



# Global Burden Disease Estimates for Major Depressive Disorders (MDD): A review of diagnostic instruments used in studies of prevalence

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## Abstract

Global Burden of Disease (GBD) estimates have significant policy implications nationally and internationally. Disease burden metrics, particularly for depression, have played a critical role in raising governmental awareness of mental health and in calculating the economic cost of depression. Recently, the World Health Organization ranked depression as the single largest contributor to global disability. The main aim of this paper was to assess the basis upon which GBD prevalence estimates for major depressive disorder (MDD) were made. We identify the instruments used in the 2019 GBD estimates and provide a descriptive assessment of the five most frequently used instruments. The majority of country studies, 356/566 (62.9%), used general mental health screeners or structured/semi-structured interview guides, 98/566 (17.3%) of the studies used dedicated depression screeners, and 112 (19.8%) used other tools for assessing depression. Thus, most of the studies used instruments that were not designed to make a diagnosis of depression or assess depression severity. Our results are congruent with and extend previous research that has identified critical flaws in the data underpinning the GBD estimates for MDD. Despite the widespread promotion of these prevalence estimates, caution is needed before using them to inform public policy and mental health interventions. This is particularly important in lower-income countries where resources are scarce.

**Keywords** Depression screening · Global burden of disease · Global mental health · Patient Health Questionnaire · Cultural psychiatry

## Introduction

In 2007 a series of papers on global mental health were published in which the authors called upon the international community to “scale up” services for people with mental disorders (Lancet Global Mental Health Group et al. 2007). A

year later the Movement for Global Mental Health (MGMH) was launched. The aim was to “close the treatment gap for people living with mental disorders worldwide” (Patel et al., 2011, p. 88). In addition to calling attention to more severe disorders (e.g., schizophrenia), the MGMH has put the spotlight on the global burden of depression. For example, the Lancet Commission recently launched a proposal for scaling up the diagnosis and treatment of depression (Patel et al. 2018; see also, Chisholm et al., 2016). However, a growing number of researchers and clinicians, including the former United Nations Special Rapporteur on the Right to Health, have expressed concerns about uncritically accepting calls to scale up mental health treatment because doing so inadvertently deflects attention away from the upstream causes of distress, such as poverty, food scarcity, violence, and inadequate or unsafe housing (Bayetti et al., 2023; Pūras, 2017; Williams & Chapman, 2022).

Despite these concerns, Global Burden of Disease (GBD) estimates, which are produced by the Institute for Health

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Metrics and Evaluation (IHME) in collaboration with the World Health Organization, have had significant policy implications nationally and internationally. Disease burden metrics, particularly for depression, have not only played a critical role in raising governmental awareness of mental health, but they are also used to calculate the economic cost of depression. In 2017 depressive disorders were ranked as the third leading cause of ‘years lost to disability’ (YLD) and the World Health Organization (WHO) now ranks depression as the single largest contributor to global disability (WHO 2017). The Gates Foundation, the largest funder of the IHME, uses the GBD data to inform its investment portfolio (Tichenor & Sridhar, 2019).

Yet, estimating the extent of the problem of depression globally is difficult because of the time-intensive nature of conducting structured clinical interviews. As a result, researchers tend to rely on screening questionnaires which can overestimate prevalence (Thombs et al., 2018). Authors of a recent study noted that, “The common practice of reporting the percentage of patients with scores above cut-off thresholds in screening questionnaires for depression as disorder prevalence substantially overestimates prevalence and misinforms users of epidemiological evidence” (Thombs et al., 2018, p. 44). Additionally, researchers have found that even minor wording changes in depression measures may lead to major changes in prevalence estimates (Karlsson et al., 2010; Maske et al., 2015). Moreover, there is evidence that suggests that the reliability of the epidemiological studies underpinning the GBD estimates for depression is poor (Brhlikova et al., 2011; Lyus et al., 2023). In order to be able to draw valid conclusions about the prevalence and relative burden of depression globally, the instruments used should be high quality and designed to identify a diagnosis of major depressive disorder.

The main aim of this paper was to assess the basis upon which GBD prevalence estimates for major depressive disorder (MDD) were made. We identified the instruments used in the latest (2019) GBD estimates for MDD across regions and provide a descriptive assessment of the five most frequently used instruments.

## Studies underpinning the GBD 2019 estimates for MDD

The GBD 2019 Data input sources tool (<https://ghdx.healthdata.org/gbd-2019/data-input-sources?components=5&causes=568&locations=1>) was accessed in March 2023 to identify studies underpinning the GBD 2019 estimates for MDD (Components = Nonfatal Health Outcomes; Causes = Major depressive disorder; Locations = Global). Of the 516 studies listed by the GBD Data input source tool, we retrieved 466 full-texts and 23 abstracts via internet sources,

libraries, and personal communications with the authors of the studies. Reasons for not being able to access studies were (1) studies were not available online ( $n = 18$ ) and (2) papers were not available in English ( $n = 6$ ). GBD includes “multi-country studies” covering more than one WHO region. For the analysis, the multi-country studies were disaggregated into country-based samples; three studies did not provide primary data on MDD prevalence and were excluded. A total of 566 country study sample estimates for depression were examined. (The source table and a list of the measures used are included in an on-line appendix). Information on the diagnostic instruments used to derive country estimates was extracted from individual country-based samples and aggregated by the 6 WHO regions (e.g., diagnostic instruments used by epidemiological studies in AFRO region; the EMRO region). In Table 1, 2, 3 we report on the number and type of instruments used per region and in total.

## Instruments used in the assessment of MDD

The 566 studies used a wide variety of instruments: 12 dedicated depression screeners and 27 general mental health screeners/structured or semi-structured interviews were used to assess prevalence. There were also 18 instruments that were neither depression nor general mental health screeners (e.g., “Survey questions [derived from] symptoms that aligned with the DSM-5”). The majority of country studies, 356/566 (62.9%), used general mental health screeners or structured/semi-structured interview guides (Table 2), 98/566 (17.3%) of the studies used dedicated depression screeners (Table 1), and 112 (19.8%) used other tools of assessing depression (Table 3).

Using instruments that are not designed to make a diagnosis of MDD, and/or are known to overestimate MDD, may lead governments and policymakers to misallocate limited resources. For example, according to a recent systematic review, the CIDI, which was the most frequently used instrument, does not meet criteria for minimal standards for sensitivity and the researchers rated the quality of the evidence for this structured interview as “very low” (Pettersson et al., 2015). Additionally, researchers who have used the Composite International Diagnostic Interview (CIDI) acknowledge that the “reliability and validity of diagnoses made with the WMH [World Mental Health] CIDI may vary across countries” (Wang et al., 2007, p. 7).

Of the five most commonly used instruments (Table 4), only the patient health questionnaire, full form (PHQ-9) and the Mini International Neuropsychiatric Interview (MINI) have been shown to meet minimum criteria for sensitivity and specificity (Pettersson et al., 2015) and they were used in 8% of the studies. It is important to emphasize however that neither the PHQ-9 nor the MINI provide an assessment

**Table 1** Dedicated Depression Screeners underpinning the 2019 GBD estimates for major depression, their description and number of studies using them by WHO region, n=98

Depression Screener	Brief Description	Total n = 98	AFRO	EMRO	EURO	PAHO	SEARO	WPRO
1 Center for Epidemiologic Studies Depression Scale (CES-D)**	a 20-item measure that asks caregivers to rate how often over the past week they experienced symptoms associated with depression, such as restless sleep, poor appetite, and feeling lonely <a href="#">REF</a>	24	2	0	9	5	1	7
2 Beck Depression Inventory (BDI)**	a 21-item, self-report rating inventory that measures characteristic attitudes and symptoms of depression (Beck, et al., 1961) <a href="#">REF</a>	22	3	9	5	1	2	2
3 Child Depression Inventory (CDI)*, **	a brief self-report test that helps assess cognitive, affective and behavioral signs of depression in children and adolescents <a href="#">REF</a>	10	1	1	4	1	1	2
4 Patient Health Questionnaire (PHQ)** (2 versions)	a multipurpose instrument for screening, diagnosing, monitoring and measuring the severity of depression <a href="#">REF</a>	30	1	0	7	8	5	9
5 Geriatric Depression Scale (GDS)**	a self-report measure of depression in older adults <a href="#">REF</a>	4	0	0	3	0	0	1
6 Harvard Department of Psychiatry National Depression Screening Day Scale (HANDS)**	is an easy-to-use screening tool of 10 questions to identify patients with symptoms of recent depression. It is designed to take minimal physician time; it can be filled out by the patient in the waiting room and scored by office staff <a href="#">REF</a>	1	0	0	1	0	0	0
7 Montgomery-Åsberg Depression Rating Scale (MADRS)	A psychological rating scale measuring the severity of depression symptoms <a href="#">REF</a>	1	0	0	1	0	0	0
8 Children's Depression Rating Scale-Revised (CDRS-R)*	rating scale for assessing severity of depression and change in depressive symptoms for clinical research trials in children and adolescents with depression <a href="#">REF</a>	1	0	0	1	0	0	0
9 Kandel and Davies' Depressive Mood Inventory**	Six-item scale to measure depressive mood <a href="#">REF</a>	1	0	0	1	0	0	0
10 Reynolds Adolescent Depression Scale (RADs)*, **	used to assess the severity of depressive symptomatology in adolescents from 11 to 20 years of age <a href="#">REF</a>	2	0	0	0	0	0	2
11 Center for Epidemiologic Studies Depression Scale for Children (CES-DC)	a 20-item self-report depression inventory with possible scores ranging from 0 to 60 <a href="#">REF</a>	1	0	0	1	0	0	0
12 Patient Health Questionnaire for Adolescents (PHQ-A)*	a self-report questionnaire that is designed for assessing anxiety, mood, eating, and substance use disorders in adolescents with possible scores ranging from 0 to 27 <a href="#">REF</a>	1	0	1	0	0	0	0
<b>TOTAL</b>		98	7	11	33	15	9	23

\* Children, adolescents, young adults

\*\* Self-report measure

**Table 2** General mental health screeners and structured/semi-structured interview guides underpinning the 2019 GBD estimates for major depression, their description and number of studies using them by WHO region, n = 356

Name	Brief Description	Total n=356	AFRO	EMRO	EURO	PAHO	SEARO	WPRO
1 Diagnostic Interview Schedule (DIS)	a structured interview assessing an individual's current and past symptoms of psychiatric disorders such as depression, schizophrenia, and substance dependence. <a href="#">REF</a>	17	1	0	4	9	0	3
2 Hopkins Symptom Checklist (HSCL)**	a screening instrument designed to identify common psychiatric symptoms. <a href="#">REF</a>	9	5	3	1	0	0	0
3 Clinical Interview Schedule-Revised (CIS-R)	a fully structured interview, to make it possible for lay survey interviewers to gather information about common (neurotic) psychiatric symptoms during health survey interviews <a href="#">REF</a>	10	1	0	7	1	0	1
4 Mini International Neuropsychiatric Interview (MINI)	designed as a brief structured diagnostic interview for the major psychiatric disorders in DSM-III-R, DSM-IV and DSM-5 and ICD-10 <a href="#">REF</a>	21	4	2	8	2	2	3
5 Mini International Neuropsychiatric Interview Plus (MINI-Plus)	a structured and standardized diagnostic interview used to determine the most common psychiatric disorders according to axis I DSM-IV-TR [9] and the International Classification of Diseases and Related Health Problems (ICD-10) <a href="#">REF</a>	3	1	1	0	0	1	0
6 Mini International Neuropsychiatric Interview for Children and Adolescents (MINI-KID)*	the structured psychiatric interview of choice for psychiatric evaluation and outcome tracking in clinical psychopharmacology trials and epidemiological studies <a href="#">REF</a>	9	2	2	1	0	1	3
7 Composite International Diagnostic Interview (CIDI) (various versions, e.g. World Mental Health (WMH-CIDI) and Munich version (M-CIDI))	a comprehensive, fully-structured interview designed to be used by trained lay interviewers for the assessment of mental disorders according to the definitions and criteria of ICD-10 and DSM-IV. It is intended for use in epidemiological and cross-cultural studies as well as for clinical and research purposes <a href="#">REF</a>	139	8	5	60	31	5	30
8 Structured Clinical Interview for DSM Disorders (SCID) (2 versions)	a semi-structured interview guide for making diagnoses according to the diagnostic criteria published in the American Psychiatric Association's Diagnostic and Statistical Manual for Mental Disorders (DSM) <a href="#">REF</a>	14	1	0	0	1	1	11
9 Diagnostic Interview for Children and Adolescents (DISC)* (2 versions)	a fully structured diagnostic instrument that assesses thirty-four common psychiatric diagnoses of children and adolescents <a href="#">REF</a>	16	0	0	3	5	1	7
10 Geriatric Mental State Examination (GMS)	internationally the most widely used structured comprehensive clinical mental health assessment for older persons <a href="#">REF</a>	30	2	0	12	6	2	8
11 Schedule for Affective Disorders and Schizophrenia for School-Age Children (3 versions) *	a semi-structured interview to assess current and past symptoms of mood, anxiety, psychotic, and disruptive behavior disorders in children ages 6–18 years old <a href="#">REF</a>	11	0	2	5	1	1	2

Table 2 (continued)

Name	Brief Description	Total n=356	AFRO	EMRO	EURO	PAHO	SEARO	WPRO
12	Schedule for Affective Disorders and Schizophrenia (SADS)	16	0	15	1	0	0	0
	<i>designed to accomplish these aims by providing for (1) a detailed description of the features of the current episode of illness when they were at their most severe; (2) a similar description of the major features during the week prior to the evaluation; (3) a series of questions and criteria which enable one to make diagnoses using the Research Diagnostic Criteria [7]; and (4) a detailed description of past psychopathology and functioning relevant to the evaluation of prognosis and overall severity of disturbance</i> <a href="#">REF</a>							
13	Schedule for Clinical Assessment in Neuropsychiatry (SCAN)	10	0	0	8	1	0	1
	<i>a set of instruments, supported by manuals, that aim to measure and classify the psychopathology of the major psychiatric disorders of adult life</i> <a href="#">REF</a>							
14	Comprehensive Psychopathological Rating Scale (CPRS)	4	0	0	4	0	0	0
	<i>It is suitable for the rating of pathological anxiety alone or for anxiety occurring in the setting of other psychological or medical disorder</i> <a href="#">REF</a>							
15	Preschool Age Psychiatric Assessment (PAPA)*	1	0	0	1	0	0	0
	<i>structured diagnostic parent-administered psychiatric interview about children ages 2–5 (24 months through 72 months) that assesses parent-reported psychiatric symptoms, disorders, and impairment in preschool children</i> <a href="#">REF</a>							
16	Development and Well-Being Assessment (DAWBA)*	10	0	0	4	5	0	1
	<i>a novel package of questionnaires, interviews, and rating techniques designed to generate ICD-10 and DSM-IV psychiatric diagnoses on 5–16-year-olds</i> <a href="#">REF</a>							
17	Hospital Anxiety and Depression Scale (HADS)**	5	0	0	3	0	2	0
	<i>measure anxiety and depression in a general medical population of patients</i> <a href="#">REF</a>							
18	National comorbidity survey replication (NCS-R) & National comorbidity survey replication adolescent supplement (NCS-A)*	12	0	0	0	12	0	0
	<i>designed to provide the first nationally representative estimates of the prevalence, correlates, and patterns of service use for DSM-IV mental disorders among U.S. adults and adolescents and to lay the groundwork for follow-up studies of risk and protective factors, consequences, and early expressions of adult mental disorders</i> <a href="#">REF</a>							
19	Cambridge Examination for Mental Disorders (CAMDEX)	1	0	0	0	1	0	0
	<i>standardized structured interview for diagnosing common mental disorders of late life</i> <a href="#">REF</a>							
20	The Alcohol Use Disorder and Associated Disabilities Interview Schedule – Diagnostic and Statistical Manual of Mental Disorders (AUDADIS)	4	0	0	0	4	0	0
	<i>is a fully structured interview designed to assess alcohol, drug and mental disorders according DSM criteria in both clinical and general populations</i> <a href="#">REF</a>							
21	Child and Adolescent Psychiatric Assessment (CAPA)*	3	0	0	0	3	0	0
	<i>an interviewer-based structured psychiatric interview that collects data on the onset dates, duration, frequency, and intensity of symptoms of a wide range of psychiatric diagnoses</i> <a href="#">REF</a>							
22	Primary Care Evaluation of Mental Disorders (PRIME-MD)**	4	0	0	0	1	0	3
	<i>Designed to diagnose mental health problems in the primary care sector</i> <a href="#">REF</a>							

Table 2 (continued)

Name	Brief Description	Total n=356	AFRO	EMRO	EURO	PAHO	SEARO	WPRO
23 Psychogeriatric Assessment Scale (PAS)	a standardized interview which assesses the changes seen in dementia and depression using a set of scales <a href="#">REF</a>	1	0	0	0	0	0	1
24 Strengths and Difficulties Questionnaire (SDQ)* **	a short behavioural screening questionnaire for children aged 3 to 16. The questionnaire is used to assess children's mental health, and can be completed by children and young people themselves, by their parents or by their teachers <a href="#">REF</a>	1	0	0	0	0	0	1
25 The Depression, Anxiety, and Stress Scale (DASS)**	a 42-item self-administered questionnaire designed to measure the magnitude of three negative emotional states: depression, anxiety, and stress <a href="#">REF</a>	2	0	1	0	0	0	1
26 Diagnostic Interview for Genetic Studies (DIGS)	developed by investigators from sites in the National Institute of Mental Health (NIMH) Genetics Initiative to record information regarding a subject's functioning and psychopathology <a href="#">REF</a>	1	0	0	1	0	0	0
27 Diagnostic Instrument for Children and Adolescents (DICA)	A semi-structured interview to assess the presence or absence of symptoms in children and adolescents aged 7–18 for DSM-III and most ICD-10 diagnostic criteria <a href="#">REF</a>	2	1	0	1	0	0	0
TOTAL	–	356	26	31	124	83	16	76

\*Children, adolescents, young adults

\*\*Self-report measure

**Table 3** Other instruments underpinning the 2019 GBD estimates for major depression, their description and number of studies using them by WHO region, n= 112

Other Instruments	Brief Description	Total n= 112	AFRO	EMRO	EURO	PAHO	SEARO	WPRO
1 National Mental Health Survey	N/A	2	0	0	0	1	1	0
2 DSM III-R Criteria Checklist	N/A	1	0	0	0	0	1	0
3 Structured Questionnaire	N/A	1	0	0	0	0	0	1
4 Clinical Diagnosis Based on Present State Examinations	N/A	1	1	0	0	0	0	0
5 Self-Reported	N/A	72	18	4	31	8	5	6
6 Standardised questionnaire form using diagnostic criteria taken from DSM-IV	N/A	1	0	1	0	0	0	0
7 Clinical Interview	N/A	6	0	5	1	0	0	0
8 Structured Interview	N/A	5	0	0	2	3	0	0
9 Clinical Diagnosis	N/A	7	0	0	4	0	0	3
10 Inpatient or outpatient treatment in a psychiatric hospital	N/A	1	0	0	1	0	0	0
11 Semi-structured interview (SPIKE)	N/A	1	0	0	1	0	0	0
12 HDL Global Depression Scale	N/A	1	0	0	1	0	0	0
13 Symptom Checklist	N/A	2	0	1	0	1	0	0
14 Interview by psychiatrist	N/A	6	0	3	0	0	3	0
15 Previous Diagnosis	N/A	1	0	0	0	0	0	1
16 Clinical Interviews Based on DSM-IV Checklist	N/A	2	1	1	0	0	0	0
17 Semi-structured interview based on DSM-IV criteria	N/A	1	0	0	0	0	1	0
18 Survey questions that asked about symptoms aligned with the DSM-5	N/A	1	0	0	0	1	0	0
TOTAL	–	112	20	15	41	14	11	11

of depression severity. Also, although the PHQ-9 is widely used as a diagnostic tool, it should not be used in this way, for it was not designed to make a diagnosis of depression. Although Pfizer’s website represents it as both a screening instrument and a diagnostic tool, in a recent interview one of the developers of the PHQ-9 stated that, “This latter description [on Pfizer’s website] is incorrect, Pfizer must have written it and we didn’t notice” (Goldhill, 2023).

### Can we trust the GBD estimates for depression?

As many researchers have noted, there is no standardized method for collecting prevalence data on mental disorders and global estimates are likely highly unreliable (Wildeman, 2013). Our results are congruent with and extend previous research that has identified critical flaws in the data underpinning the GBD estimates for depression (Brhlikova et al., 2011; Lyus et al., 2023). Despite the widespread promotion of these prevalence estimates, it is clear that caution is needed before using them to inform public policy and mental health interventions. Additionally, the documented heterogeneity of screening instruments is cause for concern. This is particularly important in lower income countries where

resources are scarce. Such heterogeneity “appears to rest on the unsupported, and likely erroneous, assumption that depression screening tools can be used interchangeably [to estimate the incidence of depression]” (Fried, 2017).

Screening tools for depression, especially questionnaire-based ones, vary greatly in quality. A recent systematic review (Pettersson et al., 2015) of the accuracy of 20 case-finding instruments and structured interviews used to identify major depression in adults found that only 15% of the assessed instruments met minimum criteria for sensitivity and specificity. Moreover, as emphasized by many depression researchers, screening questionnaires are not designed to make a diagnosis or to estimate prevalence; “Using them in this way distorts prevalence estimates, often substantially, and does so disproportionately in low-prevalence populations” (Thombs et al., 2018, p. 48). Thus, there is the real possibility that the use of screening questionnaires in epidemiological studies could lead to the overdiagnosis and over treatment of depression.

In addition to the concerns described above—the use of instruments intended for screening not diagnosis—there is also the issue of inappropriately using a US-centric biomedical model in non-Western contexts. The assumption that “depression” is a universal and valid disease category that can be abstracted in a way that allows “MDD” to be

**Table 4** Five frequently used instruments in the 2019 GBD estimates for depression

Instrument	Design and Purpose	Limitations
1. Composite International Diagnostic Interview (CIDI)	Fully structured interview designed to have standardized questions that would limit subjectivity in the diagnostic process. Identifies 6 mental disorders including major depressive disorder Widely used instrument for assessing major depression in epidemiological and clinical studies	There is little room for clinical judgment (Levis et al., 2018; Robins et al., 1988) Using the GRADE methodology, Pettersson et al., (2015) report “The quality of the evidence for [using this] structured interview was very low.” <sup>*</sup>
2. Patient Health Questionnaire (PHQ)	Symptom checklist for depression screening that was originally designed for use in primary care settings	Should be used only for screening and monitoring treatment, “it was not intended for diagnosis” (Goldhill, 2023) No evidence for PHQ as a severity measure (Pettersson et al., 2015) Substantial evidence that using the PHQ leads to overdiagnosis and over treatment (Jerant et al., 2014; Levis, et al., 2020; Roseman et al., 2016)
3. Geriatric Mental State (GMS)	Semi-structured clinical interview designed to assess 8 mental health issues, including depression in older adults Widely used in community survey research	No evidence that it includes a severity measure for depression (Copeland et al., 2002)
4. Center for Epidemiologic Studies Depression Scale (CES-D)	Self-report screening tool to assess depressive symptoms in the general population	Researchers have reported a high false positive rate for the CES-D (Pettersson et al., 2015)
5. Mini International Neuropsychiatric Interview (MINI) **	Short (approximately 15 min) structured psychiatric interview used in multicenter clinical trials, epidemiology studies, outcome tracking, and in non-research clinical settings Compatible with international diagnostic criteria (ICD) and DSM	Designed to be over-inclusive (Leclubier et al., 1997) and will generate a higher rate of false positive diagnoses for MDD (Levis et al., 2018)

1. CIDI was developed by the World Health Organization (WHO) in 1982. It was used in 139 studies underpinning the 2019 GBD estimates for depression, and there were various versions used, e.g. WMH-CIDI, Munich version M-CIDI, University of Michigan version UM-CIDI, shortened version CIDIS. 2. PHQ was funded by Pfizer and developed by Pfizer with the assistance of Dr. Robert L. Spitzer, Dr. Janet B.W. Williams, Dr. Kurt Kroenke, and colleagues. The PHQ has 6 versions. It was used in 30 studies, and there were various versions used. Twenty-six studies used the PHQ-9. 3. GMS was developed by Copeland and colleagues in the 1970's. It was used in 30 studies. 4. CES-D was developed by Dr. Lenore Radloff of the Center for Epidemiologic Studies at National Institute of Mental Health. It was used in 24 studies. 5. MINI was developed by Dr. David V. Sheehan and Dr. Yves Lecrubier of the University of South Florida. The MINI has multiple versions. It was used in 33 studies and there were various versions used (eg. MINI, MINI-KID, MINI-Plus)

<sup>\*</sup>GRADE defines very low as “Severe or very severe problems in several domains”

identified and studied divorced from context, has been harshly criticized by medical anthropologists and cultural psychiatrists (Mezzich et al., 1999). As many researchers have noted, it is insufficient and inappropriate to simply translate structured interviews or depression symptom rating scales into another language and maintain that they are culturally valid. Psychiatrist Derek Summerfield, who has called the use of the economic metric “disability adjusted life years” when applied to depression “epistemologically lamentable,” sums this point up well: “Western depression is not a universal condition” (Summerfield, 2017, p. 52). As he points out (Summerfield, 2017, p. 52), depression, or any mental disorder, is not “an entity essentially lying outside situation, society, and culture which is identifiable anywhere using a common (Western) methodology such as the Composite International Diagnostic Interview (CIDI).” Indeed, the biomedical model in psychiatry systematically de-links mental well-being and emotional distress from the power asymmetries and structural conditions in which they are inevitably embedded (Yamin, 2019).

### Where to go from here?

Many people around the world are struggling with mental health issues including depression. However, as we have shown here, GBD depression estimates are based mainly on instruments that were not designed to make a diagnosis of depression and thus have limited value in determining international policy. Accepting and acting on evidence when it challenges a dominant—and heavily promoted—narrative is not an easy task. Nonetheless, our research is consistent with growing concerns (Pūras, 2017) that the recent calls to ‘scale up’ the diagnosis and treatment of depression based on GBD estimates may result in misallocation of resources and missed opportunities.

It is certainly understandable that when one sees oft-cited statistics about depression as one of the leading causes of disability, or when one hears that there is a world-wide mental health crisis, the response is to advocate for increased access to psychiatric diagnosis and treatment. It is not surprising then that these GBD estimates are being used to promote predominately intra-individual interventions, particularly psychotropics (see for example, Mekonen et al., 2021). However, in addition to the concern about wasting limited resources, advocating for interventions from the global north and conflating access to psychiatric services with mental health equity deflects attention away from the adverse socioeconomic conditions of health. Thus, the problem is not solely with depression screeners per se. Rather, the use of screeners as diagnostic instruments devoid of socioeconomic and cultural context risks medicalizing and individualizing distress and deflects attention away from the social determinants of health. There is a need to incorporate non-reductive

epistemological and empirical approaches when addressing the issue of global mental health and incorporate a robust biopsychosocial approach. Although the reasons are complex and multilayered, there is increasing evidence that recent economic policies contribute to emotional distress via the consequences of precarity incurred by them (Cosgrove et al., 2023).

In conclusion, our results support the work of human rights scholars and advocates who argue that disease specific approaches to global mental health will not transform the social, structural, and economic conditions that undermine well-being (Pūras, 2017; Yamin, 2019; Zeira, 2022). We should not reduce rights to the right to receive treatment (Chapman, 2010; Pūras, 2017). Certainly, psychotherapeutic approaches and pharmacological treatments should be part of any mental health toolkit. However, based on our findings we urge caution before using these estimates to uncritically scale up treatment approaches focused on the individual. As we have shown here, many of the instruments underpinning the studies used to derive GBD MDD estimates are not designed to make a diagnosis of depression, thus the basis of these estimates of MDD need to be urgently revisited.

**Supplementary Information** The online version contains supplementary material available at <https://doi.org/10.1007/s10597-024-01302-6>.

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