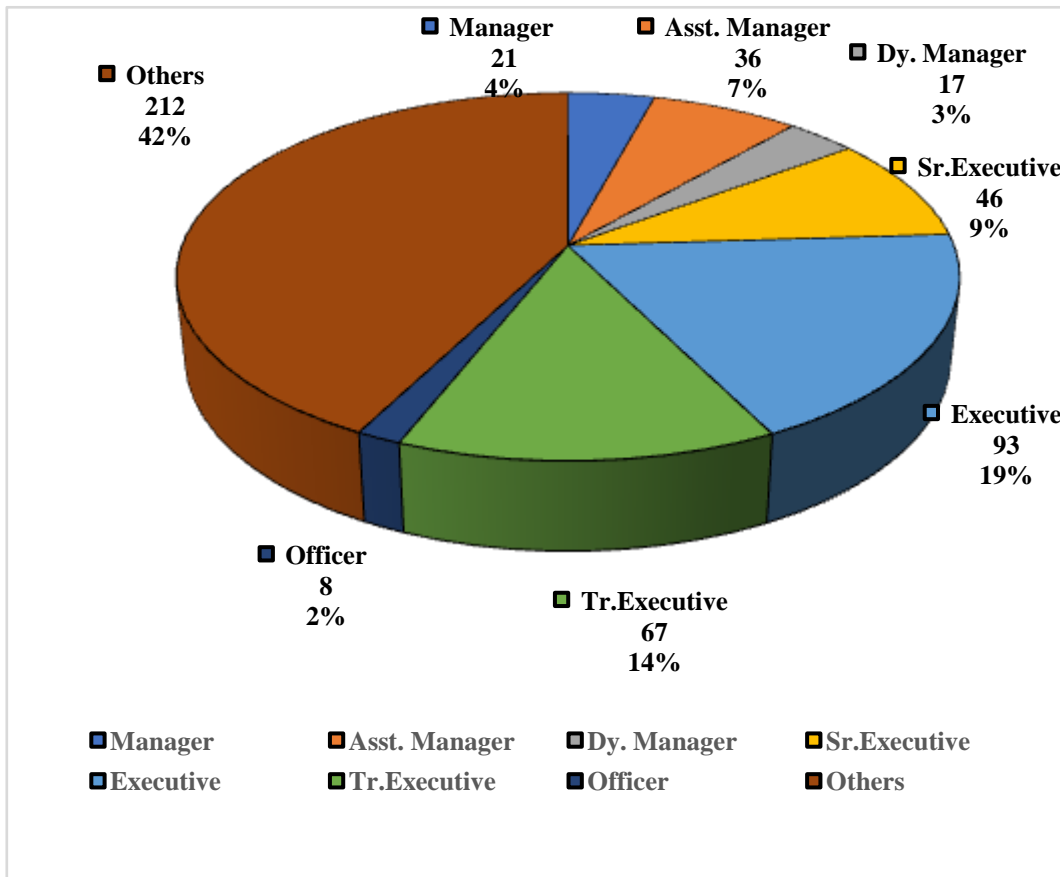
- STUDY DESIGN : Prospective study
- STUDY LOCATION : Maiva Pharma company in Hosur
- DURATION OF STUDY : 6 Months
- POPULATION OF THE STUDY : 500 peoples
- DATA COLLECTION : collection of the data of the Hamilton depression

III. RESULTS

Table No.1 shows that 500 No's of employees with department 100% of study population . 145 (29%) belongs to 16-19yrs agegroup. Out of 500 employees 255 (51%) employees were Male and 245 (49%) employees were female. Male Victim are more than female. Based on symptoms maximum number of employees are mostly affected as Mild Depression (209 / 45%). Based on Designation Others (212 / 42%) are more than the Officer (8/2%)







IV.CONCLUSION

This study concluded that the depression was measured by Hamilton score scale. Depression decreases patients quality of life, including physical functioning and psychological well-being. Depression can fuel a desire for hastened death and decisions to withdraw or refuse potentially life-extending medical treatments. Identifying and treating depression in the terminally ill, confusion remains four stable factors that reflected anxiety, depressed mood, insomnia, and somatic symptoms, and were similar. In case of continuing the use of Hamilton Depression Rating Scale, research needs to be done to decide whether all the seventeen items are really required and whether it is possible to cut down the redundant items, if any, that unnecessary inflates the score found in assessment of severity measurement of depression

REFERENCE

[1]. Demyttenaere K, De Fruyt J Getting what you ask for: on the selectivity of depression rating

scales. Psychother Psychosom 2003; 72:61–70

[2]. Williams JB Standardizing the Hamilton Depression Rating Scale: past, present, and future. Eur Arch Psychiatry Clin Neurosci 2001; 251(suppl 2):II6–II12

[3]. Aben I, Verhey F, Lousberg R, Lodder J, Honig A Validity of the Beck Depression Inventory, Hospital Anxiety and Depression Scale, SCL-90, and Hamilton Depression Rating Scale as screening instruments for depression in stroke patients. Psychosomatics 2002; 43:386–393

[4]. Akdemir A, Turkcapar MH, Orsel SD, Demiregi N, Dag I, Ozbay MHR Reliability and validity of the Turkish version of the Hamilton Depression Rating Scale. Compr Psychiatry 2001; 42:161–165

[5]. Baca-Garcia E, Blanco C, Saiz-Ruiz J, Rico F, Diaz-Sastre C, Cicchetti DV et al., Assessment of reliability in the clinical evaluation of depressive symptoms among multiple investigators

- in a multi-center clinical trial. *Psychiatry Res* 2001; 102:163–173
- [6]. Bech P, Tanghøj P, Andersen HF, Overo K et al., Citalopram dose-response revisited using an alternative psychometric approach to evaluate clinical effects of four fixed citalopram doses compared to placebo in patients with major depression. *Psychopharmacology (Berl)* 2002; 163:20–25
- [7]. Entsuah R, Shaffer M, Zhang J: A critical examination of the sensitivity of unidimensional subscales derived from the Hamilton Depression Rating Scale to antidepressant drug effects. *J Psychiatr Res* 2002; 36:437–448
- [8]. Faries D, Herrera J, Rayamajhi J, DeBrot D, Demitrack M, Potter WZ: The responsiveness of the Hamilton Depression Rating Scale. *J Psychiatr Res* 2000; 34:3–10
- [9]. Leentjens AF, Verhey FR, Lousberg R, Spitsbergen H, Wilms FW: The validity of the Hamilton and Montgomery-Åsberg depression rating scales as screening and diagnostic tools for depression in Parkinson's disease. *Int J Geriatr Psychiatry* 2000; 15:644–649
- [10]. Meyer JS, Li YS, Thornby J: et al., Validating mini-mental status, cognitive capacity screening and Hamilton depression scales utilizing subjects with vascular headaches. *Int J Geriatr Psychiatry* 2001; 16:430–435
- [11]. Moberg PJ, Lazarus LW, Meshulam RI, Bilker W, Chuy IL, Neyman I, Markvat V: Comparison of the standard and structured interview guide for the Hamilton Depression Rating Scale in depressed geriatric inpatients. *Am J Geriatr Psychiatry* 2001; 9:35–40
- [12]. Carrozzino D, Patierno C, Fava GA, Guidi J. The Hamilton rating scales for depression: A critical review of clinimetric properties of different versions. *Psychother Psychosom.* 2020;89(3):133-150.
- [13]. Shear MK, Vander Bilt J, Rucci P, et al. Reliability and validity of a structured interview guide for the Hamilton Anxiety Rating Scale (SIGH-A). *Depress Anxiety.* 2001;13(4):166-178.
- [14]. Williams JBW, Kobak KA, Bech P, et al. The GRID-HAMD: standardization of the Hamilton Depression Rating Scale. *Int Clin Psychopharmacol.* 2008;23(3):120-129.
- [15]. Zimmerman M, Thompson JS, Diehl JM, Balling C, Kiefer R. Is the DSM-5 Anxious Distress Specifier Interview a valid measure of anxiety in patients with generalized anxiety disorder: A comparison to the Hamilton Anxiety Scale. *Psychiatry Res.* 2020;286:112859.
- [16]. Williams J.B.W. Standardizing the Hamilton Depression Rating Scale: past, present, and future. *Eur Arch Psychiatry Clin Neurosci.* 2001;251(S2)(suppl 2):6-12.
- [17]. Reynolds WM, Kobak KA. Reliability and validity of the Hamilton Depression Inventory: A paper-and-pencil version of the Hamilton Depression Rating Scale clinical interview. *Psychol Assess.* 1995;7(4):472-483.
- [18]. Bech P, Allerup P, Gram LF, et al. The Hamilton depression scale: evaluation of objectivity using logistic models. *Acta Psychiatr Scand.* 1981;63(3):290-299.