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# Depression in the UAE: A Systematic Review on Cultural Influences, Challenges, and Advancements in Mental Health Interventions

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#### Abstract

Depression is one of the significant issues that is increasing rapidly in prevalence globally, as well as in the United Arab Emirates (UAE). To address the shortage of studies conducted in the Arab world, and particularly in the UAE, the present investigation aims to review the prevalence of depression, specifically in the UAE, emphasizing the cultural stigmas, family dynamics, and environmental demands that impact the population, from citizens to expatriates. Google Scholar, PsychArticles, Scopus, Embase, Scite, and PubMed were used to access and identify literature reporting relevant findings in the context of the UAE. Articles indexed in Scopus Q1 or Q2, dated from 2011 to 2024, were selected. Thematic analysis was used to identify themes based on the challenges and developments from the UAE's cultural perspective. Findings were classified as mental health beliefs, key determinants of mental health, and treatments. It sheds light on the religious and socioeconomic influences and their impact on treatment roadblocks and mental health beliefs. It also outlines the UAE's latest legislative and public health developments, pointing out the country's determination to enhance mental healthcare access and reduce stigma surrounding mental health disorders. The findings signify the necessity for culturally adapted mental health interventions.

**Keywords:** Cultural sensitivity, cultural stigma, depression, mental health intervention, mental health policy, mental health, socio-economic influence, UAE.

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**Transparency:** The authors confirm that the manuscript is an honest, accurate, and transparent account of the study; that no vital features of the study have been omitted; and that any discrepancies from the study as planned have been explained. This study followed all ethical practices during writing.

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## 1. Introduction

"I billion people globally are estimated to be living with a mental disorder, and among this one billion, 5% of adults have depression, making it a leading cause of disability, and a major contributor to the overall global burden of disease".

— The Lancet Commission Editorial [1].

Sociocultural barriers that deny people with mental illness their basic human rights to privacy and informed consent have historically been the focus of research on mental illness stigma in the Arab world [2]. Our response to a mental health issue is influenced by how we characterize and interpret it. According to some, depression is a serious worldwide public health emergency [1, 3]. According to projections, mental health will account for the largest global disease burden by 2030 and will be a major contributor to preventable suffering and early death [1, 3, 4]. The case for increasing the detection and treatment of depression as a public health and development issue has also been made using estimates of the worldwide burden of depression in terms of disability, quality of life, and economic effects [4].

To combat depression, the World Health Organization (WHO) and the Movement for Global Mental Health have created several standardized international intervention guidelines and health packages. To reduce the treatment gap, this knowledge could enhance care and therapy for depression as well as other mental, neurological, and substance abuse issues [5]. The percentage of individuals who meet the diagnostic criteria for a particular condition but do not receive treatment is known as the treatment gap [5]. One of the core principles of global mental health (GMH) is that mental disorders are widespread and that mental health treatments are limited globally [4, 5].

There have been recommendations to increase mental health services globally as a top priority in the field of global mental health due to the estimated high level of unmet care needs [4, 5], particularly to address mental health issues in the UAE. The field's primary goal, according to *The Lancet* GMH series from 2007 and 2011 [5, 6], to increase the use of evidence-based care and reduce the treatment gap for mental disorders, which are among the most prevalent conditions, including common mental disorders such as somatoform disorders, depression, and anxiety, it is essential to refer to important WHO publications that prioritize reducing the treatment gap and increasing access to mental health care. Additionally, the creation of several Mental Health Gap Action Programs supports these efforts [7]. More than 100 countries are now implementing the initiative [7, 8]. The most prevalent mental disorders can be identified, diagnosed, and managed using evidence-based tools and guidelines, such as the WHO's mhGAP-Intervention Guide (mhGAP-IG) 2.0 [7]. There are also practical issues, such as how the programs might be advantageously applied to populations and environments with varied cultural norms.

The prevalence of this paradigm in global mental health concerning depression is largely demonstrated using treatment gap statistics as a framework for evaluating unmet needs. Just 8% of adults who meet the diagnostic criteria for depression, for instance, use treatments for these symptoms, according to the most recent global gap report on treatment coverage data for major depression in 84 countries [9]. Similar figures are observed in nearly all international mental health research publications, policy documents, and advocacy campaigns concerning the treatment gap for depression [1, 3, 6]. It's unclear whether this indicates a lack of demand for medical help for these experiences or a shortage of mental health resources.

The research used to identify and characterize the gap in mental health treatment has been heavily criticized. Among these criticisms are those that highlight the risks of exporting a Western paradigm of illness and treatment, disregarding cultural differences in comprehension, reacting to social suffering, and medicalizing grief [10, 11]. Critical psychiatry experts have called for a thorough reassessment of initiatives to increase mental health diagnosis and care in the UAE. These programs have been developed and executed with the belief that Western biomedical classifications and therapeutic approaches can be globally applicable and universally successful [11]. The veracity of worldwide prevalence figures, the validity of conventional depression diagnostic tools, and the suitability of GMH's international initiatives have all been questioned by several academics [10, 11].

Critics emphasized that GMH shifts focus away from the cultural, economic, and social causes of illness and ignores substantial local diversity in conceptualizations of depression and mental suffering [11, 12]. This has led to a general demand for interventions to be tailored to local populations, local health care systems, and local cultures [12, 13]. The decontextualization of suffering is the subject of another line of criticism. According to Mills and Lacroix [10] converting situated accounts of suffering into context-free psychiatric diagnoses entails removing symptoms from their social and personal contexts and presenting issues as brain-based illnesses rather than as indications of a disturbance in an individual's "lifeworld," which consists of the experiences, pursuits, and social networks that give life significance [14]. Through a comprehensive study, this paper integrates and builds upon the requests to rethink the treatment gap, family dynamics, environmental pressures, and cultural stigmas associated with depression.

In response to the critics, the *Lancet* Commission [6] replaced the term "treatment gap with "care gap" [6], referring to the unmet mental health, physical health, and social care needs of people with mental illness, including depression. It may be argued, then, that upholding the idea of a care gap still ignores a more important aspect of depression in the UAE: why do so few individuals in these environments seek mental health therapy for depression? Furthermore, how does the claim of a mhGAP affect our thinking about how to address the low service uptake? And how do we know that so many people in the UAE have been afflicted with depression, leading to the need for additional depression awareness programs for both professionals and laypeople?

The formation of global mental health policy and practice in the UAE, which is greatly impacted by mental health care from a cultural perspective, was critically investigated in this paper. We contend that the ongoing individualization of mental health issues obscures the significance of broader mental health determinants and promotes the use of professional interventions over public health strategies [15].

#### 2. Mental Health from the Arab and UAE's Socio-Cultural and Religious Framework

The sociocultural elements that are generally accepted to influence the stigma associated with mental illness in Arab nations. Additionally, the persistent stigma related to mental illness may be explained by ineffective or nonexistent monitoring systems for mental health laws and policies within the healthcare system. More efforts are needed to change the

stigmatizing behavior of medical staff toward mental illness, even though the gradual integration of mental health services into the primary healthcare system is a step toward destigmatizing mental illness [2].

The Arab world is a highly diverse region, with member states differing greatly in terms of their sociodemographic characteristics as well as the coverage and modalities of their health systems. The region's health status has significantly improved over the last 20 years, resulting in longer life expectancies and lower rates of child mortality [16]. Over the past 25 years, the area has also experienced a complex emergency caused by political and economic upheaval, as well as civil war in certain nations. Mental health issues such as post-traumatic stress disorder (PTSD), depression, and various anxiety disorders are being caused by war and violence, displacement, refugees, terrorist threats and activities, and other factors [17].

For instance, one in four teenagers in the capital, Beirut, is said to have anxiety and attention-deficit hyperactivity disorder, and approximately one-fourth of a nationally representative sample in Lebanon satisfied the criteria for at least one of the DSM-IV mental health disorders at some point in their lives [18]. About 20% of Qatari citizens suffer from a mental disorder [19]. The Eastern Mediterranean Region (EMR), as defined by the WHO, exhibited higher observed rates of mental disorders in 2015 than the projected age-standardized rates, with anxiety and depression disorders being the most reported. Except for Egypt, all EMR nations had a higher burden of mental disorders in 2013 than the global average. Palestine ranked highest because nearly half of its youth were believed to suffer from emotional and behavioral disorders due to ongoing trauma and military violence [20]. In 2006, 30 percent of school-age adolescents in Mosul, Iraq, showed signs of PTSD, while 14 percent of 600 primary school students in Baghdad did the same [21]. The only research on the Syrian crisis that is currently available is based on data collected from Syrian refugees in neighboring countries. For instance, 547 Syrian refugee children and adolescents attending public schools in Lebanon exhibited symptoms of anxiety-related disorders, accounting for 56% of the sample [2].

Although primarily Western viewpoints have shaped our current knowledge of mental illness, there is now a broad consensus about the influence of cultural diversity on how people perceive health and sickness, how they seek treatment, and how they receive care [22]. Understanding the varying effects of culturally specific factors such as stigma, spirituality, or shame in the development of mental illness seems crucial, given the current rise of globalization and significant waves of immigration from low-income to high-income countries [23, 24].

One-third of the population of the UAE, a federation of seven nations on the east coast of the Arabian Peninsula, is under 25 years old, contributing to the country's rapidly expanding population [25]. Due to the nation's rapid urbanization in recent decades, societal structures have changed significantly, and mental health issues have increased dramatically [26]. Significantly, 8 million of the 9.6 million people living in the UAE are foreigners from all over the world [27]. The stress of migration has recently come to light as a possible threat to the mental health of migrants and their offspring [28, 29]. Numerous studies have emphasized the difficulties that children and adolescents have when adjusting to a new environment [30] and the effects of acculturative stress on the mental health of adolescents [31]. For these reasons, it appears essential to determine the mental health requirements and care pathways for young people residing in the UAE to enhance their life trajectories.

Studies conducted in the UAE are sparse. Much research only included non-help-seeking samples, while others only looked at national samples from the UAE. The limited studies that have been done on young people have shown that mental illness is very common [32], with eating disorders [33], anxiety [32], and depression [34, 35] being the most common, there have also been reports of reluctance to seek assistance because of stigma and doubts about the effectiveness of traditional Western medical care [36]. A few studies that have concentrated on UAE migrant/expatriate populations have found that adult expatriates have higher suicide rates than UAE citizens [37] and that teenagers are more likely to engage in risky behaviors [38].

According to a different recent study by Adel et al. [36], the UAE has 156 females and 58 males. The majority (43.5%) suffered from depression. 28% had seen a traditional healer before seeking mental health help, with 36.7% having only one visit and 60% having only one visit. The most frequent reason for seeking advice from traditional healers was referrals from friends or family (81.7%). Traditional healers most frequently attributed symptoms to envy (26.7%). Contact with traditional healers was substantially predicted by female gender and having completed high school or less [36].

Overall, despite its paucity, research on youth mental health in the UAE has shown that mental health issues are quite prevalent, indicating the necessity of improving early detection and prevention in the area. To better understand depression in the UAE, the current study aimed to analyze the literature on mental health. More precisely, the study's primary goal was to examine prospective therapeutic problems and advancements from cultural, societal, and religious standpoints. To the best of our knowledge, our study represents one of the initial attempts to analyze the literature on the UAE's mental health challenges in diagnosing and treating depression.

This paper begins with an introduction highlighting the significance of depression in the UAE and the cultural context surrounding mental health. The literature review examines existing research on cultural influences and intervention strategies. The methodology outlines the systematic review process, followed by the presentation of key findings. The discussion interprets these findings in context, and the conclusion summarizes the insights, challenges, and recommendations. References are listed at the end.

Recent studies presented in Table 1 on depression in the UAE highlight a growing mental health burden, particularly among adolescents [34, 39] and expatriate workers [40]. While prevalence data are available [35] there is limited critical exploration of cultural stigma, traditional healing practices [36] and underutilized mental health services [2]. Although global mental health strategies [3, 6] emphasize scalable interventions, these often lack cultural alignment with Arab contexts [10]. The absence of a focused, culturally grounded evaluation in the UAE represents a critical gap, which this review aims to address.

### 2.1. Research Questions

- Q1. What are the key cultural factors influencing depression in the UAE?
- Q2. What are the primary challenges in diagnosing and treating depression in the UAE?
- Q3. How has progress been made in mental health policies and interventions?

#### 2.2. Objectives

- 1. To explore the cultural and religious influences on depression.
- 2. To identify key challenges in the diagnosis and treatment of depression in the UAE.
- 3. To assess the effectiveness of existing mental health policies and interventions in the UAE.
- 4. To provide recommendations for improving mental health care and policies in the UAE.

#### 3. Methods

The following method was used to obtain secondary data from existing peer-reviewed journal articles and reports from government agencies and related health organizations: (1) a systematic search of the published literature, using defined keywords.

## 3.1. Literature Search Strategy

A systematic literature search was conducted to retrieve peer-reviewed scientific psychology and medical journal articles on mental health in the UAE and the Arab region. Electronic databases (Google Scholar, PsychArticles, Scopus, Embase, Scite, and PubMed) were searched covering the period from 2011 to 2024, using keywords: 'mental health, depression, mental illness, public health, mental health challenges and treatments, UAE.' The literature search was conducted in accordance with the Preferred Reporting Items for Systematic Reviews and Meta-Analyses (PRISMA) guidelines. Additionally, references of published studies were searched manually for pertinent articles, and national/local health authorities were contacted for annual statistics and data. During the preliminary screening phase, a total of 211 articles were identified; however, after thorough analysis of their eligibility, 23 articles were selected for the final review.

#### 3.1.1. Eligibility Criteria

Eligible studies included only empirical research papers relevant to mental health challenges and treatments in the UAE or the Arab context.

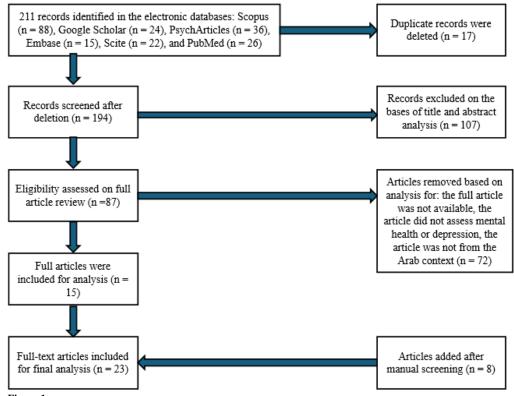
#### 3.1.2. Exclusion Criteria Were

- (1) articles that were not available in English.
- (3) duplicate publications or sub-studies of included articles.

Table 1 summarizes the findings from the literature retrieval.

### 3.1.3. Data Extraction

The PRISMA guidelines consist of a four-phase flow diagram. The flow diagram describes the identification, screening, eligibility, and inclusion criteria of the reports that fall under the scope of a review [41, 42] (Figure 1).



**Figure 1.** PRISMA flowchart illustrating study selection.

**Table 1.** Summary of included studies- author(s) (Year), title, journal and Scopus ranking.

Author(s)	Title	Journal	Scopus
Haak-Saheem and	'Hidden' expatriates: international mobility in	Human Resource	Q1
Brewster [27]	the United Arab Emirates as a challenge to	Management Journal	
	current understanding of expatriation		
Lancet [1]	Ensuring care for people with depression	The Lancet	Q1
Saeed, et al. [23]	COVID-19 health awareness among the United Arab Emirates population.	Plos One	Q1
Shah, et al. [34]	Self-esteem and other risk factors for depressive symptoms among adolescents in the United Arab Emirates.	PloS one	Q1
Adel, et al. [36]	Patterns and factors associated with consulting traditional healers on the care pathway of psychiatric patients in the United Arab Emirates	International Journal of Social Psychiatry	Q1
Vally and Helmy [38]	The prevalence of suicidal behavior and its associated risk factors among school-going adolescents resident in the United Arab Emirates	Scientific reports	Q1
Al-Yateem, et al. [39]	Anxiety-related disorders in adolescents in the United Arab Emirates: a population-based cross-sectional study.	BMC Pediatrics	Q2
Barbato and Thomas [40]	In this together: Psychological wellbeing of foreign workers in the United Arab Emirates during the COVID-19 pandemic	International Journal of Psychology	Q1
Maalouf, et al. [43]	Anxiety, depression and PTSD in children and adolescents following the Beirut port explosion	Journal of Affective Disorders	Q1
Herrman, et al. [3]	Time for united action on depression: a Lancet–World Psychiatric Association Commission	The Lancet	Q1
Arafa, et al. [16]	Depressed, anxious, and stressed: What have healthcare workers on the frontlines in Egypt and Saudi Arabia experienced during the COVID-19 pandemic?	Journal of Affective Disorders	Q1
Razzak, et al. [35]	Depression: prevalence and associated risk factors in the United Arab Emirates	Oman Medical Journal	Q2

Merhej [2]	Stigma on mental illness in the Arab world: beyond the socio-cultural barriers.	International Journal of Human Rights in Healthcare	Q2
Chisholm, et al. [4]	Scaling-up treatment of depression and anxiety: a global return on investment analysis.	The Lancet Psychiatry	Q1
Collins, et al. [5]	Grand challenges in global mental health.	Nature	Q1
Mills and Lacroix [10]	Strategic universality in the making of global guidelines for mental health.	Transcultural Psychiatry	Q1
Keynejad, et al. [7]	WHO Mental Health Gap Action Program (mhGAP) Intervention Guide: a systematic review of evidence from low and middle-income countries.	BMJ Ment Health	Q1
Moitra, et al. [9]	The global gap in treatment coverage for major depressive disorder in 84 countries from 2000–2019: A systematic review and Bayesian metaregression analysis.	PLoS medicine	Q1
Patel, et al. [6]	The Lancet Commission on global mental health and sustainable development.	The Lancet	Q1
Farran [18]	Mental health in Lebanon: Tomorrow's silent epidemic	Mental health & prevention	Q2
Abdelrahman and Ismail [44]	The psychological distress and COVID-19 pandemic during lockdown: A cross-sectional study from the United Arab Emirates (UAE).	Heliyon	Q1

## 3.1.4. Data Analysis

This study employed thematic analysis as the primary qualitative method to identify patterns and themes within participants' responses. Unlike past studies on depression in the UAE that have largely relied on quantitative surveys or prevalence reporting (e.g., [34, 35]), this method enables a deeper understanding of individual experiences, cultural beliefs, and contextual barriers, offering rich insights into how depression is perceived and addressed within the local setting.

#### 4. Results

## 4.1. Themes Identified in Literature

Theme 1: Cultural Perspectives on Mental Health.

Sub themes: Influence of religious beliefs, collectivist culture, family support, social stigma, and reluctance to seek professional help on mental health attitudes and depression.

Theme 2: Challenges in Mental Health Care Accessibility.

Sub themes: Cultural resistance, language barriers, fear of social judgment, and lack of culturally tailored interventions. *Theme 3:* Government Policies & Mental Health Initiatives.

Subthemes: Impact of COVID-19 on mental health in the UAE, increase in depression and anxiety due to pandemic-related stressors, growth of digital mental health services.

#### 5. Discussion

Depression is a growing public health concern worldwide, and in the UAE, its prevalence and impact are influenced by unique cultural, societal, and policy-related factors that necessitate a deeper understanding for effective mental health interventions. This study aimed to systematically review the cultural influences, challenges, and progress in addressing depression in the UAE, with a focus on identifying gaps in mental health care and proposing culturally relevant interventions. The findings from the systematic review suggested that the influence of religious beliefs, collectivist culture, family support, social stigma, and reluctance to seek professional help on mental health attitudes are potential determinants of depression. The findings align with the literature. The importance of family and the UAE's socio-economic and religious context significantly shape beliefs about mental illness [45]. Traditional family values correlate with negative attitudes towards mental health, indicating a need for cultural reforms to reduce stigma [2]. In other words, this correlation varies by gender, with males more likely to adhere to traditional values. The study concluded that, while mental health issues in the UAE remain stigmatized, some improvement is evident, aligning with global trends. For instance, in Matsafeni Village, cultural beliefs attributing mental illnesses to spiritual causes persist, fostering discrimination [46]. Similarly, in Saudi Arabia, 72.2% of respondents attributed mental illness to evil spirits, reflecting negative attitudes and stigmatization [16]. To address these issues, culturally progressive reforms are indeed necessary. As suggested by Andrade et al. [47], authorities in the UAE should attempt such reforms to remove the stigma associated with mental health problems. This approach could be extended to other regions facing similar challenges. Additionally, in other countries, community education to reduce stigma, considering cultural factors in mental health perceptions, is recommended [46]. Addressing these issues requires a deep understanding of the complex interaction between culture, religion, and social norms and highlights the need for culturally sensitive mental health services and policies that recognize and address diverse cultural narratives influencing mental health perceptions and practices [47]. Efforts to improve mental health systems in the UAE should incorporate targeted mental health literacy programs that integrate biopsychosocial models of mental illness with the positive aspects of religious and cultural beliefs dominant in the region [48].

Rapid growth in the UAE has led to environmental factors affecting mental health, especially among expatriates and students. Accelerated development has heightened outdoor and indoor environmental issues, exacerbating conditions like asthma, which affects 13% of schoolchildren [49]. This development, along with expatriates' unique challenges, complicates the mental health landscape in the UAE. Occupational stress, social isolation, and expatriate life significantly influence depression rates. Foreign workers, who make up 80% of the UAE population, show high rates of post-traumatic stress, depression, anxiety, and insomnia, especially among women, younger individuals, and those with prior psychological disorders [40]. Despite seemingly prosperous lives, expatriates often face social isolation, job-related stress, and concerns about job security, which increase the prevalence of mental illness [36]. "Third culture kids" (TCKs) are particularly vulnerable to stress-related mental health issues due to frequent life changes and cultural challenges [33]. The high prevalence of anxiety disorders among UAE students (55%) and the significant risk of clinical depression among TCKs (68.7%) underscore the need for more research and interventions [33, 39]. Studies on postnatal depression (PND) in Emirati women highlight culturally specific risk factors, with 22% of mothers experiencing depression at 3 months postpartum, influenced by poor relationships with mothers-in-law, not breastfeeding, and poor self-image [21]. These findings illustrate the impact of traditional family structures and modern pressures on depression. Social and religious factors also contribute to underdiagnosed mental health issues, emphasizing the need to address stigma and improve access to care [50].

The COVID-19 pandemic has had significant psychological consequences in the UAE. Studies have reported increased levels of anxiety, depression, and stress among various population groups. A survey of expatriate residents found elevated stress and uncertainty, with the Asian community experiencing greater anxiety about negative consequences compared to Arab or Western residents [44]. Healthcare personnel reported moderate to high levels of anxiety due to workplace exposure concerns and fear of infecting their families [36]. Notably, the impact varied across different demographic groups. Younger individuals, females, those with a history of mental health problems, and people who tested positive for COVID-19 or had loved ones test positive experienced higher levels of depression and anxiety symptoms [33]. University students also reported significant mental health impacts, with four out of ten self-reporting moderate to severe depression and anxiety [45]. The psychological effects of the pandemic extended to children as well, with parents experiencing severe anxiety being seven times more likely to report emotional problems in their children [41]. Additional studies highlighted exacerbated psychological distress in the UAE population, with males, older individuals, and the unemployed being more severely impacted [44]. This suggests that societal changes and external pressures can disproportionately affect certain demographic groups, potentially due to cultural expectations and social roles. These findings highlight the need for targeted mental health support programs, improved social support networks, and personalized interventions to address the ongoing psychological challenges faced by various segments of the UAE population [40, 44].

The UAE has made substantial progress in advancing mental health as a component of its national healthcare objectives, particularly within the framework of the seven-year national Vision 2021. The nation has exhibited a robust commitment to addressing mental health issues through diverse initiatives and policy measures. This national agenda reflects a high-level political commitment to tackle noncommunicable diseases (NCDs), which account for a significant portion of deaths and premature mortality in the country [27], as well as the research and innovation required to improve mental health provision in the UAE [39]. Recently, on 30 May 2024, the UAE enacted the Federal Mental Health Law (Federal Law No. 10/2023), replacing the outdated Federal Law No. 28/1981. This new legislation significantly transforms the nation's mental health approach, emphasizing the protection and rights of individuals with mental health conditions. A key focus is safeguarding psychiatric patients' rights, particularly in employment. The law clearly outlines the general rights of psychiatric patients, ensuring dignity, respect, and workplace equality. It also mandates employers to accommodate employees with mental health conditions by preventing discrimination, providing workplace adjustments, and promoting mental health awareness. This reform demonstrates the UAE's commitment to modernizing its mental health framework and aligning with global best practices, ensuring mental health prioritization in healthcare and employment.

This legal shift builds upon the country's already established foundation for mental health services, including the development of psychiatric services [32] and the implementation of mental health training programs for school nurses [39]. Mental health services in the UAE are available through public hospitals and primary healthcare centers; however, there are significant gaps in the provision and integration of these services. The UAE government has established healthcare centers and e-services for physical health, but psychological health services have not improved to the same extent [51]. While the country has made significant progress in delivering mental health services, there remains scope for improvement [38]. The UAE's mental health infrastructure encompasses community-based services, wherein local community mental health centers collaborate with general practitioners and primary mental healthcare, as observed in other nations [22]. However, the integration of mental health services faces challenges. For instance, most primary healthcare doctors and nurses have not received official inservice training on mental health within the last five years [26]. This lack of training may impede the effective integration of mental health services into primary care.

Psychiatric and counselling centers serve a vital function in the provision of specialized mental healthcare. The UAE has established regional psychiatric inpatient units that provide services to both Emirati citizens and expatriate residents. A retrospective analysis of psychiatric inpatient admissions demonstrated that a higher proportion of Emiratis (UAE nationals) were admitted compared to expatriates, with Emiratis exhibiting a higher prevalence of substance use disorders and expatriates presenting more frequently with stress-related conditions [24]. Psychiatric and counseling centers in the UAE serve as essential facilities for specialized mental healthcare, addressing a diverse range of psychological disorders among both Emirati nationals and expatriate residents. It is noteworthy that there are certain discrepancies and variations in the

patterns of mental health service utilization in the UAE. While the inpatient study demonstrated a higher admission rate for Emiratis compared to expatriates [24], a study on youth accessing mental health services in Dubai revealed that non-Emirati patients were more likely to report relationships with friends as a source of stress [40]. This observation suggests that cultural and social factors may influence the manifestation and treatment of mental health disorders in the UAE, as evidenced by the demographic distribution of psychiatric admissions, which reveals significant patterns shaped by the country's unique social and cultural context. The higher admission rates for Emiratis compared to expatriates in psychiatric inpatient units can be attributed to various factors, including disparities in healthcare access and cultural influences. Notably, the higher admission rates for Emiratis contrast with the overall healthcare workforce demographics in the UAE. Al-Yateem et al. [41] observe that only approximately 3% of the UAE nursing workforce are nationals, with the country heavily relying on expatriate nurses. This discrepancy between patient demographics and healthcare provider demographics may influence the quality and cultural appropriateness of care provided.

There are initiatives to develop education and counselling services, particularly in elementary and secondary schools. However, the concept of private practitioners in mental health counselling remains relatively novel in the UAE [46]. To address the growing mental health needs of the population, there is a requirement for culturally sensitive and relevant models of mental healthcare, as well as increased collaboration between religious leaders and professional mental health service providers [26]. The role of psychiatric and counseling centers is crucial, but there is scope for growth, particularly in developing private practice options and addressing cultural factors that influence mental health perceptions and treatment-seeking behaviors.

Public awareness campaigns in the UAE seem to be in their early stages, with a growing recognition of their importance. Several initiatives in higher education are associated with World Mental Health Day, observed annually on October 10<sup>th</sup> [11]. As the country continues to develop its mental health services, these initiatives may play a crucial role in raising awareness and reducing stigma in the UAE [46]. However, it is noteworthy that university-based mental health awareness campaigns may oversimplify systemic pressures and place undue responsibility on individuals [38]. A recently implemented training program for school nurses in the UAE, focusing on mental health promotion, prevention, and early intervention, has been established to enhance mental healthcare delivery in schools. This initiative represents a significant advancement toward improving mental health education and early identification within the educational system [39]. Additionally, others have highlighted the need for more studies on health promotion and interdisciplinary research in the UAE, which could include school-based programs [45]. Corporate wellness programs in the UAE are in their infancy. However, geographic, sociodemographic, and school type differences in adolescent well-being and mental health could potentially inform the development of targeted programs in various settings, including workplaces [41]. These findings underscore the importance of considering contextual factors when designing interventions to promote adolescent well-being and mental health. Workplace programs could benefit from incorporating insights about geographic and socio-demographic variations in mental health outcomes. By tailoring interventions to specific populations and environments, organizations may be better equipped to address the unique challenges faced by adolescents transitioning into the workforce.

As previously indicated, cultural and religious factors significantly influence attitudes towards mental health and helpseeking behaviors in the UAE. Misconceptions about mental illness are prevalent, with a substantial proportion of individuals holding erroneous beliefs about mental disorders (60.1%) and experiencing shame in seeking professional assistance (58.9%) [46]. These barriers frequently stem from traditional family values, which correlate with negative attitudes towards mental health and shape perceptions of mental illness. Healthcare professionals occasionally encounter difficulties in reconciling their professional knowledge with cultural and religious beliefs, resulting in confusion and incomplete understanding [39]. This conflict extends to the general population, where fear of stigma and discouragement of self-disclosure outside the family impede professional help-seeking [22]. To address these barriers, culturally specific education for healthcare professionals and the public is necessary, focusing on contextual, cultural, and religious factors impacting stigma while supporting access to mental health services [39]. A key recommendation is to align mental illness and its treatments with Islamic jurisprudence, as religious views significantly influence attitudes towards professional mental health services [26]. This approach could potentially reduce stigma and increase acceptance of mental health care. Additionally, developing culturally sensitive mental health care models for Emirati citizens and facilitating collaboration between mosque Imams and mental health professionals is crucial. Despite challenges, a study found that UAE undergraduate students viewed the counseling profession favorably [41], indicating potential growth in mental health counseling, particularly in private practice. The development of Connected Mental Health (CMH) solutions that consider cultural, religious, and linguistic aspects could help overcome numerous mental health care barriers in the UAE [36]. The framework for designing CMH solutions in the UAE emphasizes the role of cultural factors in ensuring effective and accepted mental health interventions. By providing multilingual services in Arabic and English, the framework aims to improve accessibility for both native Arabic speakers and the expatriate community, enhancing communication and creating a more inclusive and culturally sensitive mental health care system. The framework's emphasis on religious and cultural sensitivities underscores the significant impact these factors have on mental health perceptions and treatment-seeking behaviors in the UAE. This is crucial in a region where traditional beliefs, religious practices, and cultural norms substantially influence attitudes toward mental health. Despite considerable investments in healthcare infrastructure, traditional healers (Mutawa) remain influential in the mental health sector, particularly for citizens seeking assistance for conditions that might be considered psychiatric in a Western biomedical context [31]. A study conducted in Abu Dhabi assessed 214 patients to investigate their utilization of traditional healers before accessing psychiatric care. Notably, 43.5% were diagnosed with depressive disorders, and 28% had first consulted a traditional healer. The primary reason for choosing traditional healers, reported by 81.7% of patients, was recommendations from friends or family [36]. To enhance mental health systems in the UAE, integrating biopsychosocial models of mental illness with valuable aspects of religious and cultural beliefs is essential [48]. Although there are promising indications of increased mental health awareness and educational efforts, particularly in schools, there is a need for broader initiatives across the public, educational, and corporate sectors.

Workplace mental health in the UAE has garnered increasing attention, with studies identifying prevalent mental health issues among workers and efforts to address them. Research indicates high rates of psychological distress, anxiety, and burnout, particularly among healthcare workers and high-stress industries [32, 35, 44]. For instance, a study conducted during COVID-19 revealed that over a third of healthcare workers reported moderate to severe psychological distress and anxiety, with frontline workers experiencing higher levels [35]. While mental health knowledge did not predict anxiety and distress levels, risk perceptions and concerns about transmitting illness to family were associated with poorer mental health outcomes, suggesting the importance of addressing perceptions and providing support. Furthermore, research on UAE medical students demonstrated high burnout rates (77.4%) and mental health difficulties (74.5%), indicating the need for early intervention [46]. Efforts to integrate mental health support in UAE workplaces are emerging, although research on their effectiveness is limited. A study in the UAE healthcare sector found that workplace stress negatively impacts employee well-being, albeit weakly [38]. Researchers recommend organizational, family, and social support to mitigate stress impacts. Workplace health promotion initiatives are increasingly recognized as effective in supporting employee health and well-being [41]. While not specific to the UAE, various mental health support programs, such as Employee Assistance Programs (EAPs), stress management workshops, flexible work arrangements, and mental health awareness training, have demonstrated positive effects on employee well-being and productivity [37]. These initiatives are associated with reduced stress, improved job satisfaction, increased engagement, and decreased absenteeism. Successful programs often include onsite offerings, incentives, and awareness cultivation among managers to foster a supportive culture [33].

Notably, some countries are developing national standards to assist employers in assessing and mitigating risks to mental health in the workplace, viewing it as both a corporate and social responsibility [30]. This highlights the importance of addressing risks arising from work organization, leadership, corporate culture, and job security [30]. A global survey revealed that workers value mental health interventions developed in consultation with employees, enhanced training for managers, and targeted efforts to address stigma [29]. This suggests the significance of both formal programs and informal cultural shifts. Corporate culture significantly influences employee mental health outcomes, with supportive cultures associated with positive mental health and deleterious cultures linked to stress and burnout [52].

Telemedicine and digital platforms for mental health support have demonstrated potential in the UAE, but their adoption and utilization remain limited. A cross-sectional study conducted in 2023 found that while 66.9% of participants were familiar with telemedicine, only 29.8% had used it [26]. Among those who had used telemedicine, 92.3% found it useful or highly useful, and 83.1% expressed overall satisfaction with their experience. Notably, despite the potential benefits, there is a lack of awareness and mixed attitudes towards mental health apps among university students in the UAE. A study conducted during the COVID-19 lockdown revealed that students were experiencing psychological issues related to depression, anxiety, and social dysfunction, but demonstrated uncertainty regarding the use of mental health apps [41]. The study revealed that students were experiencing anxiety, depression, and social dysfunction. Notably, 91.3% had never utilized a mobile application for mental health purposes, 36.3% were unaware of such applications; however, 79.2% expressed a willingness to use them in the future.

The UAE has demonstrated a commitment to global mental health initiatives. In 1991, UAE health authorities initiated the implementation of breastfeeding promotion and support programs nationwide, adhering to the 1990 WHO and United Nations Children's Fund (UNICEF) "global goal" for breastfeeding [17]. This exemplifies the UAE's adoption of international health guidelines. The UAE is progressing towards community mental health care and exploring innovative models, indicating a transformation in care delivery within the country [23]. Furthermore, there is increasing interest in social prescribing to address social determinants of mental health, aligning with global holistic care trends. Internet-based cognitive-behavioral therapy (CBT) has demonstrated efficacy in reducing anxiety and depression symptoms among employees [35]. Web-based psychotherapy interventions have also demonstrated effectiveness in alleviating post-traumatic stress disorder (PTSD) symptoms among trauma-exposed employees [43]. Globally, comprehensive mental health support programs have demonstrated positive impacts on employee well-being and workplace depression. However, further research is necessary to assess the effectiveness of such initiatives in the UAE context.

Despite the UAE's advanced medical technology and specialized physicians [42], its mental health services are still in a developmental phase. The country invests significantly in healthcare and medical tourism, with initiatives such as the Dubai Health Experience (DXH) positioning Dubai as a medical tourism hub [17]. However, community mental health services remain underdeveloped, and traditional healers continue to play a significant, albeit unofficial, role. Rural patients are more likely to rely on faith-based management compared to urban patients (35.1% vs. 18.4%), while urban populations often integrate psychiatric and faith management beliefs (31.6% vs. 9.6%) [41]. The focus is shifting towards community mental health and social prescribing to address the population's needs more effectively [46]. Dubai's unique demographic composition and complex health system present challenges for mental health service provision [38]. The paper highlights areas requiring improvement, such as mental health legislation, education, training, and research, but does not provide success rates for Dubai's community mental health centers. Successful models from other countries, such as Australia's community-based care and Canada's integrated youth services, offer valuable insights. These models emphasize accessible, multidisciplinary, and community-based care, suggesting potential strategies for improving mental health systems. Various countries have focused on community-based mental health care with differing levels of progress. In Georgia, strategic plans have led to the adoption of evidence-based, human rights-oriented mental health care, improving access through new standards for ambulatory services and mobile teams, though comprehensive treatment still requires enhancement [19].

Similarly, Azerbaijan has transitioned from institutional to community-based services since 2011, focusing on comprehensive care programs across regions, despite significant challenges such as stigma and resource scarcity [22].

#### 6. Conclusion

The UAE has demonstrated significant progress in acknowledging the importance of mental health and implementing measures to enhance treatment accessibility and support. Nevertheless, challenges persist, including cultural stigmatization, limited awareness, and inadequate service provision. The integration of mental health services into primary care, the establishment of community-based centers, and the exploration of connected mental health solutions present promising opportunities for advancement. It is imperative that the UAE continues to invest in mental health infrastructure, education, and awareness campaigns, with a focus on reducing stigma, improving access to culturally appropriate care, and addressing the needs of diverse populations, including nationals, expatriates, and youth. By leveraging its resources and commitment to healthcare excellence, the UAE has the potential to develop a robust mental health system that could serve as a regional paradigm. Prioritizing comprehensive, culturally sensitive mental health programs for its diverse population, such as specialized clinics in underserved areas, school-based initiatives, and telemedicine, can enhance accessibility and appeal to technologically adept youth. Collaborations with international organizations and research institutions could facilitate knowledge exchange and the implementation of evidence-based practices tailored to the UAE's context.

This review emphasizes the importance of culturally tailored mental health interventions in the UAE that consider local beliefs and social norms. Integrating traditional healing practices with clinical care, enhancing training for culturally competent professionals, and expanding digital mental health platforms are essential steps. Government support through policy engagement and dedicated funding is also critical for sustainable impact.

The study is limited by the small number of UAE-focused publications and the dominance of COVID-19-related research, which may not reflect broader or long-term trends. Language and publication biases may have led to the exclusion of relevant data.

Future studies should explore long-term depression trends, assess culturally adapted interventions, and investigate mental health access among vulnerable groups. Comparative research with other Gulf countries could provide broader regional insights.

## References

- [1] T. Lancet, "Ensuring care for people with depression," *The Lancet*, vol. 399, no. 10328, p. 885, 2022. https://doi.org/10.1016/s0140-6736(21)01149-1
- [2] R. Merhej, "Stigma on mental illness in the Arab world: beyond the socio-cultural barriers," *International Journal of Human Rights in Healthcare*, vol. 12, no. 4, pp. 285-298, 2019. https://doi.org/10.1108/ijhrh-03-2019-0025
- [3] H. Herrman *et al.*, "Time for united action on depression: A Lancet—World Psychiatric Association Commission," *The Lancet*, vol. 399, no. 10328, pp. 957-1022, 2022. https://doi.org/10.1016/s0140-6736(21)02141-3
- [4] D. Chisholm *et al.*, "Scaling-up treatment of depression and anxiety: A global return on investment analysis," *The Lancet Psychiatry*, vol. 3, no. 5, pp. 415-424, 2016. https://doi.org/10.1016/s2215-0366(16)30024-4
- [5] P. Y. Collins *et al.*, "Grand Challenges in Global Mental Health," *Nature*, vol. 475, no. 7354, pp. 27-30, 2011. https://doi.org/10.1038/475027a
- [6] V. Patel *et al.*, "The Lancet Commission on global mental health and sustainable development," *The lancet*, vol. 392, no. 10157, pp. 1553-1598, 2018. https://doi.org/10.1016/s0140-6736(18)31612-x
- [7] R. C. Keynejad, T. Dua, C. Barbui, and G. Thornicroft, "WHO Mental Health Gap Action Programme (mhGAP) Intervention Guide: A systematic review of evidence from low and middle-income countries," *BMJ Ment Health*, vol. 21, no. 1, pp. 30-34, 2018. https://doi.org/10.1136/eb-2017-102750
- [8] D. Bemme, "Contingent universality: The epistemic politics of global mental health," *Transcultural Psychiatry*, vol. 60, no. 3, pp. 385-399, 2023. https://doi.org/10.1177/13634615231189565
- [9] M. Moitra *et al.*, "The global gap in treatment coverage for major depressive disorder in 84 countries from 2000–2019: A systematic review and Bayesian meta-regression analysis," *PLoS Medicine*, vol. 19, no. 2, p. e1003901, 2022. https://doi.org/10.1371/journal.pmed.1003901
- [10] C. Mills and K. Lacroix, "Reflections on doing training for the World Health Organization's mental health gap action program intervention guide (mhGAP-IG)," *International Journal of Mental Health*, vol. 48, no. 4, pp. 309-322, 2019. https://doi.org/10.1080/00207411.2019.1683681
- P. Bracken, J. Giller, and D. Summerfield, "Primum non nocere. The case for a critical approach to global mental health," *Epidemiology and Psychiatric Sciences*, vol. 25, no. 6, pp. 506-510, 2016. https://doi.org/10.1017/s2045796016000494
- [12] A. Gómez-Carrillo, R. Lencucha, N. Faregh, S. Veissière, and L. J. Kirmayer, "Engaging culture and context in mhGAP implementation: Fostering reflexive deliberation in practice," *BMJ Global Health*, vol. 5, no. 9, p. e002689, 2020. https://doi.org/10.1136/bmjgh-2020-002689
- [13] S. Ecks, "Mental ills for all: Genealogies of the movement for global mental health," *The movement for global mental health: Critical views from South and Southeast Asia*, pp. 41-64, 2021. https://doi.org/10.1017/9789048550135.002
- [14] R. Lewis-Fernández and L. J. Kirmayer, "Cultural concepts of distress and psychiatric disorders: Understanding symptom experience and expression in context," *Transcultural Psychiatry*, vol. 56, no. 4, pp. 786-803, 2019. https://doi.org/10.1177/1363461519861795
- [15] L. J. Kirmayer and D. Pedersen, "Toward a new architecture for global mental health," *Transcultural Psychiatry*, vol. 51, no. 6, pp. 759-776, 2014. https://doi.org/10.1177/1363461514557202
- [16] A. Arafa, Z. Mohammed, O. Mahmoud, M. Elshazley, and A. Ewis, "Depressed, anxious, and stressed: What have healthcare workers on the frontlines in Egypt and Saudi Arabia experienced during the COVID-19 pandemic?," *Journal of Affective Disorders*, vol. 278, pp. 365-371, 2021. https://doi.org/10.1016/j.jad.2020.09.080

- [17] S. Musisi and E. Kinyanda, "Long-term impact of war, civil war, and persecution in civilian populations—Conflict and post-traumatic stress in African communities," *Frontiers in Psychiatry*, vol. 11, pp. 1-20, 2020. https://doi.org/10.3389/fpsyt.2020.00020
- [18] N. Farran, "Mental health in Lebanon: Tomorrow's silent epidemic," *Mental Health & Prevention*, vol. 24, p. 200218, 2021. https://doi.org/10.1016/j.mhp.2021.200218
- [19] M. Zolezzi, N. Bensmail, F. Zahrah, S. M. Khaled, and T. El-Gaili, "Stigma associated with mental illness: Perspectives of university students in Qatar," *Neuropsychiatric Disease and Treatment*, vol. 13, pp. 1221-1233, 2017. https://doi.org/10.2147/ndt.s132075
- [20] R. Charara *et al.*, "The burden of mental disorders in the eastern Mediterranean region, 1990-2013," *PloS One*, vol. 12, no. 1, p. e0169575, 2017. https://doi.org/10.1016/j.eurpsy.2017.01.2023
- [21] L. Itani, D. Jaalouk, J. Fayyad, J. T. Garcia, F. Chidiac, and E. Karam, "Mental health outcomes for war exposed children and adolescents in the Arab world," *Arab Journal of Psychiatry*, vol. 28, no. 1, pp. 1–25, 2017. https://doi.org/10.12816/0036878
- [22] N. Gopalkrishnan, "Cultural diversity and mental health: Considerations for policy and practice," *Frontiers in Public Health*, vol. 6, p. 179, 2018. https://doi.org/10.3389/fpubh.2018.00179
- [23] B. Q. Saeed, I. Elbarazi, M. Barakat, A. O. Adrees, and K. S. Fahady, "COVID-19 health awareness among the United Arab Emirates population (vol 16, e0255408, 2021)," *PloS one*, vol. 19, no. 11, p. e0314212, 2024. https://doi.org/10.1371/journal.pone.0314212
- [24] R. Hechanova and L. Waelde, "The influence of culture on disaster mental health and psychosocial support interventions in Southeast Asia," *Mental Health, Religion & Culture,* vol. 20, no. 1, pp. 31-44, 2017. https://doi.org/10.1080/13674676.2017.1322048
- [25] N. Ameen and A. Anand, Generation Z in the United Arab Emirates: A smart-tech-driven iGeneration," in the new generation Z in Asia: Dynamics, Differences, Digitalisation. USA: Emerald Publishing Limited, 2020.
- [26] N. Chowdhury, "Integration between mental health-care providers and traditional spiritual healers: Contextualising Islam in the twenty-first century," *Journal of Religion and Health*, vol. 55, no. 5, pp. 1665-1671, 2016. https://doi.org/10.1007/s10943-016-0234-7
- [27] W. Haak-Saheem and C. Brewster, "'Hidden' expatriates: International mobility in the United Arab Emirates as a challenge to current understanding of expatriation," *Human Resource Management Journal*, vol. 27, no. 3, pp. 423-439, 2017. https://doi.org/10.1111/1748-8583.12147
- [28] H. Geros *et al.*, "Migrant status and identification as ultra-high risk for psychosis and transitioning to a psychotic disorder," *Acta Psychiatrica Scandinavica*, vol. 141, no. 1, pp. 52-59, 2020. https://doi.org/10.1111/acps.13099
- [29] J.-P. Selten, E. Van Der Ven, and F. Termorshuizen, "Migration and psychosis: A meta-analysis of incidence studies," Psychological Medicine, vol. 50, no. 2, pp. 303-313, 2020. https://doi.org/10.1017/s0033291719000035
- [30] M. F. Sterle, J. R. Fontaine, J. De Mol, and L. L. Verhofstadt, "Expatriate family adjustment: An overview of empirical evidence on challenges and resources," *Frontiers in Psychology*, vol. 9, p. 1207, 2018. https://doi.org/10.3389/fpsyg.2018.01207
- [31] T. Akkaya-Kalayci *et al.*, "The effect of seasonal changes and climatic factors on suicide attempts of young people," *BMC Psychiatry*, vol. 17, pp. 1-7, 2017. https://doi.org/10.1186/s12888-017-1532-7
- [32] M. A. Subu *et al.*, "Traditional, religious, and cultural perspectives on mental illness: A qualitative study on causal beliefs and treatment use," *International Journal of Qualitative Studies on Health and Well-Being*, vol. 17, no. 1, p. 2123090, 2022. https://doi.org/10.1080/17482631.2022.2123090
- N. Al Mestaka, A. Alneyadi, A. AlAhbabi, A. AlMatrushi, R. AlSaadi, and L. B. Alketbi, "Prevalence of probable eating disorders and associated risk factors in children and adolescents aged 5–16 years in Al Ain City, United Arab Emirates: observational case–control study," *Journal of Eating Disorders*, vol. 11, no. 1, p. 114, 2023. https://doi.org/10.1186/s40337-023-00840-w
- [34] S. M. Shah *et al.*, "Self-esteem and other risk factors for depressive symptoms among adolescents in United Arab Emirates," *PloS One*, vol. 15, no. 1, p. e0227483, 2020. https://doi.org/10.1371/journal.pone.0227483
- [35] H. A. Razzak, A. Harbi, and S. Ahli, "Depression: Prevalence and associated risk factors in the United Arab Emirates," *Oman Medical Journal*, vol. 34, no. 4, pp. 274–282, 2019. https://doi.org/10.5001/omj.2019.56
- S. Adel, K. Abdel Aziz, D. El Tabei, N. A. Mahfouz, and D. A. El-Gabry, "Patterns and factors associated with consulting traditional healers on the care pathway of psychiatric patients in the United Arab Emirates," *International Journal of Social Psychiatry*, vol. 69, no. 5, pp. 1202-1212, 2023. https://doi.org/10.1177/00207640231154824
- [37] S. Ghuloum and M. A. Karim, Suicidal behavior in Qatar," in Suicidal Behavior in Muslim Majority Countries. Singapore: Springer Nature Singapore, 2024.
- Z. Vally and M. Helmy, "The prevalence of suicidal behaviour and its associated risk factors among school-going adolescents resident in the United Arab Emirates," *Scientific Reports*, vol. 13, no. 1, p. 19937, 2023. https://doi.org/10.1038/s41598-023-47305-3
- [39] N. Al-Yateem *et al.*, "A qualitative exploration of mental health knowledge among pediatric health professionals in the United Arab Emirates," *Plos One*, vol. 17, no. 3, p. e0266224, 2022. https://doi.org/10.1371/journal.pone.0266224
- [40] M. Barbato and J. Thomas, "In this together: Psychological wellbeing of foreign workers in the United Arab Emirates during the COVID-19 pandemic," *International Journal of Psychology*, vol. 56, no. 6, pp. 825-833, 2021. https://doi.org/10.1002/ijop.12786
- [41] A. A. Selçuk, "A guide for systematic reviews: PRISMA," *Turkish Archives of Otorhinolaryngology*, vol. 57, no. 1, p. 57, 2019. https://doi.org/10.5152/tao.2019.4058
- [42] M. Jaafari, A. Alzuman, Z. Ali, A. Tantry, and R. Ali, "Organizational health behavior index (OHBI): A tool for measuring organizational health," *Sustainability*, vol. 15, no. 18, p. 13650, 2023. https://doi.org/10.3390/su151813650
- [43] F. T. Maalouf *et al.*, "Anxiety, depression and PTSD in children and adolescents following the Beirut port explosion," *Journal of Affective Disorders*, vol. 302, pp. 58-65, 2022. https://doi.org/10.1016/j.jad.2022.01.086
- [44] R. Abdelrahman and M. E. Ismail, "The psychological distress and COVID-19 pandemic during lockdown: A cross-sectional study from United Arab Emirates (UAE)," *Heliyon*, vol. 8, no. 5, p. e09422, 2022. https://doi.org/10.1016/j.heliyon.2022.e09422

- [45] E. Petkari and M. Ortiz-Tallo, "Towards youth happiness and mental health in the United Arab Emirates: The path of character strengths in a multicultural population," *Journal of Happiness Studies*, vol. 19, pp. 333-350, 2018. https://doi.org/10.1007/s10902-016-9820-3
- [46] E. N. Mboweni, M. H. Mphasha, and L. Skaal, "Exploring mental health awareness: A study on knowledge and perceptions of mental health disorders among residents of Matsafeni Village, Mbombela, Mpumalanga Province," *Healthcare*, vol. 12, no. 1, p. 85, 2023. https://doi.org/10.3390/healthcare12010085
- [47] S. Bilač, F. Öztop, Y. Kutuk, and M. Karadag, "Cultural narratives and their impact on family mental health," *Journal of Psychosociological Research in Family and Culture*, vol. 2, no. 2, pp. 18-24, 2024. https://doi.org/10.61838/kman.jprfc.2.2.4
- [48] S. Slewa-Younan, T. P. Nguyen, N. Al-Yateem, R. C. Rossiter, and W. Robb, "Causes and risk factors for common mental illnesses: the beliefs of paediatric hospital staff in the United Arab Emirates," *International Journal of Mental Health Systems*, vol. 14, pp. 1-16, 2020. https://doi.org/10.1186/s13033-020-00367-6
- [49] S. Dalibalta, F. Samara, H. Qadri, and H. Adouchana, "Potential causes of asthma in the United Arab Emirates: Drawing insights from the Arabian Gulf," *Reviews on Environmental Health*, vol. 33, no. 2, pp. 205-212, 2018. https://doi.org/10.1515/reveh-2017-0030
- [50] H. A. R. Al Rand, H. Madi, S. Alhemeiri, and A. Al Obeidli, *Healthcare innovation and leadership: Case study of the United Arab Emirates," in Resilient Health.* UAE: Elsevier, 2024.
- [51] F. Al Ali, M. Stephens, and V. Pereira, *Government e-services and reputation," in Doing Business in the Middle East.* London: Routledge, 2023.
- [52] G. Andrade, D. Bedewy, A. B. A. Elamin, K. Y. A. Abdelmonem, H. J. Teir, and N. Alqaderi, "Attitudes towards mental health problems in a sample of United Arab Emirates' residents," *Middle East Current Psychiatry*, vol. 29, no. 1, p. 88, 2022. https://doi.org/10.1186/s43045-022-00255-4