



Cognitive Behavioral Therapy in Saudi Arabia: A Scoping Review on Training, Practice, and Research

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Abstract

An evidence-based intervention for many psychiatric and health problems, cognitive behavioral therapy originated in the West before being disseminated globally. While Saudi Arabia is unique, in that it is at the heart of the Islamic world, it is similar to most other countries in that mental disorders are common. Nonetheless, few studies have examined cognitive behavioral therapy in Saudi Arabia. In this scoping review, cognitive behavioral therapy training, practice, and research in Saudi Arabia were explored by searching several English and Arabic databases. Various education and training programs were outlined. Moreover, cognitive behavioral therapy practice in Saudi Arabia in public and private settings was discussed. Published studies were grouped by themes into attitudes toward CBT, adaptation, and effectiveness. Recommendations for improvement are also discussed.

Keywords Cognitive behavioral therapy · Saudi Arabia · Training · Practice · Research

Saudi Arabia is at the heart of the Islamic world, where the two holiest mosques in Islam are located. It is also in the heart of Arab countries, located in southwestern Asia. As of 2021, it had a total population of 34 million (General Authority for Statistics, 2021); it is considered a high-income country and ranks 35th of 191 countries on the Human Development Index (United Nations Development Programme, 2022).

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According to the Saudi National Mental Health Survey, approximately 34% of the population suffer from a mental disorder, with the highest rate of reported symptoms among women and the young and anxiety disorders the most common type (23%). Of those suffering from a disorder, only 28% have received treatment, including non-healthcare, such as herbal or spiritual treatments (Al-Subaie et al., 2020a, 2020b). Mental health services are a key component of healthcare delivery in Saudi Arabia and are considered a vital part of the healthcare system. These services are provided by various mental health professionals, such as psychiatrists, psychologists, and social workers, who work in various settings. These services include inpatient and outpatient clinics, psychological testing centers, and counseling centers. Community services are not well established; however, the Ministry of Health is working to improve them (Al-Subaie et al., 2020a, 2020b).

Cognitive behavioral therapy (CBT) is a psychological treatment approach that focuses on modifying unhelpful cognitions and behaviors associated with an individual's current difficulties. This approach is designed to change maladaptive thinking patterns that can be associated with anxiety, depression, and eating disorders and to increase motivation and the development of more positive life attitudes. It is thought to improve emotional health and well-being, decrease anxiety, and reduce emotional symptoms such as worry, guilt, anger, and shame (Hofmann et al., 2012).

Studies of CBT in Saudi Arabia are scarce, and no reviews on this topic have been published. Saudi Arabia is currently undergoing a health system reform; thus, up-to-date information on various types of interventions, including CBT, is required (Alasiri & Mohammed, 2022). Moreover, Saudi Arabia is considered the leader of Arabic and Islamic worlds, and examining CBT in Saudi Arabia will assist other countries that consider Saudi Arabia a role model. This review aims to determine the status of CBT in Saudi Arabia with a focus on education and training, quality of services, and available research.

CBT Training in Saudi Arabia

CBT training in Saudi Arabia has increased in recent years, with a growing number of universities and institutions offering CBT-related courses and workshops. For instance, King Saud University offers a high diploma program in CBT for mental health professionals approved by the Saudi Commission for Health Specialties (King Saud University, 2023). In addition to formal programs and courses, many private institutions offer workshops and training courses in CBT for mental healthcare professionals to enhance their skills and knowledge. A master's degree is the minimum requirement for independent practice for a clinical psychologist in Saudi Arabia, where for a psychiatrist, holding board of psychiatry is the minimum requirement.

Undergraduates

There are 29 public universities and 38 private universities and colleges in Saudi Arabia. Only 15 have undergraduate psychology programs (Saudi Ministry of

Education, 2023), all of which are colleges of education with the exception of Prince Nourah University, which has two separate programs, one in its health college and the other in its college of education. Almost all universities teach psychology in Arabic except for the clinical psychology major at Prince Nourah University. These undergraduate programs include courses that include the theory of CBT.

Postgraduate

Although undergraduate psychology majors began in the 1970s in Saudi Arabia, postgraduate clinical psychology programs only emerged later. Five years ago, there were only two master's programs in clinical psychology and no PhD or PsyD programs. A few high-level diplomas exist in clinical psychology and CBT (Algahtani et al., 2017), and a few universities have announced that they will offer master's clinical psychology programs in the future.

Clinical Psychology High Diploma

The first high diploma in clinical psychology was offered at King Faisal Specialist Hospital in Jeddah in 2003. This 18-month full-time program included assessments and psychotherapy. Unfortunately, it ended in 2006, and only two batches graduated (Diploma in Clinical Psychology, 2003). A second attempt was made in 2017, when a high diploma in clinical psychology was introduced at the Saudi Commission for Health Specialties but lasted only 1 year (High Diploma in Clinical Psychology, 2017).

CBT High Diploma (KFSH-Jeddah)

The first postgraduate program for CBT in Saudi Arabia was established in Jeddah City at the King Faisal Specialist Hospital in 2012. This was a 1-year, part-time program. The teaching and training were conducted in English. It continued for a few years.

CBT High Diploma (KSU)

In 2014, the Department of Psychiatry, College of Medicine, King Saud University, Riyadh City, in collaboration with SABIC psychological health research and applications, established a CBT high diploma. This was a 1-year, part-time Arabic program that accepted 12–16 trainees each year. It continued until 2019, when it was put on hold for logistical reasons (King Saud University, 2023).

Imam Abdulrahman Bin Faisal University's Clinical Psychology Master's Program

Imam Abdulrahman Bin Faisal University's Master's of Science in Clinical Psychology program in Dammam City prepares students for entry-level positions in the field by providing instructions and hands-on experience. They teach and develop the theoretical knowledge and clinical skills needed to function effectively as a team

member in the mental health field. It is a 2-year full-time program that includes two CBT courses with more than 1000 h of practicum and a thesis (Imam Abdulrahman Bin Faisal University, 2018).

Tabuk University Clinical Psychology Master's Program

The University of Tabuk established the first Saudi clinical psychology program subject to international standards in clinical psychological training. The closely supervised training is equivalent to 1000 clinical hours over three semesters. The first batch of Saudi clinical psychologists (13) graduated from this program in 2013 (Tabuk University, 2021).

Alfaisal Clinical Psychology Master's

King Fahad Medical City (KFMC) and the College of Medicine, Alfaisal University, jointly provide the clinical component of a Master's of Clinical Psychology. The program's courses are structured as an applied curriculum and include a research/capstone project. The National Neuroscience Institute at KFMC's Mental Health Department is the site for most of the practical components of the courses. The ultimate objective is to provide graduates with the skills necessary to participate in the diagnosis and treatment of psychological problems. It also aims to contribute practically to the field of research in order to improve the efficacy of preventive and treatment strategies (Alfaisal University, 2023).

Princess Nourah University Clinical Psychology Master's

This is a 2-year full-time program, with a first year consisting of coursework and a second year featuring practicums and research. A unique aspect of this program is that it accepts female students only (Princess Nourah bint Abdulrahman University, 2023).

Doctoral Level

Some universities in Saudi Arabia offer counselling psychology doctoral programs. Most of them include CBT as a modality for intervention. A few universities have started to offer clinical psychology doctoral program; however, no students have graduated yet.

Saudi Board of Psychiatry

All trainees for the Saudi Board of Psychiatry must complete two cases of psychotherapy under supervision, one of which is usually treated with CBT. Residents attend lectures and seminars on various forms of psychotherapy. Psychotherapists, who are either psychiatrists or psychologists, supervise residents from the second year of training to the fourth (Saudi Commission for Health Specialties, 2022).

Continuous Education

Over the past few decades, many short CBT training courses and workshops have been conducted in Saudi Arabia. Initially, these training courses were delivered in cooperation with international CBT bodies such as the Beck Institute in the USA and the Oxford Cognitive Therapy Center in the UK. For example, in 2008, the Oxford Cognitive Therapy Center delivered an 8-day introductory CBT course in cooperation with King Faisal Specialist Hospital (Arabpsynet, 2008). Recently, local universities and training centers have begun to deliver these courses independently in Arabic. This helps disseminate skills to therapists who are not fluent in English. After the COVID-19 pandemic, some courses have been delivered online.

Delivery and Adaptation of CBT in Saudi Arabia

CBT in Saudi Arabia is delivered in two main settings: governmental and private. Government settings include mental health hospitals called Eradah (Alamal previously) and psychiatric/psychological outpatient clinics in general hospitals. Private settings are primarily based in outpatient clinics. The majority of CBT therapists are psychologists, although some psychiatrists have received training and provide formal CBT sessions; very few family medicine doctors have received training in CBT and provide CBT sessions. Unfortunately, there is a significant shortage of CBT therapists in Saudi Arabia. Patients must wait 6–12 months in government hospitals to start CBT. In April 2020, the King approved a new national plan for psychology and psychotherapy improvement. This includes many levels of clinical psychology and psychotherapy education, training, and provision (Saudi Health Council, 2020). There is no national or local CBT or psychotherapy association in Saudi Arabia.

CBT Research in Saudi Arabia

Studies that focused on CBT in Saudi Arabia were included in the review. We included all peer-reviewed journal papers published up to July 2023 and written in English or Arabic. All study types were included: quantitative, qualitative, and mixed method. Studies were excluded if they did not focus on CBT or Saudi Arabia, even if they were conducted by Saudi authors.

PubMed, PsycINFO, and the Saudi Digital Library were searched to identify studies on CBT in Saudi Arabia. The key search terms were (1) Psychotherapy OR Psychological Therapy OR Psychological Treatment OR Cognitive-Behavioral Therapy OR Cognitive Therapy OR CBT OR Internet delivered Cognitive-Behavioral Therapy OR iCBT and (2) Saudi Arabia OR Saudi OR Kingdom of

Saudi Arabia. Some studies were included through personal contact with the authors, especially unpublished theses. The studies can be categorized by theme into attitudes toward CBT, adaptation, and effectiveness.

Attitudes

In the past, stigma was a big barrier for access to psychological treatments in Saudi Arabia. However, recently, positive changes occurred. Most mental health services have waiting lists, indicating high need among the Saudi population. This change can be attributed to awareness among the young population where 63% of the Saudi population is less than 30 years old (Reuters, 2023). One study found that stigma toward mood disorders among patients was lower in Saudi Arabia than in Canada and Korea (Alateeq et al., 2018). Moreover, people in Saudi Arabia prefer psychotherapy over medications and self-help in depression treatments (AlHadi et al., 2018). This positive attitude toward psychotherapy in Saudi Arabia has aided in CBT acceptance and increased CBT practice and training.

We found several studies that addressed attitudes toward CBT in Saudi Arabia. One study evaluating the preferences, knowledge, and attitudes of 464 Saudi parents in Riyadh with regard to CBT for their children found that they had average knowledge about CBT and positive attitudes toward the therapy. Male participants had better knowledge than female participants, and those with higher education and income had more favorable attitudes. The study suggests that parental knowledge is inadequate, indicating the need for greater awareness and mass education. However, the parents did hold positive attitudes and were interested in evidence-based treatment, preferring non-psychopharmacological interventions (Alenezi et al., 2021).

Another study aimed to determine the perceptions of general practitioners and family medicine physicians in Saudi Arabia regarding the use of CBT for depression. A cross-sectional survey of 469 physicians was conducted, with 53% reporting a positive perception of CBT in primary healthcare settings. Most participants were willing to use CBT if they had received adequate education and training. However, 59% of participants found CBT to be time consuming, while 39% found it time intensive. The most common barrier to CBT implementation was a lack of training and education (AlHadi et al., 2021).

A third study assessed mental healthcare professionals' knowledge, attitudes, and preferences with regard to computerized CBT (cCBT) in Saudi Arabia. Most of the 121 participants expressed uncertainty and lacked knowledge of cCBT. However, they showed positive attitudes toward the use of computers in therapy and believed in the efficacy of cCBT. Possession of a clinical license and cCBT experience were correlated with higher cCBT knowledge. Although professionals need more education in cCBT, their overall attitudes toward and comfort with using computers suggest the potential for its implementation. Further research is necessary to assess patient acceptance and effectiveness in the Saudi population (AlHadi et al., 2021).

Adaptation

CBT is influenced by Western values and may require modifications for non-Western clients. A study conducted in Saudi Arabia and Bahrain aimed to understand the views of patients, caregivers, and mental health professionals regarding CBT to develop guidelines for culturally adapting CBT for depression and anxiety. The findings highlighted the barriers to access and the strengths of CBT, with patients and caregivers using a bio-psycho-spiritual-social model. Therapists emphasized the need for local idioms, culturally appropriate translations, and minor adjustments in therapy. The findings were intended for use to culturally adapt a CBT manual for a randomized controlled trial (Algahtani et al., 2019). For example, instead of using the verbatim translation “automatic thoughts,” we suggest using “spontaneous thoughts” instead, as this is clearer in the Arabic language.

Almansour et al. conducted a Ph.D. thesis study at Newcastle University (UK) of a CBT model for generalized anxiety disorder (GAD). Adopting a case study model, they used CBT to target intolerance of uncertainty (CBT-IU) and other related processes. The study examined the effectiveness of CBT-IU for GAD in two adult women from Saudi Arabia for whom English was not the primary language. The results showed that CBT-IU was effective in reducing the clients’ worry and increasing their tolerance of uncertainty. The reduction in the clients’ worrying was sustained when assessed again after a 6-month follow-up (Almansoor et al., 2019).

Effectiveness

Studies of the effectiveness of CBT in Saudi Arabia are limited. Only three randomized controlled studies have been conducted. Few case–control and case-report studies have been conducted. These studies are summarized below.

An Internet-based CBT program was tested on menopausal women with sleeping difficulties. In a randomized controlled trial, the CBT intervention group showed improved sleep quality scores, reduced insomnia index scores, increased total sleep hours, better sleep efficiency, and decreased sleep latency compared to the control group. A short duration since menopause, severe hot flashes, and sleep difficulties were predictors of poor sleep quality. Internet-based CBT was recommended as a practical and effective intervention for managing sleep difficulties in menopausal women (Abdelaziz et al., 2022).

A second study evaluated the application and utility of the Saudi Arabia Networking for Aiding Diabetes system for supporting Saudi type 2 diabetes adult patients. Three modules were included: a smart mobile diabetes management module, a social networking module, and a CBT module (CBT-M). A randomized controlled trial involving 20 patients showed significant changes in HbA1c levels, diabetes knowledge, and self-efficacy scores in the intervention group. The study demonstrated the acceptable and feasible use of this system to support diabetes care in Saudi Arabia (Alanzi et al., 2018).

A third study, conducted by librarians, aimed to explore the effectiveness of CBT and study skills training using bibliotherapy for female college students coping with examination stress. The experimental group used self-help materials over 16 weeks, resulting in a significant decrease in examination stress compared to the control group. The intervention model showed promise for reducing examination stress among undergraduates, and suggested that librarians could play a role in healthcare using similar techniques (Hamdan et al., 2021).

Dr. Yousra Alatiq has published four CBT studies in Saudi Arabia. A study examining the feasibility and benefits of transdiagnostic CBT (T-CBT) for four female patients showed positive effects on depression, anxiety, and general functioning. However, the small sample size and simple design of this study limited its validity. Further research is required to confirm the findings. It is worth to mention that transdiagnostic CBT, a treatment method for mental health problems, has potential benefits in Saudi Arabia, where available therapists are limited in number (Alatiq, 2014).

A second study assessed the feasibility and benefits of using T-CBT in Saudi Arabia to treat adult emotional disorders. A naturalistic open trial was conducted with 198 patients. The results showed a significant decrease in all outcome measures. The study supports T-CBT as a low-intensity intervention delivered by junior psychologists but the study was limited in terms of the sample size of individuals who completed the treatment and were discharged (Alatiq & Al Modayfer, 2019).

A third study was attempting to replicate a feasibility trial demonstrating the potential of T-CBT to improve emotional disorders in Saudi Arabian adults. A total of 276 patients were analyzed, of whom 39.9% completed the treatment plan and 60.1% disengaged. The results revealed large effect sizes for both groups, with medium effect sizes for the disengagement group. The study supported the suitability of T-CBT for Saudi Arabian patients with emotional disorders and highlighted its application in clinical settings (Alatiq, 2021).

The term “family accommodation” in relation to patients with obsessive–compulsive disorder involves a family member assisting or facilitating the compulsion or acting in another way to reduce the sufferer’s anxiety. This condition can be disabling for both the individual and family dynamics. One case report showed that family-based CBT was successful in treating a 14-year-old female patient in Saudi Arabia (Alatiq & Alrshoud, 2018).

Published Studies in Arabic

A search of Arabic databases revealed a few studies, including master’s and PhD theses, focusing mainly on the effectiveness of CBT for a variety of conditions. These conditions included depression, anxiety, quality of life, and addiction relapse. However, most of the studies had small sample sizes (Alahmari, 2020; Al-anazi & Kahlah, 2016; Blhamar, 2020; Hakami, 2020).

For example, one study aimed to evaluate the effectiveness of a CBT program in reducing the symptoms of sound sensitivity disorder (misophonia) among university students. The pilot study involved 22 students with high scores on the Sensitivity Disorder Scale and associated symptoms, while the clinical study involved 11

students. The results showed statistically significant differences between the intervention and control groups on the sensitivity scale and for the associated symptoms (Katabh, 2021).

Another study assessed the effectiveness of a CBT group therapy program in reducing depression among tramadol addicts in Jeddah, Saudi Arabia. Twenty-four participants were divided into control and experimental groups, with the therapy program being applied to the experimental group. The results indicated significant differences in favor of the experimental group, confirming the efficacy of the program for reducing depression (Alsulaiman, 2022).

Almost all information and reviewed studies that have been mentioned in this review regarding attitude, training, and practice included men and women. The exception is Prince Nourah University teaching programs (undergraduate and post-graduate): they accept females only.

Discussion

Saudi Arabia's universities and institutions are increasing their CBT training, including advanced diploma programs and workshops for mental healthcare professionals. Despite the availability of these training programs and courses, there is a significant need to improve and expand CBT education and training in Saudi Arabia. This is especially important given the high prevalence of anxiety disorders and other mental health issues in Saudi Arabia, as well as the need for effective treatments for these conditions (Al-Subaie et al., 2020a, 2020b). Moreover, research suggests that many mental health professionals in Saudi Arabia have limited knowledge and experience of CBT, indicating the need for ongoing education and training to ensure that these professionals can provide high-quality, evidence-based CBT services to patients (AlHadi et al., 2021). This underscores the importance of ongoing efforts to improve CBT education and training in Saudi Arabia by establishing regular professional development opportunities and incorporating CBT into mental healthcare curricula at universities and training programs. Furthermore, efforts should be made to ensure that CBT training programs and courses are adapted to the local context of Saudi Arabia, taking into account cultural and religious factors that may influence the effectiveness and acceptability of CBT for patients in this region. These efforts should involve collaboration with international CBT experts and draw on best practices from around the world. This will help ensure that CBT education and training in Saudi Arabia are of the highest quality and reflect the latest evidence-based practices and approaches. Moreover, it is important to establish mechanisms for monitoring and evaluating the implementation of CBT training programs in Saudi Arabia to ensure that they meet their intended goals and objectives and to identify areas for improvement. Furthermore, high-quality research is needed to evaluate the effectiveness of CBT in Saudi Arabia and identify potential barriers to its implementation. This will help identify ways to improve CBT training and education in Saudi Arabia and inform the development of culturally appropriate and effective CBT interventions for mental health disorders there. Establishing a Saudi CBT association is highly recommended. This will help bring professionals together and improve the

current status of CBT in Saudi Arabia. However, potential barriers exist to achieving these goals. First, the number of CBT trainers who speak Arabic and know the culture well is limited. Second, CBT training and educational resources available in the Arabic language are limited. Third, convincing the decision makers in the government regarding the importance of CBT is challenging.

The findings of this review can be generalized to the countries that share the Arabic language and culture, such as the Arab Gulf countries (Kuwait, Bahrain, Qatar, United Arab Emirates, Oman). Moreover, the main concepts regarding acceptance of the model from the religious perspective can be applied to other Islamic countries, albeit after considering language differences.

This scoping review has several limitations. Only one author participated in this review, and independent or duplicate checking was not possible. In addition, many master's and PhD theses have not been published or are inaccessible online, having been deposited only in the university library or repository.

In conclusion, there is a need for ongoing efforts to improve CBT education and training in Saudi Arabia. These efforts should be prioritized and supported by the relevant professional organizations, governmental agencies, and mental healthcare institutions in Saudi Arabia to ensure that mental health professionals have access to high-quality CBT education and training to enhance their skills and knowledge for the effective treatment of mental health disorders. This will ultimately lead to improved patient outcomes and increased access to evidence-based mental healthcare services in Saudi Arabia.

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Data Availability The author affirms that all data produced or examined in this study are incorporated within this published article. Additionally, both primary and secondary sources, along with the data corroborating the finding of this study, were all accessible to the public at the time of submission.

Declarations

Conflict of Interest The author declares no competing interests.

Disclaimer The funding source had no involvement in the study.

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