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Identification and Treatment for Depressive Disorder: Descriptive Study from Indonesia

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Abstract

Access to professional mental health services was low worldwide, especially in lower-middle-income countries. Indonesia encounters several challenges in providing adequate mental health care. Poor detection could reduce the treatment coverage. This study aimed to determine how many individuals with depression recognize their condition or receive an appropriate diagnosis, as well as the types of treatments they receive. We analyzed secondary data from the Indonesian Family Life Survey 5th edition (IFLS-5), which included socio-demographic data, levels of well-being, subjective experiences of mental health issues, and treatment information. We found that 6,645 respondents (22.8%) exhibited significant depressive symptoms, yet only 15 respondents (0.1%) reported having a lifetime psychiatric disorder that met the criteria for depression. Most lifetime psychiatric diagnoses (LPD) were made by doctors (93.3%). A significant portion of respondents with a history of psychiatric disorders did not receive any treatment (70.5%), and among those who did, medication was the most common approach. There was considerable gap between the identified significant depressive symptoms and LPD, warranting further exploration. Low detection rates and stigma, potentially linked to Indonesian culture and perceptions of mental health, may underlie these issues. A variety of treatment options must be available and accepted to be beneficial for patients

Introduction

World Health Organization (WHO) stated that in one in every 8 people living with a mental disorder, and an estimated 970 million people from anxiety and depressive disorders (World Health Organization, 2022). In 2018, National Basic Health Research (Riskesdas) reported that more than 19 million Indonesians aged 15 years and above emotional and mental problems (Kementerian Kesehatan Republik Indonesia, 2018). In the second year of the COVID-19 pandemic in Indonesia, anxiety and depressive disorder rose significantly to about 18.5% and 29.2% (Hardi *et al.*, 2023) is also supported by data from Universitas Negeri Semarang, severe depressive disorder is 17% and there is a high risk of PTSD (Mega *et al.*, 2021). Research from Universitas Sumatera Utara also stated that depressive and anxiety with smartphone addiction (Wijaya and Megawati, 2023).

In 2022, Health Ministry of Indonesia revealed that suicide cases increased to 826, in contrast to the previous year's 613 (Universitas Gadjah Mada, 2023). Mortality was significantly higher among people with mental disorders and caused by unnatural death, which estimates that 14.3% of deaths

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worldwide are attributable to mental health (Werlen *et al*., 2020). Anxiety and depressive disorders highly contribute to and often do not adequate care. An online survey of Swiss adults showed that almost half of those with anxiety and depression had not perceived the need for treatment, with never accessing health care and over four in five currently not using any mental health services (Werlen *et al*., 2020). Indonesia also faced similar low mental health treatment coverage and treatment maintenance. Only 84.9% of individuals with mental disorders seek and 49.9% of them receive routine treatment (Kementerian Kesehatan Republik Indonesia, 2018). Among 48.9% of patients with schizophrenia who received treatment, less than half maintained their treatment (Kementerian Kesehatan Republik Indonesia, 2018). There were only around 9% of patients with depression who received evidence-based treatment (Kementerian Kesehatan Republik Indonesia, 2018). Indonesia National Adolescent Mental Health Survey (I-NAMHS) stated that only 2.6% of young adults with mental health problems seek help (Center for Reproductive Health *et al*., 2022).

In Indonesia, mental health issues have been ranked list. Treatment gaps have been estimated to be above 90% and even reaching 95% in rural Indonesia (World Health Organization, 2014). There were several challenges in diagnosing mental such as uneven mental health services (Munira *et al*., 2023) awareness of mental health. Hartini *et al*., 2018a) barriers to traditional and cultural beliefs (Subu *et al*., 2022). Indonesia's health coverage is low, especially for mental which results in declining and limited funds for mental health hospitals (Pols and Wibisono, 2017). Mental health services are unequally and not every hospital has professionals (Munira *et al*., 2023). The ability to seek help is also relatively low in Indonesia due to limited knowledge and awareness (Munira *et al*., 2023). Most Indonesian people have a negative view of mental, instead of seeking professional help, they often do *pasung* practices (chains and cages) to isolate people with mental illnesses (Baklien *et al*., 2023). Patients also prefer family or even religious to seek help rather than professionals (Munira *et al*., 2023). Those conditions could be potential barriers to receiving proper treatment for mental health. Data about mental health especially in lower and middle-income countries (LMIC) and mainly collected from high-income resulting in inequality of mental health well-being (Moitra *et al*., 2023).

Indonesia Family Life Surveys (IFLS) is a longitudinal household survey conducted in Indonesia. The cross-sectional national population survey also investigated depression. In 2015, depression was found among 27,86% (Purborini *et al*., 2021), 15% (Peltzer and Pengpid, 2018), and 19,4% (Fahmi *et al*., 2019) of young adults, adults, and older adults, respectively. Several depression risk factors, including younger age, stressors, lack of social support, and behavior, have been identified (Peltzer and Pengpid, 2018). However, information about mental health treatment coverage was not studied. Considering the limited data and noteworthy issues regarding the low treatment utilization in Indonesia, it is crucial to evaluate whether the actual depression cases received help. Proper assessment and treatment are crucial in managing mental health issues. It requires professional skills to determine mental health disorders. Poor detection and diagnosis could widen the treatment gap, which leads to individuals not recognizing their mental health problems. This study aimed to learn how many individuals with depression recognize or receive a proper diagnosis of their mental health issues. Moreover, the treatment types received by them were also explored. The data could provide insight into how individuals perceived mental health and could help increase professional awareness of mental health (Kraus *et al*., 2019).

Methods

This cross-sectional research used secondary data from the Indonesian Family Life Survey 5th edition (IFLS-5). The data collection period was from 2014 to 2015. The survey collected data from Indonesia's most populated provinces, 13 provinces comprising 83% of the national population. The survey sampling was grouped by provinces and urban/rural locations, then sampled randomly by those strata. IFLS randomly selected 321 enumeration areas (EAs) in each of the 13 provinces, sampling urban EAs and EAs in

smaller provinces to facilitate urban-rural and Java-non-Java comparison. The IFLS-5 collected data on a wide range of health and socioeconomic variables, including measures related to mental health (19,20). Variables used in this study were selected from some parts of IFLS-5 data, namely books 3A and 3B. Sociodemographic data were retrieved from book 3A, which is intended for respondents aged 15 and above. Some sociodemographic data typically related to mental health were selected: age, sex, educational levels, and occupational status. Age was divided into 18-24, 25-44, 45-59, and above 59 years old. Sex was categorized into men and women. Educational levels were classified into less than 9 years and 9 years and above. Occupational status consisted of two groups, namely actively working or not working (STRAUSS *et al*., 2016).

Meanwhile, book 3B provided mental health conditions and treatment data in our study. The mental health problems assessment is based on the results of a health worker's diagnosis (Have a doctor/paramedic/nurse/ midwife ever told you that you have emotional, nervous, or psychiatric problems]? "Yes" or "No"). Questions related to who diagnosed the condition consisted of the answer categories "Doctor", "Paramedic", "Nurse", and "Midwife". Meanwhile, questions regarding the type of treatment include: Are you now taking the following treatments to treat […] and its complications? with the categories "Traditional Medicine", "Modern Medicine", "Other treatments", "No treatments". Depression was evaluated in this study using the CES-D-10 (Center for Epidemiological Studies Depression Scale), a self-report measure consisting of 10 question items for depression regarding the frequency of several depressive symptoms (e.g., how you felt in the past week "I felt hopeful about the future") with the answer category "rarely or none (≤1 day)", "Some days (1-2 days)," Occasionally (3-4 days)", "Most of the time (5-7 days)". The results are divided into the presence or absence of significant depressive symptoms, an accumulation of scores above 10 is categorized as depression. The instrument has good reliability and validity in screening depressive symptoms among the general population. It has also been widely used in several studies (Monica, 2020).

There were 34,257 data points retrieved from IFLS-5. Incomplete data from demographic sections (n=2) and depression questions (n=2810) were excluded. The study only included respondents older than 18 years old, so some data were excluded, resulting in 29,165 completed data points to be analyzed further. Further information is in Figure 1. All statistical analyses were performed using SPSS version 26. Descriptive data are used to describe sociodemography (age, sex, educational levels). Respondent with depression, and lifetime psychiatric diagnosis (LPD), and receiving treatment was shown in percentage (%). We conducted a sub-analysis to see the description of subjects who received a diagnosis by health workers and the type of treatment for subjects with psychological problems and psychological problems with depression. All human research procedures followed were in accordance with the Institutional Review Board (IRBs) in the United States at Research and Development (RAND) Corporation, in Indonesia at the University of Gadjah Mada, and the Helsinki Declaration of 1975. The ethical clearance number obtained from the Human Subjects Protection Committee of the RAND was s0064-06-01-CR01.

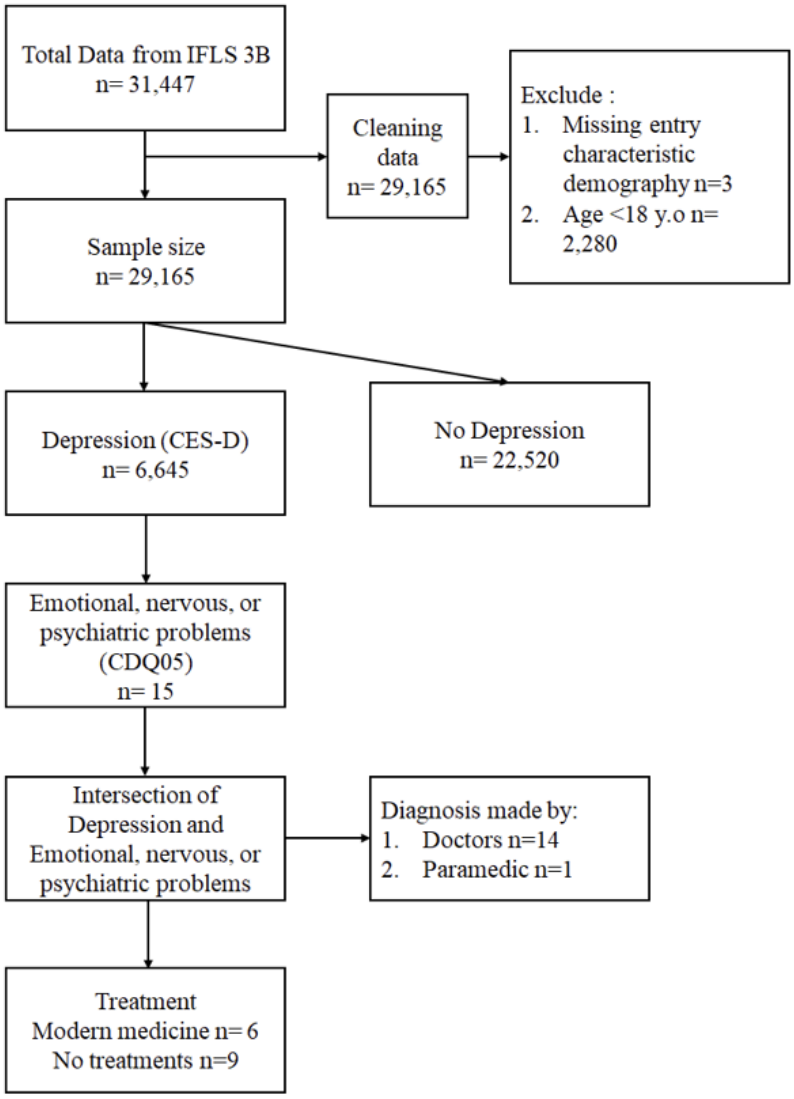

Figure 1. The flow of the research

Results and Discussion

Among the completed data, we found 6645 (22.8%) respondents with significant depressive symptoms. There were only 15 respondents (0.1%) who reported having any lifetime psychiatric disorder and met the depressive criteria. Most of the respondents with depression (53.5%) and lifetime psychiatric diagnoses (63.6%) were adults. Please refer to Table 1 for further information about demographic data.

Most of the lifetime psychiatric diagnoses (LPD) were made by doctors (93.3%). Most of the respondents with a history of psychiatric disorders did not receive any treatment (70.5%). The findings were also in line with the respondents who had clinically significant depressive symptoms. Most of them did not receive treatment (60%). Among respondents who received treatment, modern medicine is the majority treatment approach. Details of who made the diagnosis and types of treatment are displayed in Table 2.

The study intended to explore individuals with depression, properly diagnosed and treated in Indonesia. The prevalence of clinically significant depressive symptoms was 22.8%. Lifetime psychiatric disorders reported by the respondents were collected to explore awareness. Since the lifetime psychiatric disorders covered more than depression, near or higher proportions were expected compared

Table 1. Demographics Data of the Significant Depressive Symptoms and 15 People with Lifetime Psychiatric Diagnoses

Variables	Significant depressive symptoms N (%)	Lifetime psychiatric diagnoses N (%)	Lifetime psychiatric diagnoses with depression N (%)
Prevalence (%)	6645 (22.8)	44 (0.2)	15 (0.1)
Age			
18-24	1438 (21.6)	2 (4.5)	0 (0)
25-44	3557 (53.5)	28 (63.6)	12 (80)
45-64	1375 (20.7)	13 (29.5)	3 (20)
≥65	275 (4.1)	1 (2.3)	0 (0)
Gender			
Male	3015 (45.4)	22 (50)	7 (46.7)
Female	3630 (54.6)	22 (50)	8 (53.3)
Marital Status			
Single	1276 (19.2)	7 (15.9)	4 (26.7)
Married	4814 (72.4)	36 (81.8)	11 (73.3)
Separated/ divorced/ widow	555 (8.4)	1 (2.3)	0 (0)
Educational Levels			
No school	227 (3.4)	0 (0)	0 (0)
< 9 years	3412 (51.4)	11 (25.0)	3 (20.0)
≥ 9 years	2988 (44.9)	33 (75.0)	12 (80.0)
Occupational Status			
Not Working	4111 (61.9)	28 (63.6)	9 (60.0)
Working	2426 (36.5)	16 (36.4)	6 (40.0)
Other	108 (1.6)	0 (0)	0 (0)
Receiving treatment			
Yes		13 (29.5)	6 (40.0)
No		31 (70.5)	9 (60.0)

Table 2. Diagnosis and Types of Treatment Received by the Respondents

Variables	Lifetime Psychiatric diagnosis n=44	Lifetime Psychiatric Diagnosis with depression n=15
Diagnose by		
Doctor	39(88.6)	14(93.3)
Paramedic	2(4.5)	1(6.7)
Midwives	3(6.8)	0(0.0)
Type of Treatment		
Traditional Medicine	1(2.3)	0(0.0)
Modern Medicine	9(20.5)	6(40.0)
Other treatments	3(6.8)	0(0.0)
No treatments	31(70.5)	9(60.0)

to the clinically significant depressive group. However, the actual report on lifetime psychiatric disorders was low, even among the respondents who had clinically depressive symptoms. Most of them did not receive any mental health treatment during their lifetime. The clinically significant depressive symptoms in this study corroborate the previous data estimation for the LMI countries (Moitra *et al*., 2022). This result also falls in the range of previous IFLS-5 research (Handajani *et al*., 2022). Compared to the recent study in 2022, the prevalence (29.2%) was slightly higher than our findings (Hardi *et al*., 2023). It indicated that depressive disorder was on the rise after the IFLS-5 survey, which prompted an intervention at the community level. Information about how individuals with depression were diagnosed and managed in Indonesia is described below.

A good treatment was initiated by a careful diagnosis. A diagnosis is usually informed or known by the individual, which is reflected by how individuals remember their experience and whether they have had any psychiatric diagnosis during their lifetime. To our surprise, less than 1% of the respondents reported any lifetime psychiatric diagnosis, and an even smaller proportion when compared with those who met the clinically significant depressive disorder during the survey. It indicates there is a possibility of a low detection rate among Indonesians. It raised a concern about whether the respondents were aware of their mental status or had ever been properly screened. A previous study on LMIC stated that the severity of depression and suicidality were under-detection, especially in primary care clinics (Fekadu *et al*., 2022). A low detection rate implies huge neglect of people with depression, especially in LMIC (Fekadu *et al*., 2022). However, careful interpretation of the result should be warranted. Some possibilities should be considered before exploring the potential factors underlying the phenomenon. It was unknown whether the respondent had any emotional, nervous, or psychiatric issues. Low identification of depression may occur due to depression may not be a lifelong experience and may go unnoticed while visiting any healthcare professional. The prevalence of depression in the survey may be accidental, unknown to the respondent, and undiagnosed by professionals, which partly explains the low detection rate. Limitations to recall psychiatric history could happen due to the recall bias, which potentially underestimate the lifetime prevalence of mental disorders, thus resulting in small results but could have a large prevalence in the population (Takayanagi *et al*., 2014). Mental health care availability, cultural factors, and stigma could also contribute to the discrepancy between the detected depression and the subjective report.

Doctors were reported as the majority source of diagnosis among the respondents. No further data about which doctor diagnosed the respondents was available. In Indonesia, most mental health care was centralized in the secondary or tertiary care settings, where psychiatrists were available (Cipta *et al*., 2023). Individuals may be referred by general practitioners using national health insurance or gain direct access through their own money to a psychiatrist or clinical psychologist (Cipta *et al*., 2023). However, the latest option is not always feasible for everyone (Cipta *et al*., 2023). Visiting the general practitioners in primary care could be the best alternative and gain a referral to the psychiatrist (Cipta *et al*., 2023). General practitioners are the spearhead in primary care, including addressing a wide range of mental health issues (Regier *et al*., 1978). However, misdiagnosis and underdiagnosis of mental health disorders could happen. Research from Ethiopia reported that 39.16% of psychiatric disorders were misdiagnosed (Ayano *et al*., 2021). It is also found that undetected diagnoses of depression have reached as high as 80% (Ayano *et al*., 2021; Fernández *et al*., 2010). Understandably, primary care is more focused on medical care settings that are also high in prevalence and overlook psychological distress (Rogers *et al*., 2021). Poor detection on the primary care level could partly be related to the prioritizing of health issues with a high prevalence (Borowsky *et al*., 2000). Limited knowledge about mental health disorders, lack of extensive staff training in detecting mental health disorders, short consultation duration during the office visit, and restrictive reimbursement policies occured in the primary care settings (Cipta *et al*., 2023; Romer and McIntosh, 2005). Limited mental health services

access is noteworthy and has been a part of the consideration for the allocation of primary care medical services to assist in tackling common mental health problems (Munira *et al*., 2023).

Collaborative care in primary health care can promote better mental health care. Reflecting on the unequal general practitioners to patient ratio in Indonesia (1:1706), it shows that the service coverage figures are not evenly distributed (Sutrisno, 2023). Collaboration with other medical personnel, such as midwives and paramedics, was performed to wider the coverage in the community. Thus, it is common for patients to get help from them. Consistent with HI countries, a higher proportion of individuals with MDD in LMI countries accessed general health services that included general medical doctors, nurses, or other health professionals not related to mental health (Moitra *et al*., 2023). It indicated the importance of having the same vision and knowledge in detecting mental health problems to enhance mental health services in Indonesia.

Indonesian culture and perspective about mental health disorders are related to "insanity", which elicits stigma or discrimination (Hartini *et al*., 2018b; Subu *et al*., 2022). It led to a delay in help-seeking, especially before mental health disorders worsen or are experienced with functional deficit (Doll *et al*., 2021). Indonesian people were tolerant of individuals with mental health problems, as long as no aggression was shown. When the individual showed aggression, some initial measures were performed before utilizing mental health services, such as conducting physical confinement (known as *pasung*), visiting respected traditional healers (such as *dukun*), or consulting religious teachers as their first choice (Anjara *et al*., 2021; Kaligis *et al*., 2021; Subu *et al*., 2022; Mahendrata *et al*., 2017). The low level of mental health utilization was also observed in another study. Research from Switzerland shows that among respondents with anxiety and depression, almost half of them did not perceive a need for treatment, two-thirds had never utilized professional health care, and more than four in five were not currently using health care services (Werlen *et al*., 2020). Accepting mental illness and seeking treatment can be inherently difficult for Indonesians. Some respondents might keep their lifetime psychiatric diagnosis a secret due to embarrassment, shame, or stigma, especially when mental illness is still considered an improper subject in Indonesia (Hartini *et al*., 2018b). Mental health problems often receive negative responses; thus, the social desirability bias (the desire to avoid embarrassment from the community) might lead to underreporting (Tourangeau and Yan, 2007).

In this study, respondents who reported ever experiencing any psychiatric disorder were also asked about their treatment experience. Medication was the most prevalent choice of treatment in this study. Not every mental health problem should receive any medications as a primary or first-line intervention (Zimmerman *et al*., 2018). The nature and severity level of mental health problems determine the need for medication, which has mostly been suggested to treat individuals with serious mental illness (Zimmerman *et al*., 2018). Although the severity of the LPD was unknown, resistance to use medication was associated with the attitude towards medication, such as the potential side effects, being dependent or experiencing withdrawal from the medication, long-term use of medication, and contemplating the efficacy profile (Asher *et al*., 2023). It could partly explain the LPD journey that those who do not receive treatment earn larger portions. Other than medication, psychotherapy is effective as an alternative or combination of modalities to reduce certain mental health disorder symptoms (Kerna NA *et al*., 2021). Psychotherapy received a good reception and is considered a popular psychiatric treatment modality (Angermeyer *et al*., 2017). There were also other options for managing mental health problems, ranging from informal approaches to formal approaches, such as self-care, community, and facility-based programs, including innovative digital interventions (Moitra *et al*., 2023). As a supplemen to modern medicine, traditional medicine was also found in Indonesian society, including traditional Chinese medicine that uses herbs, acupuncture, massage, and diet therapy (Subu *et al*., 2022).

Early detection of mental health problems can provide significant benefits to both patients and society. Preventing mental health issues and early intervention are

crucial to prevent disease advancement, hence reducing mortality and morbidity (Chanen and Thompson, 2018). Reminding us of the need to promote mental health awareness and screen mental status for better prevention and early intervention. Further research to reveal the barriers to increasing the treatment coverage in the community is needed. Some potential variables should be considered, such as attitude toward mental health treatment and mental health professionals in Indonesia; moreover, the decision towards help-seeking and receiving treatment was also important to be included. The mental health problems would be best included to identify the patients' perceptions in handling the mental health problems.

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Conclusions

This research shows that although cases of depression in Indonesia are still relatively high, most respondents do not undergo standard examinations or even seek professional help. The low rate of LPD raises concerns about many possibilities underlying the phenomenon, including the low detection rate. A range of accessible treatments should be available for patients in need of treatment. These findings warrant further research to improve mental health service coverage.

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