Pak. j. life soc. Sci. (2024), 22(2):15524-15536 E-ISSN: 2221-7630;P-ISSN: 1727-4915

Pakistan Journal of Life and Social Sciences
www.pjlss.edu.pk

https://doi.org/10.57239/PJLSS-2024-22.2.001126

RESEARCH ARTICLE

"Now and Then": The Systematic Literature Review on the Interventions and Treatment Setting for Major Depressive Disorder in Pakistan

Tania Qamar[1*], Dr. Nabisah Ibrahim[2], Nur Amirah Azrina Hamzah[3]

[1,2] School of Applied Psychology Social Work & Policy, University Utara Malaysia

[3]Doctoral Candidate, School of Economics, Finance and Banking (SEFB), Universiti Utara Malaysia

ARTICLE INFO

Received: Sep 16, 2024

Accepted: Nov 24, 2024

Keywords

Systematic Literature Review

Major Depressive Disorder

Treatments of Major Depressive Disorder

Treatment Setting

Pakistan

***Corresponding Author:**

taniaqamar56@gmail.com

ABSTRACT

Real-world evidence of the advancement of interventions and treatment settings for Major Depressive Disorder (MDD) is lacking. A systematic literature review on the treatments and treatment settings of MDD in Pakistan is essential for understanding the current landscape and identifying gaps in care for informed interventions. In this study, a systematic literature review was conducted to understand the interventions and treatment setting of MDD in Pakistan. A literature search was conducted in November 2023 in Scopus, Web of Science, Science Direct, PubMed, and Springer Nature, comprising studies published from 2017 to 2023. Bibliographies of all relevant empirical studies and relevant book chapters from 2017 to 2023 were searched. Extracted data included publications such as newspapers, blogs, websites, collections of books, individual books, and proceedings from conferences. Fifty-six studies and one book chapter were included for systematic review. A review of the book chapter revealed the main themes in the treatment of MDD in this study, such as (i) spiritual and religious treatment; (ii) herbal treatment; (iii) homeopathic treatment; (iv) psychiatric treatment; (v) self-help skills and physical activity treatment; and (vi) psychological and psychotherapeutic treatment. A review of empirical studies showed that there is a lack of clinical consensus regarding the treatment and treatment setting of MDD in clinical and therapeutic practice. To better understand the personal burden of affected patients and the need for mental health treatments, especially psychotherapies, to be standardized, a suitable framework is required.

INTRODUCTION

A neuropsychiatric disorder known as Major Depressive Disorder (MDD) impacts almost 300 million people globally. According to the World Health Organization, the symptoms of MDD also included problems with the nervous system, memory, cognition, motor skills, motivation, and emotional regulation (WHO, 2022). MDD occurs in over 20% of the global population (WHO, 2022) and 39.9% of the Pakistani population (Ullah et al., 2022). The most common symptoms of MDD, which can affect people of any age, include an inability to feel pleasure or continuous unhappiness, problems with social and psychological functioning, and changes in eating and sleeping patterns (Zhu et al., 2020). According to Dean and Keshavan (2017), patients with MDD are more likely to have chronic illnesses and are also more likely to discontinue their treatment, both of which have a negative effect on their medical health.

Due to the wide range of clinical symptoms and underlying causes, and the treatments of MDD is difficult to understand. In Pakistan, the treatment of MDD has been discussed since ancient times. The way people treat the symptoms of MDD is mostly based on how they perceive the symptoms of

depression (which, in the past, they didn't call MDD yet), but all of it is based on their ways of defining and perceiving the symptoms. However, in the past, people perceived and defined symptoms of MDD as histrionic symptoms or disturbance symptoms, such as depression or low mood symptoms; they perceived it as a lack of spiritual beliefs, e.g., a lack of '*Iman*'. People frequently believe that these issues are the result of supernatural forces, evil eyes, black magic, or even God's punishment because they are unaware of the biopsychosocial causes of mental illness. Developing nations, such as Pakistan, experience this more frequently (Waqas et al. 2015).

This perspective is in line with prior research on the best method of treatment. People had a strong belief that natural disasters and mental health issues such as MDD were punishments from God for people's sins (Akhlaq et al., 2022). A recent study by Safdar et al. (2023) found that the only way to overcome these challenges was through prayer, which includes prostration and recitation of Quranic verses. Rural cultures heavily depend on indigenous, supernatural, and religious treatments, as well as specific dietary regimens and tonics (Lauber & Rossler, 2007; Nisar et al., 2019). Therefore, all the perceptions and symptoms of MDD have influenced the way people treat the symptoms. Cultural practices and beliefs play an important role in defining the symptoms of MDD as well as providing treatment for the symptoms. The practices are not only important now; they have been applied since centuries ago.

Culturally based practices such as herbal treatment are becoming more popular as a form of complementary and alternative medicine around the world. Prior studies have shown that a large proportion of individuals in Pakistan choose herbal treatments as an alternative to Conventional Medicine (CM) when they are dissatisfied with it (Welz et al., 2018). Many individuals provided detailed accounts of their chronic illnesses, including feelings of disappointment, anger, and unsuccessful attempts at traditional therapy. Due to the lack of effectiveness in therapy, dissatisfaction with traditional doctors, and excessive occurrence of negative effects linked to CM, people preferred herbal medicines (Garg et al., 2023; Welz et al., 2018). Research findings indicated that a large portion of the Pakistanis who opted for homeopathy belonged to a lower socioeconomic class, specifically those earning less than 15,000 rupees per month.

Furthermore, respondents who sought homeopathic treatment as a result of societal or familial pressure also considered the financial burden (Shah et al., 2010). However, not knowing the risks associated with culturally based treatments and taking these treatments without professional guidance might be dangerous. Despite the continued efficacy of traditional treatments, the use of psychiatric and psychological consultations has been on the rise. However, still, many individuals do not seek psychiatric and psychological help. It has been shown that doctors often struggle to make the appropriate diagnosis of individuals with MDD in Pakistan (Ali et al., 2002; Ali et al., 2021). Some medical institutions have been described as creating environments conducive to discrimination due to their insufficient training and absence of psychiatry clinical rotations (Papish et al., 2013; Shah et al., 2014). There is a treatment gap since respondents to the survey reported inability to diagnose MDD and unawareness of treatment as the primary reasons why people with MDD do not seek psychiatric help (Nisar et al., 2019).

Thus, regular physical activity eases the pressure of daily tasks and maintains overall health. According to a recent study, people who struggle with emotional stability, mental illness symptoms, exercise noncompliance, or adverse drug effects like weight gain and exhaustion often seek relief in self-help techniques and physical activity (Afzal et al. 2019). Though an increase in self-esteem and a decrease in tension are both positively correlated with psychotherapy treatments (Ali et al., 2021), Despite all these traditional, cultural, and psychological treatments, over the past few decades, Pakistan has seen a dramatic rise in the prevalence of mental health problems, as mentioned above about MDD. Unfortunately, there is a serious dearth of mental health professionals in Pakistan. The assistance available to those in need is insufficient. Many problems continue to impact Pakistani society, including the high rate of gender-based violence against women, the devastating effects of natural disasters on poverty and families, and the frequency of violent crimes and terrorist attacks in major cities like Lahore and Karachi (Sohail et al. 2017).

Therefore, a complete framework of mental health services and psychotherapy is becoming more necessary, and there is a significant gap for innovations in this field. Until today, health care MDD treatment focused on finding out what was the most suitable treatment for MDD and what worked best, but did not focus on analysing the advancement of the treatment of MDD in Pakistan. In addition, previous studies were less focused on discussing the setting of MDD treatments. Generally, group therapy is a widely practiced treatment modality (Barlow, 2011; Yalom & Leszcz, 2020) with demonstrated effectiveness in treating numerous psychological disorders, such as MDD. Therefore, the main objectives of this paper are to evaluate the available interventions for MDD and also to find out the gaps in the treatment setting for MDD in Pakistan by conducting a systematic literature review. The research questions of this paper are: (i) what are the available interventions for MDD in Pakistan, and (ii) what are the gaps in the treatment settings for MDD in Pakistan?

MATERIALS AND METHODS

Aims of the review

This section aims to systematically review the treatments and treatment setting of major depressive disorder in Pakistan. This section lists the five main parts of this study: the Preferred Reporting Items for Systematic Reviews and Meta-Analyses Act (PRISMA). The resources that were used, the criteria for what to include, and what to leave out. The systematic review method, data collection, and data analysis.

Design

PRISMA, which stands for Preferred Reporting Items for Systematic Reviews and Meta-Analyses, is a term that describes a common technique for conducting these types of reviews. When writing a review, authors usually need access to certain standards that will help them evaluate the review's quality and scope. In addition, Moher et al. (2009) pointed out that PRISMA provides special attention to review reporting, which can be used as a basis for presenting systematic reviews in various fields of study. This is due to its ability to clearly describe research subjects and establish criteria for study inclusion and exclusion within the context of a systematic review. In addition, the PRISMA system analyses a large body of research material over a certain period of time (Moher et al. 2009). In this study, it facilitates the use of highly specific search phrases to examine the treatment protocols for those diagnosed with major depressive disorder. The PRISMA framework also makes it possible to collect structured information on future therapeutic interventions and evaluations of treatments.

Search strategy and data sources

Several databases were used for this paper: Scopus, Web of Science, PubMed, Springer, and Science Direct. These databases have been selected because they are widely recognized as reliable resources and cover an extensive scope of space in the field of psychology; in fact, they have more relevant papers available than the other databases. There are 416 academic journals in Scopus that are specifically related to psychology. There are 310 psychology-related journals in the Social Science Citation Index section of the Web of Science. On the other hand, Science Direct only indexes 28 journals that are specifically related to the field of psychology. According to Younger (2010), researchers can increase their chances of discovering relevant publications by searching a larger number of databases. Taylor Francis, ResearchGate, and Sage are well-known databases that compile publications in the field of psychology; they were manually searched for this study.

Table 1: Search strategy and database

Database	**SCOPUS**
Search String	TITLE-ABS-KEY ("Herbal* Homeopathic* AND Spiritual*" AND Treatment* AND of* AND major* AND "depressive* AND disorder*"; AND "Psychiatric* AND treatment* AND of* AND major* AND depressive* AND disorder* AND in* AND Pakistan*")

	TITLE-ABS-KEY ("Treatment* AND of* major* AND depressive* AND disorder* AND in* AND Pakistan*")

Identification

In this research, a systematic review approach was used, and it's based on three main factors to determine which papers were important. The first factor is the initial phase, and after an initial phase of identifying keywords, the next phase entails consulting resources such as dictionaries, encyclopaedias, and prior research to identify related and interchangeable phrases. After identifying all pertinent terms, search queries were constructed for the databases Scopus, Web of Science, PubMed, Springer, and Science Direct (see Table 1). The current review study used five databases and collected a total of 140 scientific papers and three books. A manual search of numerous databases using relevant keywords turned up four more papers. In the first phase of the systematic review procedure, 144 papers and 3 book chapters were found.

Eligibility criteria

The major goal of the initial screening was to find and remove duplicate items. In this case, three papers were excluded in the first step, and the remaining 141 were examined in the second stage using the researchers' established inclusion and exclusion criteria. The inclusion criteria were set according to the PICOS framework (Amir-Behghadami & Janati, 2020). In terms of the first criterion, the researchers decided to limit themselves solely to academic journal papers because they provide the most reliable empirical data. Thus, it showed that publications such as newspapers, blogs, websites, collections of books, individual books, and proceedings from conferences have been excluded from the present review. In this review, only publications that were originally published in English were considered. In addition, the selected time period covers a span of six years (2017–2023). Publications in the social sciences, the arts and humanities, and the pharmaceutical sciences were selected to maximize the possibility of finding articles that are relevant (see Table 2).

Table 2: Inclusion criteria and exclusion criteria for review

Criteria	Inclusion	Exclusion
Article Type	Article Journal, Book Chapter	Book Series, Proceeding, Review Article
Publication Year	2017-2023	Below 2017
Language	English	Other than English Language
Research Area	Psychiatric and Psychotherapy	Other All Scientific Areas
Population	Pakistan	All Other Countries

Data extraction

A total of 88 papers and two book chapters were removed because they didn't meet the eligibility criteria and standards (see Table 2). During the third phase of the study, which corresponds to the eligibility stage, a total of 84 articles and one book chapter were selected. For this final step, it was important to examine each article's and book chapter's titles, readability, abstracts, and primary contents to ensure they met the inclusion criteria and could be usefully applied to the current review and its goals. Twenty-eight scientific papers were excluded from the study because they did not provide empirical data and were not related to major depressive disorder.

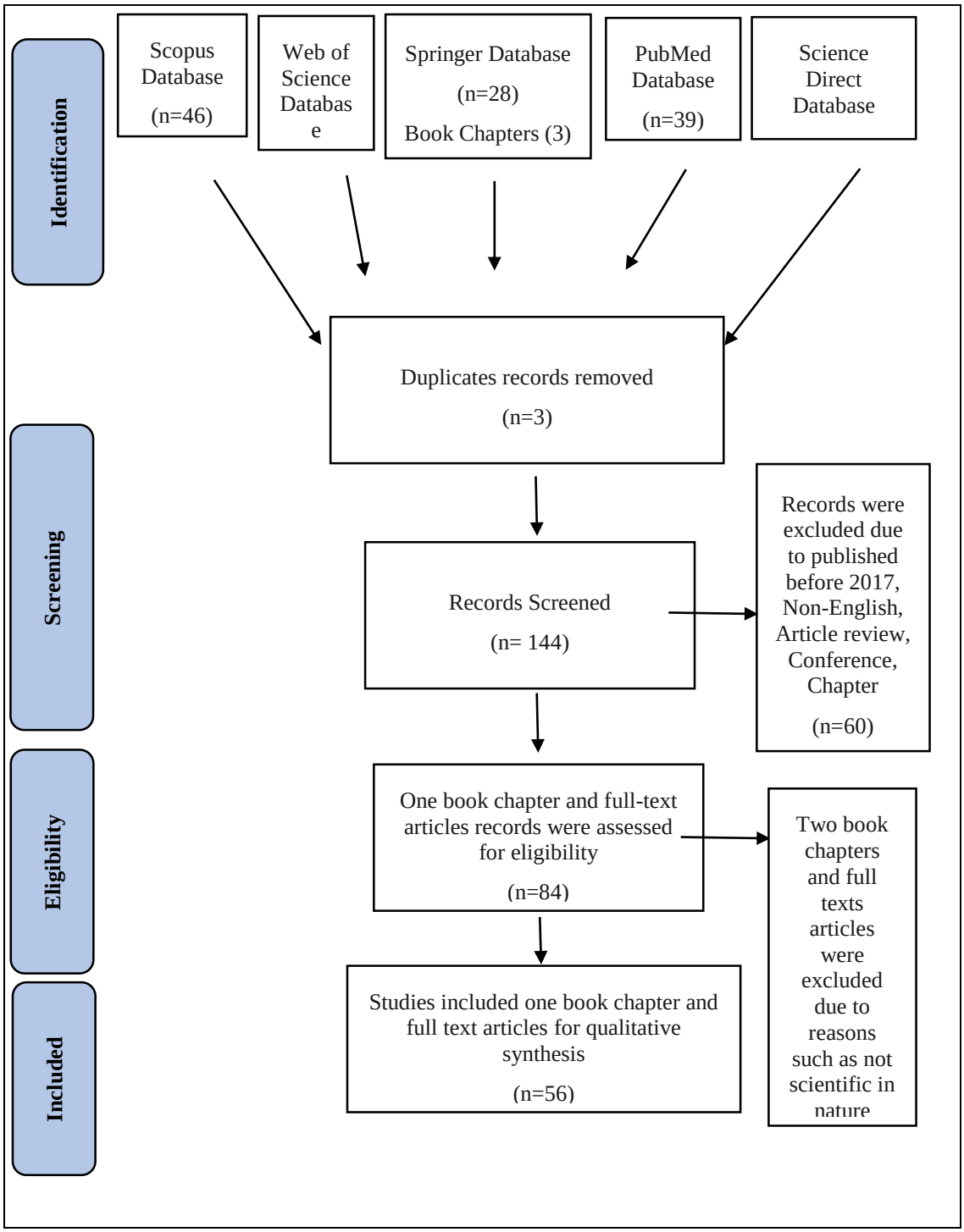

Figure 1: PRISMA process and flow chart

Quality appraisal

Figure 1 shows the PRISMA approach. Mendeley Reference Manager was originally developed to effectively delete duplicate research papers. It was expected that, due to the size of the database, duplicate results would arise frequently. According to Harris (2005), a database's degree of duplication is based on criteria such as the breadth and depth of its coverage, the journals it indexes, and the indexing terms it uses. There are three duplicates on the article list that were removed during the identification process. A total of 144 articles and three book chapters were approved in the identification process and proceeded on to the next round of screening. Articles were then filtered further based on their category, publication year, and language of publication. Following this preliminary review, 130 papers were selected for further examination. Abstract and content reviews are part of the comprehensive validation procedure currently being applied to the 84 papers and

three book chapters. Since it became clear that the first group of 28 papers and two book chapters did not have enough information to answer the research question, a second set of 56 papers and one book chapter were selected for inclusion and theoretical analysis.

Data analysis and synthesis

This research used a comprehensive review strategy, which synthesized and analysed results from several study designs (qualitative, quantitative, and mixed methods). This approach allows for the transformation of one sort of data into another, whether it be quantitative or qualitative in nature. Procedures were developed based on the results of the thematic analysis, which allowed for the identification of major themes, subthemes, and secondary themes. The initial step in the process of developing a topic was to collect relevant information. During this stage, researchers read and analysed 56 selected articles and one book chapter with the aim of identifying key points or themes. The next phase involved the researchers using a coding strategy to categorize the data into meaningful categories. In the second step, themes, concepts, or ideas are found to make the dataset more coherent and linked. This turns raw data into information that can be used (Patton, 2002; Sandelowski, 1995).

There were different themes that emerged from this method about the gaps in the treatment and treatment setting of major depressive disorder (see Fig. 2). After formulating major themes, the authors systematically repeated the preceding process for each topic, generating subthemes that developed from all related concepts or ideas. The lead author worked with other co-authors to develop theme categories that would help to consistently structure the observed data within the limitations of this study. All interpretations, analyses, and ideas were recorded as they were developed throughout the data analysis process. The authors compared their findings and had in-depth discussions to sort out any discrepancies between the many discovered themes in an effort to smooth over any discrepancies that may have developed during the topic-generation process.

RESULTS

The study data was imported from Mendeley Reference Manager (for systematic review) and then evaluated in three stages to obtain the final themes and concepts. According to Silver and Lewins (2014), a dynamic and emergent approach to qualitative research is still acceptable rather than a linear approach to task construction. Within the treatment, this chapter explained the findings in two ways: (i) systematic review of the book chapter and (ii) systematic review of the journal's articles. These reviews revealed the findings of the available treatments and treatment setting of major depressive disorder in Pakistan.

Systematic review of book chapter

As mentioned in Figure. 2, the findings of a comprehensive review of a book chapter showed different evolutions in the treatment of major depressive disorder in this study, such as (i) spiritual and religious treatment, (ii) herbal treatment, (iii) homeopathy treatment, (iv) psychiatric treatment, (v) self-help skills and physical activity treatment, and (vi) psychological and psychotherapeutic treatment. In Pakistan, in the past seven decades, there has been an evolution in how we approach mental health. The elimination of asylums, the distribution of mental health services into local neighbourhoods, and the expansion of talk therapy are only some of the many recent advances in the field of mental health treatment and intervention. The country's religious, mythical, or supernatural beliefs have a significant impact on the treatment of mental illness in Pakistan (Sohail et al., 2017). In this article, the evolutions of different treatments for mental health issues were explained, particularly for major depressive disorder (see Figure. 2).

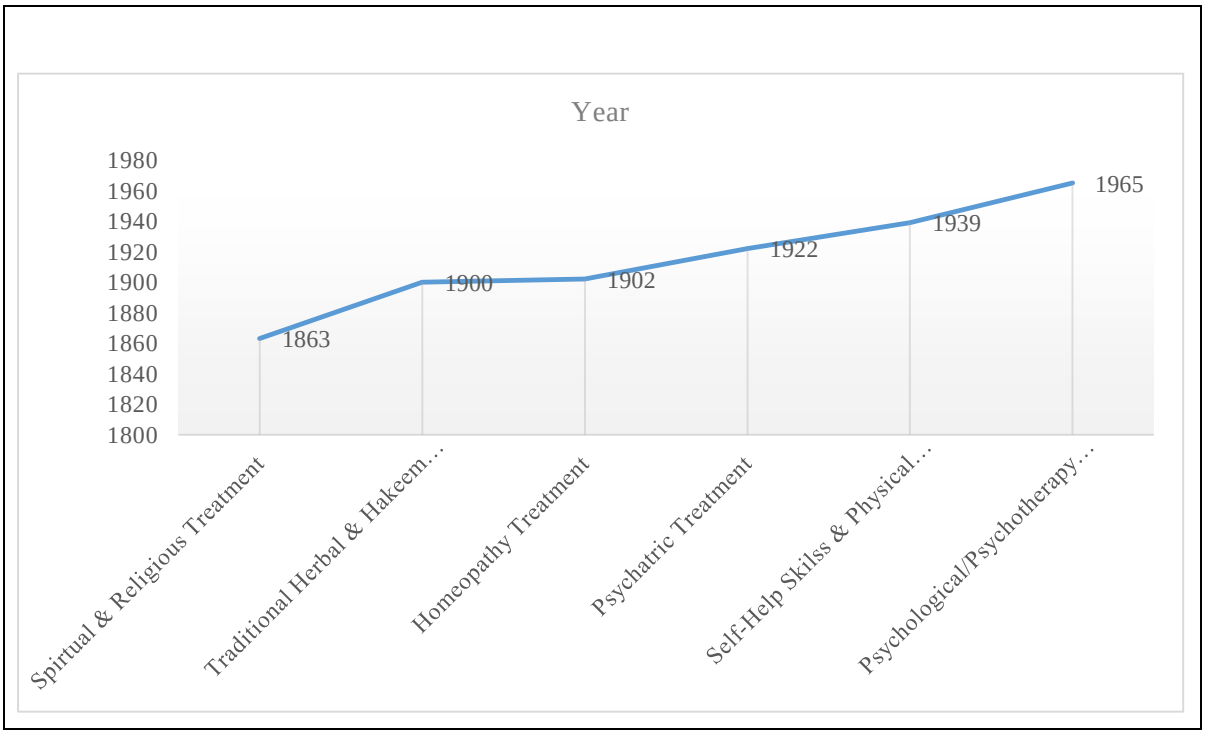

Figure 2: Available treatments of major depressive disorder in Pakistan

The review of the book chapter in Figure 2 explains how the treatments were developed and evaluated over a specific time period (1863–1965). This is about alternative treatments, such as herbal, spiritual or homeopathy are considered as treatment reported outcome. This important issue or concern is discussed here in light of complete historical background. Initially, in 1983, people experienced symptoms of depression in Pakistan, and they treated it with spiritual and religious treatments by having strong religious beliefs. After that, in 1900, people used traditional herbal treatments to treat their symptoms of depression. After two years, in 1902, homeopathy treatment was introduced in Pakistan, and people went for homeopathic medicines to treat their depression. During this homeopathic time period, many individuals in Pakistan grow herbs and plants in their houses and use them as herbal and homeopathic remedies for their depression. For the first time in 1922, psychiatric treatment was introduced, but people had little awareness and insight; therefore, only those who had severe psychological issues sought psychiatric medicines.

In 1939, self-help skills and physical activities such as meditation and exercises were introduced for the treatment of symptoms of depression. Most people use this treatment approach to overcome their symptoms of depression, and they feel better. With the passage of time, the prevalence of depression increased, and then in 1965, psychological and psychotherapy treatments were introduced in Pakistan. Due to different biopsychosocial and socioeconomic factors, few people seek psychological help for their depression. The need for legal psychiatric and psychological help is increasing constantly. Fig. 2 basically shows the evolution and development of treatments for major depressive disorder in Pakistan from 1863 to 1965. Prior studies have found that the average Pakistani population has very basic and limited knowledge of the mind and emotions (Sohail et al. 2017). Thanvi's approach to treating mental illnesses involves helping patients develop a strong spiritual foundation (Ahsen, 1977, 1986, 1987, 2005, 2010; Hochman, 1995) so that they can better cope with their symptoms. Anecdotal evidence suggests that the rising costs of Western medicine and hospitals have led more people to seek out traditional healers (Sohail et al. 2017). For example, Thanvi's method is in line with Cognitive Behavioural Therapy (CBT), which is a common treatment today. Though, practitioners in Pakistan are still practicing all these treatments to treat the symptoms of major depressive disorder.

In light of the limited availability of healthcare resources, it is important to optimize the accessibility of therapy within an acceptable period of time. As well as the previous literature about the evolutions

in the treatment of MDD, the recent literature also has various treatment approaches for the treatment of MDD (Soares et al., 2021; Vos et al., 2022). Recent studies revealed that the patients who recovered from spiritual and religious treatment believed that mental illness was a punishment from God for sinful humanity, which was unavoidable. Amidst such a belief, the studied patients tried to avoid hospitalization but prayed to God and sought help in their recovery (Akram et al., 2023). Faith in God was viewed as a source of healing, contentment, ease, help, and a sense of hope. With respect to a source of healing, contentment, and ease, religion or spirituality guided women to be happy with God's will (Charania & Hagerty, 2017). Saffron and chamomile have been used discretely as herbal medicine since ancient times, and this study has shown that the co-administration of both herbs in adjuvant therapy led to better management of depression (Ahmad et al., 2022). The use of homeopathic medicine as an element of complementary and alternative medicine is also increasing (Raza et al., 2020).

Systematic review of journal articles

Table 3: Systematic Review of Journal's Articles of MDD Related to Empirical Studies in Pakistan

Author (s)	Year	Research Objective	Study Design	Treatment	Treatment Setting
Masud	2019	Evaluation of psychotherapy practices in Pakistan	Qualitative Research	Psychotherapy	Individual
Khan	2021	Efficacy of herbal medicine in the management of depression	Experimental Study	Herbal Medicine	Group Setting
Khan et al.	2022	Vitamin D and it's correlation with depression	Survey Method	Vitamin D	Individual
Raza et al.	2020	Treatment of depression by homeopathy medicine	Computerized Comprehensive Research	Homeopathy	Individual
Safdar et al.	2023	The role of religious and spirituality to cope with depression	Exploratory Qualitative Study	Spiritual and Religious	Individual
Ahmad et al.	2022	Efficacy of chamomile and saffron in depressive patients	Randomized Clinical Trial	Chamomile and Saffron	Group Setting
Dawood et al.	2023	Effectiveness of behavioural activation therapy for Muslims patients with depression	Randomized Clinical Trial	Behavioural Activation Therapy	Group Setting
Faisal	2023	Efficacy of therapist guided intervention based cognitive behaviour therapy for depression	Qualitative Research	Cognitive Behaviour Therapy	Individual
Waqas et al.	2023	Optimizing behavioural and cognitive approaches for potential depression	Quantitative Research	Cognitive Behaviour Therapy	Individual
Charania	2017	The pervasive role of religion/spirituality in the depression of Pakistani women	Qualitative Research	Spiritual and Religious	Individual

Table 3 presents a review of some recent empirical studies regarding the different types of treatments and treatment settings for major depressive disorder. Empirical studies showed that brief psychotherapy alone can relieve depressive symptoms (Masud, 2019). Combination therapy has also been associated with significantly higher rates of improvement in depressive symptoms, increased quality of life, and better treatment compliance (Waqas et al., 2023). Findings show that people who struggle with emotional stability and mental illness symptoms often seek relief through self-help techniques and physical activity. In addition, results revealed that psychotherapy is a practice used to provide personality change and symptom relief to the client, help reduce symptomatic episodes,

improve adaptive functioning in various areas, improve life quality, increase the ability to make healthy life choices, and bring about an adequate behavioural change (Faisal, 2023). There is a range of available treatments that can be tailored to the needs of patients in a group setting. Literature describes that techniques intended for individual therapy are acceptable and practical in a group environment and may be a means to advance the area of group therapies focused on major depressive disorder (Chalker et al., 2022).

Recent studies have found group psychotherapy to be significantly more effective than individual psychotherapy at improving subject outcome ratings (Mashinter et al., 2020; Hagerty, 2022). There are very few studies on group therapy-based treatment for major depressive disorder in Pakistan (Shahid et al., 2022; Saraf et al., 2019). The large improvements cannot be explained only by a drastically improved mood, which may have been influenced based on objective data such as employment and living situation, which also improved markedly (Gul et al., 2022; Saleem et al., 2021). Thus, the findings of the literature highlighted the need to develop a substantial and clinically relevant group therapy intervention. Despite the fact that this is very encouraging, one must consider that there is limited group psychotherapy treatment for major depressive disorder in Pakistan.

DISCUSSION AND CONCLUSION

The main objective of this review was to answer the following research questions: (i) What are the evolutions in the interventions for Major Depressive Disorder (MDD) in Pakistan, and (ii) What are the treatment gaps in line with treatment settings in Pakistan? In order to address this inquiry, it is recommended to draw upon the findings of the literature study that highlighted the importance of addressing MDD. This comprehensive review conducted a thorough examination of the existing literature, identifying a total of 56 data points and one book chapter pertaining to the treatment of MDD. However, the literature supported the results of the review of the book chapter about the evolutions in the treatment of MDD. History reports that when the war of 1857 ended, spiritual and religious treatments were established for mental health issues, particularly depression. The Muslim community's religious and spiritual leaders (*ulema and mahaaeikh*) discuss issues related to mental health. After observing the suffering of people with mental illnesses, Muslim spiritual leaders established the necessary facilities. Ashraf Ali Thanvi (1863–1943), a renowned Islamic scholar, created one of the finest examples with his Khanqah Imdadia book. According to Thanvi's normative perspective, deviation from Quranic moral standards is pathological (Sohail et al., 2017). When people are broken, a gap opens up between the Creator (God) and the creature; this is where all pain comes from.

The spiritual counsellors (*murshid*) only referred the patient to reliable resources for information and guidance when they felt the patient had a serious issue. Karim et al. (2004) also explored the ideas of spiritual healing and healers during this time. According to the Karim et al. (2004) study, many people with mental health issues usually seek therapy from religious practitioners. They pray for the patient's health but do not take any other action on his behalf. Historically, the system has been linked to things like witchcraft, the evil eye, and the lusts of nosy neighbours. Traditionally, people have sought relief or healing by performing prayers or wearing religious magical words (t*alismans*). Magic, enlightenment, and religious faith are used to cure patients. After spiritual treatment, around 1900, a traditional herbal (*Hakim*) treatment was developed for mental health issues such as depression. The Pakistan Medical Council has officially recognized and registered alternative medical practitioners like herbal practitioners (*Hakims*) as well as people who follow Greek or Ayurvedic medical practices. In 1902, homeopathic treatment was established for depression. Alternative healers, including homeopaths, use homeopathic medicines for the treatment of depression. The approach, also referred to as moral treatment, includes a combination of assertiveness and politeness that is widely practiced in European contexts. In addition, the first and largest hospital in Lahore, the Punjab Institute of Mental Health (mental hospital), was built that same year, in 1902. But proper psychiatric treatment was established in 1922 for mental health issues. The standard of care and management was poor. Lt. Col. C.J. Lodge Patch was appointed as the first medical superintendent of the Lahore Mental Hospital in 1922.

According to Patch (1939), his first experience in the hospital was distressing. The patients were naked and handcuffed. They were confined and segregated for unknown reasons. They would tremble and crawl on their knees to touch the superintendent's feet in order to avoid punishment. However, the superintendent noted that physical labour was the most common form of treatment for patients. According to the 1939 annual report, women's main duties included crushing corn, and men's main duties included labour work in gardens. After this traditional time period, modern facilities and psychiatric treatment were introduced. Concerning modern facilities, two psychiatric units were made in two of the biggest government hospitals. In 1967, the Government Mayo Hospital in Lahore and the Jinnah Postgraduate Medical Centre in Karachi opened psychiatric units. Then, in modern therapeutic terms, Dr. Azhar Rizvi (1936–2008) interpreted Thanvi's major concepts (Umar & Tufail, 1999; Rizvi & Tufail, 2012). A little change was observed throughout the initial two decades of Pakistan's establishment. By combining some of the traditional influences already mentioned, unlicensed practitioners continued to provide the majority of mental health care. Literature also supported the findings of the comprehensive review of empirical studies about the treatment evolutions, gaps, and treatment settings of MDD. Both pharmacological and psychotherapeutic approaches have been shown to be effective in treating MDD.

According to Melinda et al. (2020), Tricyclic Antidepressants (TCAs) like amitriptyline, desipramine, imipramine, and nortriptyline, as well as the most common antidepressants like citalopram, fluvoxamine, fluoxetine, sertraline, and paroxetine, are good ways to treat MDD with drugs. Though non-pharmaceutical treatments included lifestyle changes like diet and exercise, psychological interventions like Cognitive Behavioural Therapy (CBT) and Interpersonal Therapy (IPT) (Fasipe, 2018) were also used to treat MDD. It is critical for decision-makers to select the most effective option from the available treatments and increase access to care. Despite the availability of several treatments, the rate of people suffering from MDD remains high. Mekonen et al. (2021) found that 48.3% of people in high-income countries seek help, but just 16.8% of people in low-income countries do the same. There is little evidence that antidepressants help in primary MDD, and it's unclear how they'll perform in treatment- and maintenance-phase studies. The significant correlation of antidepressant effects shows that the existing technique for treating MDD may not provide enough further insight into patients' well-being (Wiesinger et al., 2023), also highlighting the need for innovative group therapy-based treatments for MDD. However, the literature highlighted all the discrepancies in the treatment setting for MDD.

Major Depressive Disorder (MDD) patients' rates of seeking out mental health care from specialists were significantly low. It is important to broaden access to therapy for individuals with MDD in light of the evidence discussed in this article and other relevant sources. When looking for explanations for the reported gaps in treatment evolution for MDD, systematic reviews sometimes overlook potential causes of variability in coverage at the study level. There is still a need for in-depth investigation to fully understand what factors in treatment are responsible for facilitating "access." Besides inpatient care, outpatient care, and institutional care, institutions for the treatment of mental illness in Pakistan often have a high patient population and insufficient funding to treat multiple serious illnesses at once. However, simply having access for physical or medical issues is insufficient. Despite the availability of statistics, it is still difficult and unclear how far patients will go in terms of care after they start treatment. Therefore, it is important to consider issues beyond the general availability of services, such as behavioural or contextual factors that influence treatment adherence and engagement. Due to these limitations, the findings of this study couldn't be generalized to other contexts. However, these results should be interpreted with caution because of the large uncertainty limitations in the estimates for Pakistan. This work provides a systematic foundation for analysing future data on this topic. Studies can be enhanced by using modelling and module approaches that better capture data variability and address variable bias at the study level.

The present systematic review was able to identify some methodological difficulties and gaps in the existing literature, both of which need to be taken into account when planning future mental health surveys. The results of this study may be helpful in predicting how major depressive disorder may affect future studies under a variety of treatment coverage scenarios. Pakistani governments have neglected mental health, although research, policy, legal frameworks, and services have made

progress. Due to developmental gaps, only a small number of Pakistanis can obtain healthcare. Researchers and policymakers need to improve healthcare in disaster- and conflict-affected regions, strengthen health systems, ensure equitable and high-quality medical interventions, and establish sustainable finance mechanisms. According to this systematic review, Major Depressive Disorder (MDD) treatment coverage and group therapy-based treatment settings are limited in Pakistan. The increased treatment rates for medical, health, and general health care indicated their importance in treating MDD. This is especially important in Pakistan, where expert mental health services are limited, particularly for those with limited financial resources. People who choose to follow religious or spiritual healing beliefs instead of medical advice or guidelines to lower health risks have specific reasons and sociopsychological motivations that need further research in the social science area.

This systematic review concluded that government agencies and policymakers must reevaluate the availability of suitable interventions and support systems for MDD to reduce its major negative impact both in clinical and social areas. The needs of vulnerable groups, such as women, children, and refugees, must be given first priority. To facilitate mental health rehabilitation, it is important for future studies to explore alternate approaches within the healthcare system that effectively utilize familial and communal resources. However, mental health professionals, researchers, policymakers, and the global community need to work harder to ensure that many psychological patients can receive effective treatment. The researchers in this study came to the conclusion that mental health professionals have to develop standardized guidelines for the treatment of MDD in their practices. For mental health treatments, especially psychotherapies, to be standardized, a suitable framework is required.

REFERENCES

Amir-Behghadami, M., & Janati, A. (2020). Population, Intervention, Comparison, Outcomes and Study (PICOS) design as a framework to formulate eligibility criteria in systematic reviews. *Emergency medicine journal: EMJ*, *37*(6), 387. https://doi.org/10.1136/emermed-2020-209567

Akram, U., Irvine, K., Gardani, M., Allen, S., Akram, A., & Stevenson, J. C. (2023). Prevalence of anxiety, depression, mania, insomnia, stress, suicidal ideation, psychotic experiences, & loneliness in UK university students. *Scientific Data*, *10*(1). https://doi.org/10.1038/s41597-023-02520-5

Afzal, I., Shinwari, Z. K., Sikandar, S., & Shahzad, S. (2019). Plant beneficial endophytic bacteria: Mechanisms, diversity, host range and genetic determinants. *Microbiological research*, *221*, 36–49. https://doi.org/10.1016/j.micres.2019.02.001

Akhlaq, A., Safdar, M. R., & Sher, F. (2022). Religion, indigenous medicine and diet: A culturally driven approach to fight against COVID-19 in Pakistan. *Multicultural Education*, 8(1), 235. https:// doi. org/10.5281/zenodo.59400 98

Ali, B. S., Rahbar, M. H., Naeem, S., Tareen, A. L., Gul, A., & Samad, L. (2002). Prevalence of and factors associated with anxiety and depression among women in a lower middle class semi-urban community of Karachi, Pakistan. *Journal of Pakistan medical association*, *52*(11), 513.

Ali AA, Sheikh N, Chughani V, Hussain A, Rafi que M, et al. (2021) Comparison of Effectiveness of Isometric and Stretching Exercise in Pain Management among the Forward Head Posture Patients. *Indian Journal of Physiotherapy & Occupational Therapy*. https://bit.ly/3luuOZD

Ahmad, M., Ahmed, I., & Jeon, G. (2022). A sustainable advanced artificial intelligence-based framework for analysis of COVID-19 spread. *Environment, Development and Sustainability*. https://doi.org/10.1007/s10668-022-02584-0

Ahsen, A. (1977). *Psycheye: Self-analytic consciousness*. New York: Brandon House.

Ahsen, A. (1986). *The new structuralism*. New York: Brandon House.

Ahsen, A. (1987). *Image psychology and the empirical method*. New York: Brandon House.

Ahsen, A. (2005). *Memory image: A postmodern experiment on recall*. New York: Brand on House.

Ahsen, A. (2010). Eidetics: An overview. *Journal of Mental Imagery*, 34(1 & 2), 11–42.

Ahmed, R. A., Angel, C., Martell, R., Pyne, D., & Keenan, L. (2017). The impact of homelessness and incarceration on women's health. *Journal of Correctional Health Care*, 22, 62–7

Barlow, D. H., Farchione, T. J., Fairholme, C. P., Ellard, K. K., Boisseau, C. L., Allen, L. B., & Ehrenreich-May, J. (2011). *Unified protocol for transdiagnostic treatment of emotional disorders: Therapist guide.* Oxford University Press.

Charania, N. A. M. A., & Hagerty, B. M. (2016). The pervasive role of religion/spirituality in Pakistani women's self-management of recurrent depression. *Sigma.nursingrepository.org*. http://hdl.handle.net/10755/616167

Dean J., Keshavan M. (2017). The neurobiology of depression: an integrative view. Asian J. Psychiatr. 27, 101–111. 10.1016/j.ajp.2017.01.025

Fasipe, OlumuyiwaJohn. (2018). "Neuropharmacological Classification of Antidepressant Agents Based on Their Mechanisms of Action." *Archives of Medicine and Health Sciences* 6 (1): 81. https://doi.org/10.4103/amhs.amhs_7_18.

Faisal, K.., & Masood, A. (2022). Efficacy of Therapist Guided Internet Based Cognitive Behavioural Therapy for Depression: A Qualitative Exploration of Therapists and Clients Experiences. *Journal of Professional & Applied Psychology*, *3*(4), 453–468. https://doi.org/10.52053/jpap.v3i4.130

Garg, A., & Jaiswal, A. (2023). Evaluation and Management of Premature Rupture of Membranes: A Review Article. *Cureus*, *15*(3), e36615. https://doi.org/10.7759/cureus.36615

Harris M. R. (2005). The librarian's roles in the systematic review process: a case study. *Journal of the Medical Library Association: JMLA*, *93*(1), 81–87.

Lauber, C., & Rössler, W. (2007). Stigma towards people with mental illness in developing countries in Asia. *International review of psychiatry (Abingdon, England)*, *19*(2), 157–178. https://doi.org/10.1080/09540260701278903

Mekonen, Tesfa, Gary C. K. Chan, Jason P. Connor, Leanne Hides, and Janni Leung. (2021). "Estimating the Global Treatment Rates for Depression: A Systematic Review and Meta-Analysis." *Journal of Affective Disorders* 295 (December): 1234–42. https://doi.org/10.1016/j.jad.2021.09.038.

Melinda, Anna & Wardhani, Ratna. (2020). The Effect of Environmental, Social, Governance, and Controversies on Firms' Value: *Evidence from Asia*. 10.1108/S1571-038620200000027011.

Masud, S. (2019). Evaluation of psychotherapy practice in pakistan—a qualitative exploration. *J Res Rev Soc Sci Pakistan*, *2*(1), 290-302.

Moher, D., Liberati, A., Tetzlaff, J., Altman, D. G., & PRISMA Group (2009). Preferred reporting items for systematic reviews and meta-analyses: the PRISMA statement. *PLoS medicine*, *6*(7), e1000097. https://doi.org/10.1371/journal.pmed.1000097

Nisar, M., Mohammad, R. M., Fatima, S., Shaikh, P. R., & Rehman, M. (2019). Perceptions Pertaining to Clinical Depression in Karachi, Pakistan. *Cureus*, *11*(7), e5094. https://doi.org/10.7759/cureus.5094

Patton, Michael Quinn. (2002). *Qualitative Research and Evaluation Methods*. 3rd ed. Thousand Oaks, Calif.: Sage Publications.

Patch, L. C. J. (1939). A century of psychiatry in the Punjab. *British Journal of Psychiatry*, 85,381–391

Papish, A., Kassam, A., Modgill, G., Vaz, G., Zanussi, L., & Patten, S. (2013). Reducing the stigma of mental illness in undergraduate medical education: a randomized controlled trial. *BMC Medical Education*, *13*(1). https://doi.org/10.1186/1472-6920-13-141

Rizvi, A. A., & Tufail, A. (2012). *Muslim Nafsiat: Chand Bunyadi Mabahis (Urdu). Lahore:* Idara Saqafat-E-Islamia.

Raza, A., Ali, S., Qureshi, M. Z., Saleem, I., Raza, A., Rasheed, S., Ashraf, M., & Yasmeen, F. (2020). Treatment of Depression, Anxiety, and sleep disorders by Homeopathic Medicines: A Systematic Review. *International Journal of Homeopathy Complementary and Alternative Medicine*. https://vereniginghomeopathie.nl/wp-content/uploads/2023/02/Raza2020.pd

Sandelowski, Margarete. (1995). "Sample Size in Qualitative Research." *Research in Nursing & Health* 18 (2): 179–83. https://doi.org/10.1002/nur.4770180211.

Safdar, M. R., Akram, M., Ahmad, A., & Ayaz, A. A. (2023). The Role of Religion and Spirituality to Cope with COVID-19 Infections Among People of Lower Socioeconomic Status in Pakistan: An Exploratory Qualitative Study. *Journal of Religion and Health*. https://doi.org/10.1007/s10943-023-01781-z

Sohail, S. A., Syed, A. A., & Rahman, A. (2017). Mental Health in Pakistan: Yesterday, Today and Tomorrow. *In Mental Health in Asia and the Pacific* (pp. 17-37). Springer, Boston, MA

Silver, C., & Lewins, A. (2014). *Using Software in Qualitative Research: A Step-by-Step Guide*. https://doi.org/10.4135/9781473906907

Soares, Bernardo, Gabriela Kanevsky, Chei Tung Teng, Rodrigo Pérez-Esparza, Gerardo Garcia Bonetto, Acioly L. T. Lacerda, Erasmo Saucedo Uribe, et al. (2021). "Prevalence and Impact of Treatment-Resistant Depression in Latin America: A Prospective, Observational Study." *Psychiatric Quarterly* 92 (4): 1797–1815. https://doi.org/10.1007/s11126-021-09930-x.

Shah, S. F., Mubeen, S. M., & Mansoor, S. (2010). Concepts of homeopathy among general population in Karachi, Pakistan. *JPMA. The Journal of the Pakistan Medical Association*, *60*(8), 667–670.

Shah, S., Van den Bergh, R., Van Bellinghen, B., Severy, N., Sadiq, S., Afridi, S. A., ... & Zachariah, R. (2014). Offering mental health services in a conflict affected region of Pakistan: who comes, and why? *PLoS One*, *9*(6), e97939.

Umar, N., & Tufail, A. (1999). *Muslim Nafsiat Kay Khad-O-Khal (Urdu).* Lahore: Urdu Science Board.

Ullah, I., Ali, S., Ashraf, F., Hakim, Y., Ali, I., Ullah, A. R., Chattu, V. K., & Pakpour, A. H. (2022). Prevalence of depression and anxiety among general population in Pakistan during COVID-19 lockdown: An online-survey. *Current Psychology*. https://doi.org/10.1007/s12144-022-02815-7

Vos, Theo, Stephen S. Lim, Cristiana Abbafati, Kaja M. Abbas, Mohammad Abbasi, Mitra Abbasifard, Mohsen Abbasi-Kangevari, et al. (2020). "Global Burden of 369 Diseases and Injuries in 204 Countries and Territories, 1990–2019: A Systematic Analysis for the Global Burden of Disease Study 2019." *The Lancet* 396 (10258): 1204–22. https://doi.org/10.1016/S0140-6736(20)30925-9.

Waqas, A., Raza, N., Lodhi, H. W., Muhammad, Z., Jamal, M., & Rehman, A. (2015). Psychosocial factors of antenatal anxiety and depression in Pakistan: is social support a mediator? *PloS one*, *10*(1), e0116510. https://doi.org/10.1371/journal.pone.0116510

Wiesinger, Teresa, Stefanie Kremer, Tom Bschor, and Christopher Baethge. (2023). "Antidepressants and Quality of Life in Patients with Major Depressive Disorder – Systematic Review and Meta-Analysis of Double-Blind, Placebo-Controlled RCTs." *Acta Psychiatrica Scandinavica*, March. https://doi.org/10.1111/acps.13541.

World Health Organization. (2022). *Depression and other common mental disorders: global health estimates* (No. WHO/MSD/MER/2022.2). World Health Organization.

Welz, A. N., Emberger-Klein, A., & Menrad, K. (2018). Why people use herbal medicine: insights from a focus-group study in Germany. *BMC complementary and alternative medicine*, *18*(1), 92. https://doi.org/10.1186/s12906-018-2160-6.

Waqas, A., Zafar, S. W., Akhtar, P., Naveed, S., & Rahman, A. (2023). Optimizing cognitive and behavioral approaches for perinatal depression: A systematic review and meta-regression analysis. *Global mental health (Cambridge, England)*, *10*, e22. https://doi.org/10.1017/gmh.2023.8

Younger, Paula. (2010). "Using Google Scholar to Conduct a Literature Search." *Nursing Standard* 24 (45): 40–46. https://doi.org/10.7748/ns2010.07.24.45.40.c7906.

Yalom, I., & Leszcz, M. (2020). *The theory and practice of group psychotherapy* (6th ed.). Hachette Book Group.

Zhu, J., Sun, L., Zhang, L., Wang, H., Fan, A., Yang, B., Li, W., & Xiao, S. (2020). Prevalence and Influencing Factors of Anxiety and Depression Symptoms in the First-Line Medical Staff Fighting Against COVID-19 in Gansu. *Frontiers in psychiatry*, *11*, 386. https://doi.org/10.3389/fpsyt.2020.00386