



Original Research Article

A Systematic Review of Interventions, Severity Classification, and Diagnostic Tools to Reduce the Gap in Moderate Depressive Disorders

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Abstract: Introduction: Depressive disorders are multifaceted mental health conditions with increasing global prevalence characterised by persistent sadness, loss of interest, and impaired daily functioning. Despite advancements in diagnostic tools and treatments, moderate depressive disorders remain understudied and inadequately addressed. **Methods:** A rigorous search was conducted in the SCOPUS database using keywords like depression, depressive disorders, and depression & interventions; and Preferred Reporting Items for Systematic Reviews and Meta-Analyses (PRISMA) methodology was used for extracting relevant information from the selected papers. Articles published from 2010 onwards were analysed with a focus on assessment tools, severity classifications, and intervention strategies. **Results:** The search yielded 7,779 articles, with 2,219 fitting the core theme. Three primary themes emerged: (1) Assessment tools for depressive disorders, (2) Severity and types of depressive disorders with emphasis on moderate cases, and (3) Interventions: Medical and Psychological. The review identified key diagnostic scales like DSM-V and BDI, highlighting their efficacy and limitations. It also revealed a significant research gap in moderate depressive disorders, with most studies conflating them with mild or severe cases. Both medical and psychological interventions showed varied success with recent trends favouring integrated approaches. **Conclusions:** Moderate depressive disorders are often overshadowed in research, necessitating clearer diagnostic criteria and targeted interventions. Future studies should focus on developing and validating specific treatments for moderate depression to enhance therapeutic outcomes and reduce societal burden. This review underscores the critical need for specialized research to bridge existing gaps and improve clinical practices.

Keywords: Depression, Moderate Depressive Disorders, Systematic Review, PRISMA, Interventions, DSM-V, ICD 10, Severity Assessment.

INTRODUCTION

Depressive disorders are one of the highly prevalent multifactorial diseases which are becoming more and more intriguing with the increasing complexity of life on the planet. Depressive disorders are characterized by persistent sadness, loss of interest or pleasure, feelings of guilt or low self-worth, disturbed sleep or appetite, fatigue, and poor concentration¹⁻². The World Health Organization (WHO) has estimated that by 2030 depressive disorders will be counted as the primary cause of global disease burden. The estimates depict that more than 264 million people worldwide currently suffer from some form of depression, making it a significant cause of disability worldwide. The global burden of diseases, injuries and

risk factor study in 2016 has demonstrated depression to be the fifth largest cause of years lived with disability (YLD)³⁻⁴. According to American Psychiatric Association (APA), it has been estimated that one in 15 adults is affected by depressive disorders thereby making the yearly prevalence to be 6.7%. The lifetime prevalence of depressive disorders has been estimated to be 16.6%⁵. Recent studies suggest that the prevalence may be increasing, particularly among younger populations due to changing social and economic stressors. The growing prevalence of this serious medical illness has raised significant concern among researchers. However, due to a lack of awareness regarding the condition in low and middle-

income countries, an estimated 76% -85% of people with depression do not receive any treatment which exacerbates the condition and contributes to its rising prevalence⁶. Being multifactorial, depressive disorders arise from complex interactions between biological, psychological and social factors⁷. This complexity poses a significant challenge for clinicians in detecting, diagnosing and managing these disorders. In addition, recent genetic studies have identified hundreds of genetic variations linked to depression, enhancing our understanding of its biological underpinnings. Apart from this, the unpredictable course of prognosis and high variability in the response to treatment pose further challenges for clinicians. This systematic review therefore puts forward a consolidated perspective on various types of depression placing particular emphasis on moderate depressive disorders due to their rising prevalence and significant impact on quality of life (QoL). Apart from this, the paper also focuses on various interventions, both medical and psychological that have been reported as effective in reducing the impact of moderate depression. The paper also provides a brief overview of the tools that are majorly cited in the earlier literature to diagnose depressive disorders including the Patient Health Questionnaire-9 (PHQ-9), Hamilton Rating Scale for Depression (HAM-D), and Montgomery-Åsberg Depression Rating Scale (MADRS). An attempt to present the bibliometric trends in research and development related to depression and its management has also been undertaken. Thus, the primary aim of this systematic review is to report various aspects of recently published primary literature related to moderate depressive disorders in order to trace and identify the research gaps and develop a vivid outlook for future research.

MATERIALS AND METHODS

The current systematic literature review follows the review method proposed by Webster and Watson⁸ (2002), known as the concept-driven systematic review approach. This method examines the literature from a conceptual perspective synthesizing insights from multiple studies rather than focusing on individual author contributions. Unlike an author-driven approach which analyses multiple concepts across different authors' works, this method organises research based on themes emerging from prior studies. Given the extensive body of literature on depressive disorders this approach is particularly suitable as it allows for a structured and comprehensive synthesis of relevant research. Moreover, the rising global prevalence of depression has intensified research interest in this area, making depressive disorders a major emerging topic in healthcare research. Thus,

this review methodology effectively captures relevant studies in a systematic and concise manner.

Sources:

The process of review was initiated by looking at three major research databases namely SCOPUS, PubMed, and ScienceDirect in order to collect relevant articles. However, a majority of the articles retrieved from PubMed and ScienceDirect were also indexed in the SCOPUS database. Therefore, SCOPUS was chosen as the primary database for data collection. Articles were selected using relevant keywords like "Depression," "Depressive Disorders," and "Depression & Interventions". The retrieved studies were then systematically reviewed and analyzed for further classification and synthesis.

Theme identification:

The themes for the review were identified following a rigorous analysis of the research papers retrieved using the selected keywords. The process began with a title-screening phase ensuring that the selected studies aligned with the primary focus of the review. It was observed that moderate depressive disorder is an underrepresented area of research particularly concerning diagnosis and interventions. Given its increasing prevalence and clinical significance moderate depressive disorder was chosen as the core theme of this review. Additionally, network visualization analysis of depression-related terms in SCOPUS revealed the frequent co-occurrence of specific keywords further reflecting the growing research interest in this domain. Based on this analysis the literature was further categorized into sub-themes derived from selected studies related to the core theme. This categorization facilitated a structured assessment of research contributions, particularly emphasizing moderate depressive disorders.

Data extraction and synthesis:

After determining the core theme, the selected papers were thoroughly reviewed and analysed. To minimize selection bias, the Preferred Reporting Items for Systematic Reviews and Meta-Analyses (PRISMA) flowchart was employed to define inclusion and exclusion criteria for the selected studies. Furthermore, bibliometric analyses using SCOPUS were conducted to examine research trends and assess the evolving landscape of scholarly contributions related to moderate depressive disorders. This data-driven approach allowed for a comprehensive evaluation of research patterns providing insights into the thematic and methodological evolution of studies in this field.

RESULTS

A total of 7,779 research papers were retrieved through database searches using the aforementioned keywords. After removing duplicates and excluding papers published before 2010, approximately 2,219 papers were found to fit into

the core theme (moderate depressive disorder) and thus were finally subjected to title screening for retrieval of the sub-themes. The database search depicted many aspects of moderate depressive disorders which were chosen as the sub-themes. 3 themes identified and reviewed in the current review are stated below:

Theme 1: Assessment tools for depressive disorders. Theme 2: Severity and types of depressive disorders with special emphasis on moderate depressive disorders. Theme 3: Interventions: Medical and Psychological. Following an extensive analysis around 42 papers were finally chosen for the data extraction. The PRISMA scheme depicting the mode of selection of the papers for the current review is represented in Figure 1.

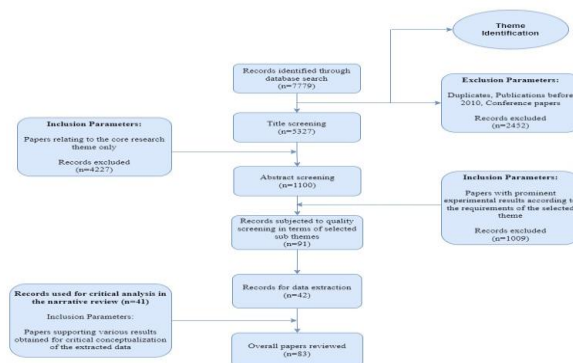


Fig.1: PRISMA (Preferred Reporting Items for Systematic Reviews and Meta-Analyses) Scheme for selection of articles for the systematic review

For the data extraction, the key data of the selected papers were screened and analysed on the following set of particulars: details of the authors; year of publication; study size; severity, assessment tools, interventions and tested outcomes, and special highlight in results (if any). These key data sets were summarized in a tabular format to ease further theme-wise analysis further depicted in Table 1.

Table 1: Data extraction and synthesis for selected papers

Data extraction and synthesis for selected papers							
S. No.	Reported Severity	Sample details	Assessment tool	Design	Intervention	Reported Outcome	Author
1.	Mild to Moderate	20 health workers and 37 pregnant women from Cape Town, South Africa	Edinburgh Postnatal Depression Scale (EPDS)	Mixed-method formative study	Task-sharing psychological counselling intervention: problem-solving, psycho-education, basic counselling skills and behavioural activation common counselling components	Three session counselling model worked best as lower depression symptoms	Boisi et al., 2021 ⁹
2.	Moderate	71 males	The Short Form-36 (SF-36) Health Survey and Goldberg Questionnaire (GHQ)	Randomized controlled clinical trial	Cardiac rehabilitation program incorporating an e-health technology	Lowering of anxiety symptoms	Bravo-Escobar et al., 2021 ¹⁰
3.	Mild, Moderate	2558 women	Self-rating anxiety	Cohort study	-	Anxiety and	Wang et

	rate, Severe	suffering from recurrent pregnancy loss (RPL)	scale (SAS) & Self-rating depression scale (SDS)			depression closely linked with RPL	al., 2021 ¹
4.	Moderate Depression	30 caregivers of children with chronic kidney disease	Diagnostic and Statistical Manual of Mental Disorders (DSM-IV)	A cross-sectional comparative study		53.3% prevalence of moderate depression	Mahmoud et al., 2021 ¹
5.	Moderate to Severe Depression	65 male and 49 female from Brazil and Switzerland	Self-designed questionnaire	Cross-sectional study		23.3% moderate anxiety symptoms due to lack of physical activity during COVID-19	Puccinelli et al., 2021 ¹
6.	Moderate to Severe Depression	113 online participants	Beck Depression Inventory (BDI)	Randomized controlled clinical trial	Cognitive-Behavioural Framework	Reduction in depression severity	Eylem et al., 2021 ¹
7.	Mild to Moderate	7725 records comprising 17 trials with a total of 1645 patients randomized to 13 treatments	Diverse Scales	Meta-analysis	Moderate aerobic exercise	Improves insomnia conditions	Brupbacher et al., 2021 ¹
8.	Mild to Moderate	274 women	The Centre for Epidemiological Studies Depression Scale (CES-D)	Randomized controlled clinical trial	Mobile phone-based physical activity education (mPED)	Decreasing depression levels intervention is done on timely basis	Figuerola et al., 2021 ¹
9.	Moderate	39 patients	Beck Depression Inventory (BDI), Ruminative Responses Scale (RRS), Paediatric Behaviour Rating Scale (PBRs),	Randomized controlled clinical trial	Meta Cognitive therapy	Lowering of depression severity as per BDI scale	Hjemdal et al., 2019 ¹

			Nursery Neurobiologic Risk Score (NBRs), Metacognition Questionnaire-30 (MCQ-30), Penn State Worry Questionnaire (PSWQ)				
10	Mild to Moderate	48 patients	Hamilton Depression Rating Scale (HAM-D17)	Randomized controlled clinical trial	Effect of Running Therapy Depression: EFFECT D	Reduction of depression by 2-3 points on average after 3 months	Kruisdijk et al., 2019 ¹
11	Moderate	2731 participants	Diagnostic and Statistical Manual of Mental Disorders, 4th Edition, Text Revision (DSM-IV-TR), 10th revision of the International Statistical Classification of Diseases and Related Health Problems (ICD-10)	Randomized controlled clinical trial	Cariprazine, Olanzapine, Quetiapine, Ziprasidone, Mirtazapine, Mianserin, Buspirone	These drugs are effective when augmented with other antidepressant therapies for the improvement of depressive symptoms.	Davies et al., 2019 ¹
12	Severe to Moderate	84 patients	Hamilton Depression Rating Scale (HDRS), Self-assessed depressive symptom severity Beck	Randomized controlled clinical trial	Metacognitive Training	Effective in improvement of depressive symptoms	Jelin et al., 2019 ²

			Depression Inventory (BDI)				
13	Mild- Moderate- severe	4 trials (948 individual)	Diverse scales	Meta-analysis of Randomized controlled studies	Vitamin Supplementation	Vitamin D effect in decreasing severity of depression	Dikka & Menon, 2019 ²¹
14	Mild to Moderate	75 studies	Diagnostic and Statistical Manual of Mental Disorders, Fifth Edition (DSM-V), International Classification of Diseases (ICD)	Systematic review	Creative arts intervention: art, dance; drama, and music; and combinations of these	Many factors like physical, intra-personal cultural, cognitive, and social elements are found to be associated with creative arts that are helpful in reduction of depression symptoms.	Dunphy et al., 2019 ²²
15	Moderate to Severe	31 Randomized controlled clinical trial	Patient Health Questionnaire (PHQ), Beck Depression Inventory (BDI)	Analysis of randomized controlled clinical trial	Selective serotonin reuptake inhibitor (SSRI) antidepressant: sertraline	Provides long-term benefits in depression regulation	Duffy et al., 2019 ²³
16	Moderate to Severe depression	16 articles	Diverse Scales	Meta-Analysis of randomized controlled studies	Serotonin selective reuptake inhibitors, tricyclic antidepressants, specific serotonergic antidepressant	Serotonin-selective reuptake inhibitors reported to be most effective	Cleverger et al., 2018 ²⁴
17	Mild to Moderate	Seven studies with 700 subjects	Diverse Scales	Meta-analysis of randomized controlled studies	Psychotherapy along with Fluoxetine, Amitriptyline, and Isocarboxazid	Psychotherapy is more effective than antidepressant treatment	Nabe & Bullinger, 2018 ²⁵
18	Moderate to Severe	76 participant	Diagnostic and Statistical	Randomized controlled	Intranasal Esketamine Hydrochloride	Rapid effect decrease of	Daly et al., 2018 ²⁶

			Manual of Mental Disorders, fourth edition, text revision (DSM-IV-TR)	clinical trial		depression severity and symptoms.	5
19	Moderate to Severe	20 patients	36-Item Short Form Survey (SF-36), General Self-Efficacy Scale (GSE), Quick Inventory of Depressive Symptomatology (QIDS)	Randomized controlled clinical trial	8-week web-based exercise intervention	Subside depression severity effectively	Haller et al., 2018 ²⁷
20	Mild to Moderate	52 participants	Hamilton Depression Rating Scale (HAM-D)	Randomized controlled clinical trial	Escitalopram and pranayama healing	Enhanced improvement of 30.8% due to inclusion of pranayama healing with the medical intervention	Rajagopal et al., 2018 ²⁸
21	Severe-Mild-Moderate	179 records	Diverse Scales	Meta-Analysis Randomized controlled clinical trial	Hypnosis	Hypnosis is an effective cognitive therapies	Millington et al., 2018 ²⁹
22	Severe to Moderate	40 patients with post-traumatic stress	Beck Depression Inventory-II (BDI-II)	Randomized controlled clinical trial	Music-instruction intervention	Guitar sessions were effective in decreasing depression symptoms.	Pezzin et al., 2018 ³⁰
23	Mild to Moderate	160 patients	Montgomery-Åsberg Depression Rating Scale score (MADRS); Quick Inventory	Randomized controlled clinical trial	Activating cognitive depression therapy (ACDT) and hypnotherapeutic depression therapy (HDT)	Reduction of depressive symptoms	Fuhr et al., 2017 ³¹

			of Depressive Symptoms — Clinician Rating (QIDS _{C16}) and the Patient Health Questionnaire—Depression Scale (PHQ-9)				
24	Mild to Moderate	318 males 695 females	Patient Health Questionnaire (PHQ)	Randomized controlled clinical trial	Effectiveness of Internet-Based Depression Treatment: EVIDENT	More effective for females	Späth et al., 2017 ³²
25	Mild to Moderate	67 children diagnosed with depression	Children's Depression Rating Scale-Revised (CDRS-R)	Randomized controlled clinical trial	Family-focused treatment for childhood depression (FFT-CD) with those of individual supportive psychotherapy (IP)	Such psychosocial interventions help in combating depression in children	Tompson et al., 2017 ³³
26	Mild to Moderate	1340 adults	Patient Health Questionnaire-9 (PHQ-9)	Randomized controlled clinical trial	Magnesium supplementation	Successful in subsiding depression symptoms with 248 mg elemental magnesium per day	Tarleton et al., 2017 ³⁴
27	Mild to Moderate	17 papers and 22 comparisons	Diverse Scales	Meta-Analysis of randomized controlled studies	Tricyclic antidepressants, serotonin selective reuptake inhibitors, serotonin-norepinephrine reuptake inhibitors, noradrenergic and specific serotonergic antidepressant	Most effective reported treatment of depression in primary care	Arroll et al., 2016 ³⁵
28	Moderate	470 patients	Beck Depression Inventory-II (BDI-II), Patient Health	Randomized controlled clinical trial	Mirtazapine	It can be used in conjunction with fluoxetine, sertraline,	Tallon et al., 2016 ³⁶

			Questionnaire (PHQ), Generalized Anxiety Disorder (GAD), Short Form Survey (SF-12)			citalopram, escitalopram, fluvoxamine, paroxetine, duloxetine, and venlafaxine to enhance the effectiveness of depression treatment.	
29	Mild to Moderate	40 women	Beck Depression Inventory (BDI), Ruminative Responses Scale (RRS)	Randomized controlled clinical trial	12-week mindfulness-based yoga	Helps in reduction of anxiety and depressive symptoms.	Schulver & Lewin, 2016 ³⁷
30	Mild to Moderate	560 rural pregnant women with perinatal depression	Patient Health Questionnaire-9 (PHQ-9)	Randomized controlled clinical trial	Peer-delivered Thinking Healthy Plus (THPP+) Programme	Mitigation of negative impacts of perinatal depression	Turner et al., 2016 ³⁸
31	Mild to Moderate	705 participating mother-child dyads	Wechsler Preschool and Primary Scale of Intelligence (WPPSI-IV); Strengths and Difficulties Questionnaire (SDQ) and the Spence Children's Anxiety Scale (SCAS)	Randomized controlled clinical trial	Thinking Healthy Programme	Cognitive, and socio-emotional improvement was significant, but needs further strategic intervention	Masenko et al., 2015 ³⁹
32	Mild to Moderate	431 patients with workplace depression	Patient Health Questionnaire-9 (PHQ-9)	Randomized controlled clinical trial	Telephone-based counselling	51% decline in depression scores in the overall study	Lerner et al., 2015 ⁴⁰
33	Mild to Moderate	380 school-going	Patient Health	Randomized	Internet-delivered	Decrease in	Wong et

	Mode rate	adolescent s	Questionn aire-9 (PHQ-9)	controlle d clinical trial	cognitive behavioural therapy programmes	depression symptomol ogy	al., 2014 ⁴
34 to . Mode rate	Severe to Mode rate	480 patients from primary care unit	Beck Depression Inventory- II (BDI-II)	Randomi zed controlle d clinical trial	Mirtazapine with serotonin- noradrenaline reuptake inhibitor (SNRI) or selective serotonin reuptake inhibitor (SSRI) antidepressants	Combined intervention is found most effective	Kessl er et al., 2013 ⁴
35 to . Mode rate	Mild to Mode rate	143 patients	Mental Health Continuu m-Short Form (MHC- SF), The World Health Organisati on- Five Well-Being Index (WHO-5), Center for Epidemiol ogic Studies Depression (CES-D), Hamilton Depression Rating Scale (HAM-D), Medical Outcome Study- Short form (MOS-SF)	Randomi zed controlle d clinical trial	Internet-based interventions "Psyfit: mental fitness online"	Improvem ent in depressive symptoms	Bolie r et al., 2013 ⁴
36 to . Mode rate	Severe to Mode rate	21,762 adults above 60 years age	Patient Health Questionn aire-9 (PHQ-9)	Randomi zed controlle d clinical trial	Personalized automated audit feedback, printed educational material, and monthly educational newsletters	Reduction in self- harm attitude	Alme ida et al., 2012 ⁴
37 to . Mode rate	Severe to Mild to Mode rate	Approx. 2000 relevant reports	Diagnostic and Statistical Manual of Mental Disorders, 3rd edition	Meta- analysis of Randomi zed controlle d studies	Imipramine, Fluoxetine, Venlafaxine, Paroxetine, Amitriptyline, Duloxetine, Bupropion,	Medical interventio ns prevail over side effects	Und rrag & Bald essari ni, 2012 ⁴

			(DSM-III), 3rd Edition Revised III-R, or 4th Edition IV, International Classification of Diseases, Ninth Revision (ICD-9)		Desvenlafaxine, Sertraline, R, S-Citalopram, S-Citalopram, Mirtazapine, Selegiline, Desipramine, Clomipramine, Nortriptyline, Phenelzine, Tranylcypromine, Trazodone		5
38	Moderate	6 trials (597 individuals)	Hamilton Depression Rating Scale (HDRS)	Meta-analysis of Randomized controlled studies	Antidepressants	Randomized trials often underestimate antidepressants due to improper randomization of the sample	Isacson & Adleson, 2011 ⁴
39	Mild to Moderate	Seven RCTs (301 participants)	Diverse scales	Meta-analysis of Randomized controlled studies	Peer support intervention	Positive relation between peer support and lowering depression score	Pfeiffer et al., 2011 ⁴
40	Mild to Moderate	602 patients	Hamilton Depression Rating Scale (HDRS), Short Form (36) H (SF-36)	Randomized controlled clinical trial	Selective Serotonin Reuptake Inhibitor (SSRI) antidepressant with supportive care	Supportive care helps in lowering the dosage of SSRI antidepressants.	Kendrick et al., 2010 ⁴
41	Severe-mild-moderate	59 Randomized controlled clinical trial	Diagnostic and Statistical Manual of Mental Disorders, 4 th Edition, Text Revision (DSM-IV-TR), 10 th revision of the International Statistical Classification	Meta-analysis of Randomized controlled studies	Sertraline, Fluoxetine, Amitriptyline, Imipramine, Paroxetine and Mirtazapine	Sertraline is more effective but has side effects like gastrointestinal issues	Cipriani et al., 2010 ⁴

			on Diseases and Related Health Problems (ICD-10)	of			
42	Mode rate	179 records	Diverse Scales	Meta-analysis	Cognitive behaviour therapy (CBT)	CBT is effective as a continuation and maintenance treatment	Driesen & Hollon, 2010 ⁵

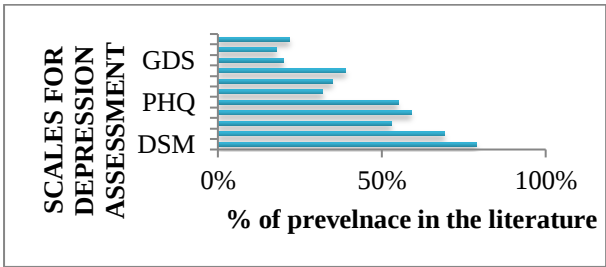


Fig 2: Prevalence of various depression assessment scales in the literature (SCOPUS database)

DISCUSSION

Assessment tools for depressive disorders:

The literature review has found the following scales to be quite prevalent and sensitive in measuring depressive disorders: Diagnostic and Statistical Manual of Mental Disorders (DSM), International Classification for Diseases and Related Disorders (ICD 10), Hamilton Depression Rating Scale (HDRS), Beck Depression Inventory (BDI), Patient

Health Questionnaire (PHQ), Major Depression Inventory (MDI), Center for Epidemiologic Studies Depression Scale (CES-D), Zung Self-Rating Depression Scale (SDS), Geriatric Depression Scale (GDS), Cornell Scale for Depression in Dementia (CSDD), Global Mental Health Assessment tool (GMHAT). Among these, the DSM, HDRS and BDI scales were the most commonly reported in the SCOPUS database (Fig 2).

As discussed in the background section, the DSM is one of the most commonly used and rated tools in terms of its efficiency in screening depressive disorders⁵¹. The current version, DSM-V (published in 2013), has been validated for diagnosing depressive disorders in both children and adolescents. It includes 23 questions accessing 13 psychiatric domains over a two-week period. Another widely used diagnostic tool, the ICD-10 is often referenced in literature for measuring depressive disorders. Although it identifies common symptoms of depression, it has a lower threshold for symptom requirements compared to the DSM-V. A comparative analysis of the DSM-V and ICD-10 in terms of symptom assessment and thresholds for severity has been provided in Table 2. Out of many other tools, the Hamilton Depression Rating Scale (HDRS) was the earliest interview-based scale developed to measure depression severity⁵². It includes 17 core items, with four additional items (18–21) for further categorization. Scores are based on a 3-point or 5-point scale, where a score of 20 or above indicates moderately severe depression. The HDRS focuses more on somatic than cognitive symptoms⁵³.

Similarly, the Beck Depression Inventory (BDI) is a widely used self-rating scale requiring only 5 to 10 minutes to complete. It evaluates 21 items, including somatic, behavioral, and emotional symptoms. These items are generally scored between 0-3 and a score above 30 indicates severe depression while a score of 19 to 29 is indicative of moderate depression while a score between 10 to 18 indicates mild depression. Many studies have reported BDI scale to be extremely specific with a sensitivity of 97% and specificity of 99%⁵⁴. Furthermore, in terms of sensitivity and specificity, the Patient Health Questionnaire (PHQ) is another effective tool with 80% sensitivity and 92% specificity⁵⁵. This self-administered tool is known for assessing the frequency of depression and anhedonia for the last 2 weeks. The scoring ranges from 0 to 23. The currently used version of PHQ that is PHQ-9 is effective in

distinguishing between severities of depression by demarcating mild depression with PHQ minimum score of 5, moderate depression with PHQ score of 10 and severe depression with a score of 20. Another self-rating scale, the Major Depression Inventory (MDI) has been developed for the measurement of depression in accordance with DCM-IV and ICD-10 scales⁵⁶. This tool has been set with a cut-off score of 26 for the diagnosis of moderate to severe depression. The sensitivity of the MDI scale has been reported to be 86 to 92% while the specificity is between 82 to 86%⁵⁷. In terms of large-scale population surveys, a very popular tool that has been reported in the review literature is the Centre for Epidemiologic Studies Depression Scale (CES-D). This scale was published in 1977 with 20 items of which 4 are positively worded and 16 are negatively worded. This scale is effective in the measurement of somatic symptoms of depression with a score ranging from 0 to 60⁵⁸. Moreover, some other scales such as Zung Self-Rated Depression Scale (SDS) also has been reported to provide quick and inclusive identification of depression⁵⁴. A score above 70 is indicated as severe depression while a score between 50-60 and 62-70 is indicated as mild and moderate depression respectively. Similarly, Cornell Scale for Depression in Dementia (CSDD) is also an assessment tool used specifically for elderly patients having underlying cognitive issues. The scale has been marked for 93% of sensitivity and 97% of specificity for this specific purpose⁵⁷. In the same context, another specific depression scale known as Geriatric Depression Scale (GDS) which is a 30-item scale used for older adults has also been reported effective with a sensitivity of 94% and specificity of 81%. Apart from this, another scale that has been gaining popularity in recent times is the Global Mental Health Assessment tool (GMHAT). It is a computerised clinical assessment tool developed for rapid assessment of mental health problems in a range of settings⁵⁹. This tool has gained popularity during the recent times of COVID-19 due to its computerised far-reaching form.

Types and severity of depressive disorders with emphasis on moderate depressive disorders:

Depressive disorders vary significantly in severity, requiring precise classification for accurate diagnosis and treatment. Several assessment tools, including those mentioned above categorize depression severity. According to the 2004 NICE guidelines, severity classification was based on ICD-10, using symptom count. However, this approach was later deemed ambiguous, leading to its revision in the 2018 NICE guidelines, which now follow the DSM-V. A comparative analysis of DSM-V and ICD-10 in terms of symptoms and classification criteria is provided in Table 2.

Table 2: Comparison of Depression Assessment Tools (DSM-V vs. ICD-10)

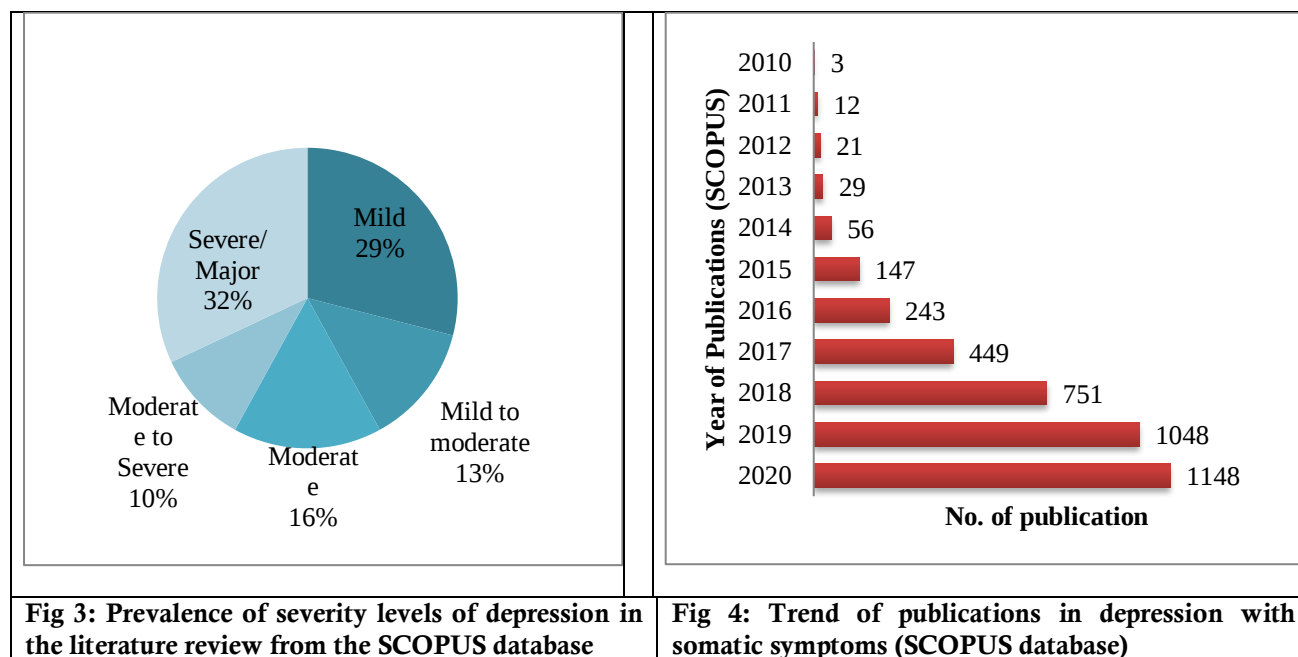
DSM-V	ICD-10
Comparison of Symptoms	
Depressed mood (self-reported or observed)	Depressed mood
Loss of interest or pleasure	Loss of interest
Fatigue/loss of energy	Reduction in energy
Worthlessness/excessive or inappropriate guilt	Loss of confidence or self-esteem
	Unreasonable feelings of self-reproach or inappropriate guilt
Recurrent thoughts of death, suicidal thoughts or actual suicide attempts	Recurrent thoughts of death or suicide
Diminished ability to think/concentrate or indecisiveness	Diminished ability to think\concentrate or indecisiveness
Psychomotor agitation or retardation	Change in psychomotor activity with agitation or retardation
Insomnia/hypersomnia	Sleep disturbance
Significant appetite and/or weight loss	Appetite\weight changes
Comparison of Severity Assessment	
Minimal (≤ 5 symptoms)	4 Symptoms
Mild to Severe (5-6 Symptoms)	5-6 Symptoms
Severe (≥ 7 symptoms)	7+ Symptoms

Key findings from the literature review suggests that moderate depressive disorders are often merged with mild or severe depression in research studies. While most diagnostic tools distinguish moderate depression, there is limited research focusing on the overlap between mild and severe depression. Figure 3 (Scopus bibliometric analysis) supports this observation, consistent with findings from Wittchen et al. (2011) and Aherne et al. (2017).

Apart from this, a basic trend that could be traced from literature related to moderate depressive disorders indicates another classification for depressive disorders in terms of the presence and absence of somatic symptoms. The somatic symptoms associated with moderate depressive disorders include fatigue and low energy, loss of libido, sleep disturbances, change in appetite, dysphonia, dizziness and palpitations along with general aches and pain (such as

headache) and gastrointestinal disorders⁶². These somatic symptoms are gaining more and more attention in terms of depression research because many authors have suggested that somatic symptoms can be used as tools to identify depressive disorders at a very early stage⁶³⁻⁶⁴

Apart from this, the growing prevalence of somatic symptoms is also a point of concern because depression is becoming somatoform in nature, increasing the disability and burden associated with it. The bibliometric trend of research papers in terms of somatic depression is also growing which can be directly seen from the increasing number of publications under this heading (Fig.4)



Interventions: Medical and Psychological:

The literature review identified two primary intervention types for treating moderate depressive disorders. These two interventions are medical interventions and psychological interventions. The medical interventions basically deal with the use of drugs that lead to a decrease in depressive symptoms in the patients. A list of approved drug classes that are used for the treatment of depressive disorders and their prevalence in the existing Scopus database has been mentioned in Table 3.

Table 3: Approved antidepressants for depressive disorder

Drugs	Class	Mechanism	Prevalence in literature (publication till 2020)
Amitriptyline, Maprotiline, Nortriptyline, Protriptyline, Trimipramine, Desipramine, Doxepin, Imipramine	Tricyclic antidepressants	Non-selective inhibitors of monoamine (serotonin, dopamine, and norepinephrine) reuptake	2,845
Selegiline, Tranylcypromine, Phenelzine, Isocarboxazid	MAO inhibitors	Inhibitors of enzymes (MAO-A and MAO-B)	1,788
Fluoxetine, Sertraline, Paroxetine, Fluvoxamine, Citalopram, Escitalopram	Selective serotonin reuptake Inhibitors	Selective serotonin reuptake inhibitors	3,987

Venlafaxine, Desvenlafaxine, Duloxetine	Serotonin-norepinephrine reuptake inhibitors	Serotonin and norepinephrine reuptake inhibitors	2,254
Mirtazapine	Noradrenergic and specific serotonergic modulator	Noradrenergic and specific serotonergic antidepressants	1,154
Agomelatine	MT ₁ /MT ₂ agonist and 5-HT _{2C} antagonist	Antagonism at MT ₁ and MT ₂ and antagonism at 5-HT _{2C} receptors	956
Vortioxetine	Multimodal antidepressant	Combination of two pharmacological modes of action: reuptake inhibition and receptor activity across five pharmacological targets	741
Bupropion	Norepinephrine-dopamine reuptake inhibitor	Releasing agent of dopamine and norepinephrine	1,995
Trazodone, Nefazodone	Serotonin modulators	Serotonin 5-HT _{2A} antagonist	2,102
Vilazodone	Serotonin reuptake inhibitor and 5-HT _{1A} -receptor partial agonist	Inhibiting serotonin reuptake and acts as a partial agonist at the 5-HT _{1A} receptor	2,547
Esketamine	Non-competitive N-Methyl-D-aspartate (NMDA) receptor antagonist	Non-competitive NMDA receptor antagonist	112
Brexanolone	Neurosteroid	Positive allosteric modulator of the GABA-A receptor	1,175

Among these drug classes, the literature review demonstrates that selective serotonin reuptake inhibitors (SSRIs) are the most commonly used class due to their efficacy and tolerability.

Psychological Interventions:

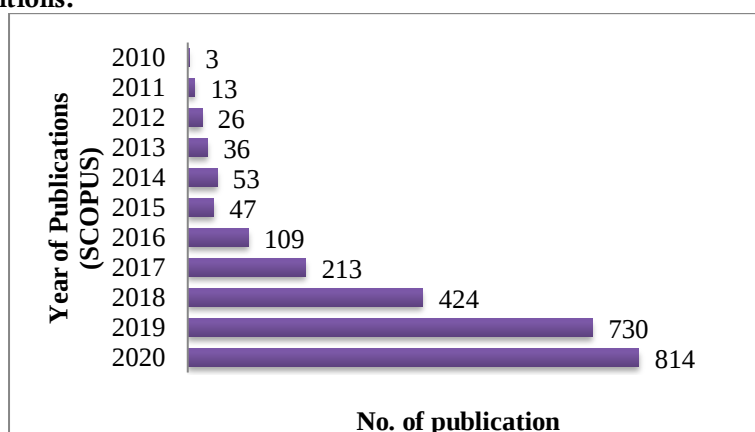


Fig 5: Trend of publications in the psychological intervention of depression (SCOPUS database)

Psychological therapies, particularly Cognitive Behavioral Therapy (CBT) are gaining prominence due to concerns over antidepressant side effects. Scopus bibliometric analysis (Figure 5) indicates a rise in research on psychological interventions in the last decade. Studies also suggest that combining psychological therapy with pharmacological treatment may reduce required drug dosages, enhancing patient outcomes.

This is due to the fact that most of the drug classes used for treating various levels of depression have been reported with some or the other side effects⁶⁵. Therefore, clinical research in the field of combined interventions has been given more interest. Many large-scale randomized trials have proved the efficiency of psychological interventions in enhancing the outcomes of medical interventions⁶⁶⁻⁶⁷. Some studies have also indicated that psychological intervention helps in reducing the dosage size of the drugs that are used for the treatment of these depressive disorders²⁴.

CONCLUSION AND FUTURE OUTLOOK

This systematic review conclusively points to the fact that most of the studies relating to moderate depression are considered to overlap with either mild or severe depression. This ambiguity underscores the need for strict adherence to diagnostic guidelines to ensure accurate differentiation of depression severity. The inconsistent classification terminology used in research such as "moderate to severe" or "mild to moderate", further limits focused investigation into moderate depression as a distinct entity. Consequently, the interventions proposed in many studies may not be specifically tailored to moderate depression raising significant concerns about the effectiveness of both pharmacological and psychological treatments in this subgroup. This research gap presents a major opportunity for future studies to develop targeted interventions that specifically address moderate depression, rather than generalizing findings from mild or severe cases. While mixed treatment approaches combining medical and psychological interventions have shown promise, their efficacy for moderate depression requires further validation through controlled studies. Furthermore, the review emphasizes that moderate depressive disorder remains an underexplored area of mental health research. The lack of exclusive data on moderate depression's etiology, symptomatology, and treatment outcomes underscores the urgency for dedicated investigations. Collecting comprehensive patient-specific data will not only enhance clinical understanding but also contribute to the reformation of public health policies and mental healthcare strategies. Establishing clear distinctions between mild, moderate, and severe depression in both research and clinical practice is crucial to ensure that patients receive appropriate and effective treatment rather than being misclassified and treated under a generalized approach. This will help bridge the existing knowledge gap, refine diagnostic protocols, and improve the effectiveness of personalized treatment strategies ultimately enhancing mental health outcomes for individuals affected by moderate depression.

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The authors confirm that the data supporting the findings of this study are available within the article.

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