Internet Interventions 2 (2015) 32–38

Contents lists available at ScienceDirect

Internet Interventions

journal homepage: www.invent-journal.com/

A feasibility open trial of guided Internet-delivered cognitive behavioural therapy for anxiety and depression amongst Arab Australians

Rony Kayrouz *, Blake F. Dear, Luke Johnston, Milena Gandy, Vincent J. Fogliati, Joanne Sheehan, Nickolai Titov

Centre for Emotional Health, Department of Psychology, Macquarie University, Sydney

ARTICLE INFO

Article history:
Received 22 October 2014
Received in revised form 1 December 2014
Accepted 1 December 2014
Available online 13 December 2014

Keywords:
Arab Australians
Anxiety
Depression
Internet-delivered treatment
Transdiagnostic

ABSTRACT

The present study examined the preliminary efficacy and acceptability of a culturally modified therapist-guided cognitive behaviour therapy (CBT) treatment for Arab Australians, aged 18 years and over with symptoms of depression and anxiety. To facilitate ease of use, the treatment was delivered via the Internet (Internet CBT; iCBT). Eleven participants with at least mild symptoms of depression (Patient Health Questionnaire 9-item (PHQ-9) total scores > 4) or anxiety (Generalised Anxiety Disorder 7-item (GAD-7) total scores > 4) accessed the online Arab Wellbeing Course, which consisted of five online lessons delivered over 8 weeks. Measures of depression, anxiety, distress and disability were gathered at pre-treatment, post-treatment and 3-month follow-up. Data were analysed using mixed-linear model analyses. Ninety-one percent (10/11) of participants completed the five lessons over 8 weeks, with 10/11 providing post-treatment and 3-month follow-up data. Participants improved significantly across all outcome measures, with large within-group effect sizes based on estimated marginal means (Cohen's *d*) at post-treatment ($d = 1.08$ to 1.74) and 3-month follow-up ($d = 1.53$ to 2.00). The therapist spent an average of 90.72 min ($SD = 28.98$) in contact, in total, with participants during the trial. Participants rated the Arab Wellbeing Course as acceptable. Caution is needed in interpreting the results of the current study given the small sample size employed, raising questions about the impact of levels of acculturation and the absence of a control group. However, the results are encouraging and indicate that, with minor modifications, western psychological interventions have the potential to be of benefit to English speaking Arab immigrants.

1. Introduction

Anxiety and major depressive disorders occur in approximately one in five Australians over a 12-month period (Slade et al., 2009) and similar rates of disorders have generally been found across cultures (Kessler et al., 2009), including Arab populations in Lebanon (Karam et al., 2006) and Iraq (Alhasnawi et al., 2009). In the last 15 years, the Arabic-speaking communities in Australia (*Arab Australians*) have grown by about 50% (Australian Bureau of Statistics, 2006, 2011) and are now the sixth largest group of immigrants to Australia (Australian Bureau of Statistics, 2011). A recent study examining mental health service use amongst Arab Australians ($n = 251$) found that 32% of the sample had elevated levels of psychological distress, only 18% of whom reported seeking treatment from a mental health professional (Kayrouz et al., 2014). Barriers to treatment included low mental health literacy, lack of time and the shame associated with seeking mental health treatment (Kayrouz et al., 2014). However, 90% reported they would be willing to try a psychological treatment for symptoms of anxiety and depression. Culturally adapted psychotherapy offers one way to address barriers and reduce psychological distress.

A key question, however, is whether or how to adapt psychological treatments for immigrant populations, such as Arab Australians and other culturally and linguistically diverse communities (CALD). Cultural adaptation has been defined as "the systematic modification of an evidence-based treatment or intervention protocol to consider language, culture, and context in such a way that it is compatible with the client's cultural patterns, meanings, and values" (Bernal et al., 2009, p. 362). Importantly, increasing the compatibility between a psychological treatment protocol and a client's value and meaning base is thought to enhance an individual's engagement with treatment. Improved engagement is likely to result in increased exposure to and use of the treatment materials, which, in turn, could result in increased therapeutic benefit. Consistent with this, a recent meta-analysis reported that culturally adapted psychotherapy was more efficacious than unadapted psychotherapy (Benish et al., 2011) for CALD populations. Unfortunately, however, this meta-analysis did not include any studies focussed on Arab immigrants.

* Corresponding author at: eCentreClinic, Centre for Emotional Health, Department of Psychology, Macquarie University, North Ryde 2109, Australia. Tel.: +612 9850 9643; fax: +612 9850 8062.
E-mail address: rony.kayrouz@students.mq.edu.au (R. Kayrouz).

http://dx.doi.org/10.1016/j.invent.2014.12.001

Another important issue is whether cultural adaptation is possible for heterogeneous immigrant groups, which comprise of multiple smaller identifiable groups with their own experiences, beliefs and values, such as Arab immigrants. The Arab world is defined as the countries where Arabic is the national language and consists of 22 countries and territories across North Africa and the Middle East. Mohit (2001) argues that, while meaningful heterogeneity does exist, there are also unifying characteristics across the Middle East beyond language, such as the role of religion, which unifies many Arabs in their conceptualisation of mental illness.

For example, while modern Arab psychiatry has adopted the etiopathogenesis model of mental illness based on the DSM model (Carnevali and Masillo, 2007-2008), there remains a dominant Arab model of distress and mental health associated with supernatural processes and religion. For this reason, religion plays a critical role in the mental health of individuals, families and communities (Nassar-McMillan and Hakim-Larson, 2003), with life stressors often being viewed as a test of faith (Abu-Ras and Abu-Bader, 2009). For many Arab Muslims and Christians, severe distress and mental health is believed to be caused by the possession of jinn (i.e., spiritual beings) or the devil, respectively. Thus, mental illness may arise as a result of 'weak faith' and can be viewed as a form of punishment from God (Al-Krenawi and Graham, 2000). Based on this model, many Arabs avoid treatment based on the fear that divulging their story may result in a stigmatising label of 'majnun' (i.e., being 'crazy') and a person of 'weak faith', which may jeopardise the individual and their family's standing in the community.

Contemporary Western psychological treatment models, such as cognitive behavioural therapy (CBT), may potentially help to reduce stigma by virtue of their focus on current issues, and their emphasis on the use of practical skills for managing symptoms of distress, anxiety and depression. Such models are also compatible with Arab treatment preferences, which include that treatment is short-term, directive and does not require divulging of one's story (Al-Krenawi and Graham, 2000). Consistent with this, two trials have explored the efficacy of CBT amongst Arab people with post-traumatic stress disorder and reported positive outcomes (Stenmark et al., 2013; Wagner et al., 2012). Further, there is emerging evidence that Arabs are becoming more open to mental health treatment (Al-Krenawi, 2002; Al-Krenawi et al., 2009; Al-Krenawi and Graham, 2011; Kayrouz et al., 2014). Thus, there is good reason to believe that certain contemporary Western psychological treatments are potentially suitable for Arab individuals with anxiety and depression and there is some encouraging evidence to support this.

Recent developments in methods of delivering psychological treatments, such as the use of Internet-delivered CBT (iCBT), provide another opportunity to increase treatment seeking by Arab people, by offering privacy and increased anonymity (Andersson and Titov, 2014; Titov, 2007, 2011). One example of an iCBT intervention is the Wellbeing Course; a five-lesson online transdiagnostic treatment targeting symptoms of anxiety and depression and based on CBT (Titov et al., 2013). The Wellbeing Course is a structured skills-based course that focuses on teaching practical evidence-based psychological skills (e.g., realistic thinking, assertiveness, behavioural activation and graded exposure) that assist in the management of symptoms of anxiety and depression. Psychotherapeutic change is believed to occur when people learn, practice and adopt adaptive cognitive and behavioural habits that promote emotional wellbeing (Titov et al., 2012, 2013). This course has been evaluated in several clinical trials (Kirkpatrick et al., 2013; Titov et al., 2013, 2014) and is now used at an Australian national treatment service, the *MindSpot Clinic*, www.mindspot.org.au.

The present study aims to examine the feasibility and efficacy of a culturally adapted version of the Wellbeing Course, the Arab Wellbeing Course, to treat symptoms of anxiety and depression amongst Arab Australians. This intervention was administered via the Internet for several reasons, including to reduce barriers to accessing treatment associated with stigma, and the increased flexibility and convenience associated with this mode of administration. Because of the absence of previous research exploring the efficacy of CBT treatment for Arab people experiencing depression or anxiety, an open-trial design was considered ethically appropriate.

2. Methods

2.1. Design and hypotheses

A single-group open-trial design was utilised to examine the feasibility, acceptability and preliminary efficacy of the culturally modified iCBT Arab Wellbeing Course for Arab Australian consumers. A sample size of 15 was determined as sufficient (one-tailed test, power at 80%, and alpha at .05) to detect within-group Cohen's *d* effect size of .70; the minimum likely effect based on previous studies employing the Wellbeing Course (Titov et al., 2013). This study was approved by the Human Research Ethics Committee of Macquarie University, Sydney, Australia, and registered as a clinical trial with the Australian New Zealand Clinical Trials Registry, ACTRN12163001329752.

It was hypothesised that (1) Arab Australians would show a statistically and clinically significant reduction in the symptoms of depression, anxiety, distress and disability; and (2) Arab Australians would rate the course as worthwhile and would recommend the course to a friend or family member.

2.2. Participants

Interested adults applied online through a clinical research website (www.ecentreclinic.org), which provides information about anxiety and depression and conducts clinical research concerning Internet-delivered treatment. Two phases of recruitment occurred from 7 January 2013 to 4 March 2013 (Phase 1) and 22 April to 16 June 2013 (Phase 2). Details about the study were circulated to participants who expressed interest in future research in a previous online survey (Kayrouz et al., 2014), the research clinic website and social media accounts of the research clinic. Additional promotion of the study was provided during an interview with the lead author published in an Arabic newspaper, personal correspondence between the lead author and more than 100 organisations providing services to Arab Australians, to over 100 Arabic-speaking health providers, and to spiritual leaders of an Arabic-speaking background in Australia.

Over the two recruitment phases, six participants in Phase 1 and five participants in Phase 2 provided informed consent and volunteered to participate. Inclusion criteria were (1) living in Australia; (2) overseas-born or Australian-born person who self-identified as being of Arabic ancestry; (3) between the ages of 18 and 70; (4) having reliable Internet access; (5) not receiving CBT elsewhere; (6) no history of a psychotic condition; (7) a Patient Health Questionnaire 9-item (PHQ-9) score > 4 or a Generalised Anxiety Disorder 7-item (GAD-7) score > 4 indicating at least mild depressive or anxiety symptoms, but not currently experiencing very severe depression (defined as a total score ≥ 23 or a score = 3 on question 9 of the PHQ-9) (Kroenke et al., 2001); (8) if taking medication for anxiety or depression, having been on a stable dose for at least 1 month. Participants who met the inclusion criteria were administered the Mini International Neuropsychiatric Interview Version 5.0.0 (MINI) (Sheehan et al., 1998) to determine if they met diagnostic criteria for an anxiety disorder or depression.

Of the 16 participants who applied to participate, 11 were eligible with 3 participants excluded for incomplete applications, one participant excluded for experiencing very severe depression (i.e., defined as a total score ≥ 23 on the PHQ-9) and the other for being outside the age range (see Fig. 1). The sample had a mean age of 33.6 years (SD = 8.99; range = 24–50) and was comprised of more females (n = 8, 73%) than males. The majority of participants were married (n = 7, 64%), with the remainder single (n = 3, 27%) or separated