

Cross-Cultural, Interdisciplinary Health Studies

# Report of the Psychosomatic Disorders Research, Treatment, and Educational Center at Kashan University of Medical Sciences, Iran since 2012

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#### Report

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## Introduction

The Department of Clinical Psychology was found at the School of Medicine in 2011 to achieve its prime objectives of teaching and research in the field of clinical psychology. Since 2012, in addition educating to postgraduate students, all Undergraduate medical sciences students have been taught in the school. About 60 research projects and near 70 researches published in fairly reputable domestic and international journals are the members' considerable accomplishments. At that time, the institute specialized psychosomatic disorders in the community, with a focus on education. The institute established research projects and appropriate

Corresponding Author: Abdollah Omidi Email: abomidi20@yahoo.com treatment. The center is backed by the Health Technology Center of the Vice Chancellor for Research of Kashan University of Medical Sciences, Kashan, Iran.

To attain the general objective of research in psychosomatic medicine and other mental fields with emphasis on contextual behavioral approach, this department aimed at empowering students in counseling and psychology, research in psychosomatic fields, and utilization of the most recent scientific findings and practical concepts.

#### **Visions**

Extending educational fields of clinical psychology, especially in contextual behavioral science approach

-Acquiring and developing a talented, academic workforce

-Collaborating with Universities around

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the world include.

-Research and developed practice in psychosomatic medicine (such as pain, cancer, cardio vascular disease, stress related disease, obesity and emotional eating, Illness anxiety, etcetera)

Our center offers clinical education and training programs for students and researchers. In particular, it presents a curriculum aimed at nurturing clinical research, which was developed jointly with University Hospital Clinical Alliance. Psychologists and physicians appointed based on recommendation from clinical departments concurrently serve as They also centrally instructors. manage clinical research and disseminate information on education and training programs. Some of the researches undertaken in our center are in the field of psychosomatic disorders; the topics of which have been explained in the following sections.

One of the research fields was headache. In individuals with tension headache, a randomized controlled clinical trial (RCT) examined the effect of mindfulness-based stress reduction on pain severity and mindful awareness (Omidi & Zargar, 2014). Another RCT examined the effects of mindfulnessbased stress reduction (MBSR) on perceived stress and psychological health in the same population (Omidi, & Zargar, 2015). Furthermore, in patients with chronic daily headache (CDH), an RCT studied the effectiveness of acceptance and commitment (ACT) on cognitive therapy regulation (ER) strategies, headache-related disability, and headache intensity (Khazraee, Omidi, Daneshvar Kakhki, Zanjani, & Sehat, Additionally, in people migraines, one study can be mentioned that has focused on the role of coping strategies and beliefs related to pain in disability due to migraine (Gilasi, Omidi, Gharlipour, Tavassoli, Haghir, & Sorkhabi, 2014), and another study in which the construct and convergent validity and reliability Psychological Inflexibility in Pain Scale

(PIPS) has been evaluated (Abdollah, O., Zahra, Z., Mohammad Hosein, F. K., & Reza, D. K. 2018).

Another field in which research is carried out in the center is head injury. One study compared ER problems in patients with mild traumatic brain injury (mTBI) and healthy individuals (Shafiei, Fakharian, Omidi, & Akbari, 2016). Another study compared emotions and difficulties in ER between individuals with mTBI and healthy Zargar, individuals (Mohammadi, Malekpour, Omidi, Akbari, 2018). A Similar study compared difficulties in ER between patients with mTBI and normal controls (Shafiei, Esmaeil, Nademi, Omidi, Sharifi, & Akbari, 2018). The mental status and disorders of patients with head injuries have also recieved much attention. One study assessed the mental status of patients with mTBI (Fakharian, Omidi, Shafiei, & Nademi, 2015), and another research studied the factors effective on the prediction of mental disorder in patients with mTBI based on logistic regression (Shafiei, Fakharian, Omidi, Akbari, & Delpisheh, 2016a). Furthermore, in one study, mental disorders were predicted TBI using principle component approach (Nademi, Shafiei, Fakharian, & Omidi, 2018). The effect of mTBI and demographic factors on psychological outcome has also been studied in a study by Shafiei, Fakharian, Omidi, Akbari, Delpisheh (2016b). In addition, Shafie, Fakhariyan, Omidi, and Nademi (2019) investigated the effect of mTBI on intelligence and memory function in motorcycle riders). In addition, a prospective cohort study was conducted on visual spatial working memory in patients with mild brain injury using the Benton Visual Retention Test (BVRT) (Shafiei, Fakharian, Omidi, Akbari, & Delpisheh, 2017). Some of the researches conducted by this center have also compared the methods used to predict post-traumatic disorder. Moreover, two researches patients with mild brain injury have compared an artificial neural network with

logistic regression in predicting posttraumatic mental disorders (Shafiei, Nademi, Fakharian, & Omidi, 2017; Shafiei, Fakharian, Omidi, Akbari, Delpisheh, & Nademi, 2016). The same comparison was performed in predicting psychological symptoms six months after mTBI (Shafiei et al., 2017).

Eating disorders is another field of research in this center. An RCT conducted on the effect of dialectical behavior therapy (DBT) on binge eating, difficulties in ER, and BMI in overweight patients with binge-eating disorder (BED) (Rahmani, Omidi, Asemi, Akbari, 2018). In addition, two studies examined unified therapy. A single-blind RCT examined the effect of dialectical behavior therapy on binge eating and difficulties in ER in patients with BED (Rahmani, Omidi, Asemi, & Akbari, 2018). Furthermore, an RCT studied the effect of unified transdiagnostic therapy on the quality of life (QOL) of patients with eating disorder (Rahmani, Omidi, & Rahmani, 2018).

This center has also extended its research to smokers and substance abusers. An RCT has examined the effects of ACT on comorbid depression and anxiety symptoms smoking cessation in male smokers (Davoudi, Omidi, Sehat, & Sepehrmanesh, 2017) and a study has compared anxiety and depression symptoms between male daily smokers and nondaily smokers (Davoudi, Omidi, & Sehat, 2017). Moreover, a doubleblind RCT has examined the effects of oxytocin on withdrawal, craving, and stress heroin-dependent response in patients (Moeini, Omidi, Sehat, & Banafshe, 2019).

Other studies conducted by the researchers of the center are related to irritable bowel syndrome (IBS). Two of these studies have focused on the QOL of people with IBS (Jamali, et al., 2012; Jamali, Raisi, Matini, Moravveji, Omidi, & Amini, 2015).

Another population chosen by the researchers of this center is pregnant women. Among these investigations, two clinical trials have employed mindfulness training.

One of them has examined the effect of mindfulness-integrated cognitive behavior therapy on depression and anxiety (Yazdanimehr, Omidi, Sadat, & Akbari, 2016) and the other has examined the effect of mindfulness training on QOL (Yazdanimehr, Omidi, Akbari, & Sadat, 2016).

At this center, one of the varied fields of study that the researchers have focused on is obsessive-compulsive disorder (OCD). Two researches are well worth mentioning; a double-blind RCT that has examined the effectiveness of cognitive behavioral therapy (CBT) and fluoxetine on sexual function of women with OCD (Sabetnejad, Assarian, Omidi, & Najarzadegan, 2016), and a case study in which the effect of aversion therapy has been investigated in a case with conversion disorder associated with mood disorder and OCD (Bagherzadeh-Shahidi, Sepehrmanesh, & Omidi, 2013).

Other fields of research have also been of interest to our researchers. In the field of sexual function, for instance, the effects of treatment with sildenafil and CBT on sexual dysfunction in women have been compared (Omidi, **RCT** Ahmadvand, Najarzadegan, & Mehrzad, 2016). A singleblind RCT has been conducted on cardiac patients to examine the effects of MBSR on blood pressure, perceived stress, and anger (Momeni, Omidi, Raygan, & Akbari, 2016). In the field of psychosomatic disorders, an RCT was performed on the effect of ACT on body image flexibility and body awareness (Givehki, Afshar, Goli, Scheidt, Omidi, & Davoudi, 2018). In hemodialysis patients, a randomized, double-blind, parallel-group trial has been conducted to examine the efficacy of MBSR on anxiety and depression (Haghshenas, Assarian, Omidi, Razaghof, & Rahimi, 2019). Furthermore, the effectiveness transdiagnostic, emotion-focused treatment for ER and individual-social adjustment has been examined in a quasiexperimental study on a sample of female students (Omidi, Azimi, Shafiei, & Nademi, 2018). In the field of bipolar disorder, a study

can be mentioned here that has been conducted to determine the effect of DBT on the executive function (EF) of these patients (Afshari, Omidi, & Sehat, 2018). A casecontrol study on veterans with posttraumatic stress disorder (PTSD) can also be noted that has examined the effectiveness of combined mindfulness-based cognitive therapy (MBCT) and MBSR intervention on depression symptoms and QOL (Omidi & Hamidian, 2018). A preliminary study of curriculum design is the last research to be noted in this paper. The study assessed the knowledge and attitudes of medical students graduate students on medicine (Omidi, Mohammadi, Zargar, Mousavi, & Attari, 2012).

#### **Ongoing research projects**

Adaptation and factor structure of the Valuing Questionnaire (VQ) in ACT approach; The effect of DBT on EF in patients with bipolar disorder; Comparison of the effectiveness of exposure and response prevention (ERP) therapy and mindfulness-based ERP therapy on oxidative stress indexes, activity of Na/K ATPase pump in RBC and obsessive symptom in people with contamination/washing OCD; Comparison of emotional reactivity anxiety sensitivity in people with health helathy individuals; anxiety and relationship of spiritual health and mental health with the tendency to use narcotics in the student population of Kashan, Iran; Effect of mindfulness-based stress management therapy on ER, anxiety, depression, and food addiction in obese people; Investigation of the effect of DBT on ER, EF, risky decision-making, and craving in opiate substance use disorder comorbid with attention deficit hyperactivity disorder (ADHD) in adult patients; The effect of DBT on ER, impulsivity, depression, anxiety, and waist circumference overweight and obese adolescent girls; The effectiveness of ACT on anxiety, depression, marital satisfaction, pain acceptance, psychological flexibility, and body composition among patients with breast cancer;

Comparison of the effects of CBT and ACT on function, care burden, experimental avoidance, anxiety, depression, and stress in informal caregivers of patients TBI; Investigation of psychometric properties of the Persian version of the Emotional Reactivity Scale in the students of the University of Kashan, Iran; Effect of MBSR and CBT on emotional strategies, EF, disease activity, QOL, and sleep in patients with rheumatoid arthritis; Comparison of the effect of ERP therapy and mindfulness-based ERP therapy on improvement of clinical symptoms in contamination/washing OCD; Comparison of the effects of CBT and ACT on psychological flexibility, EF, anxiety, depression, and QOL of the patient and caregiver in patients with major depressive disorder (MDD) after TBI; The effect of transcranial direct current stimulation (tDCS) on craving, relapse, and mental health parameters in opiate patients under methadone maintenance treatment (MMT); Comparison of the effectiveness of CBT and DBT on emotional dimensions, QOL, migraine disability, severity of headache, and severity of anxiety symptoms in patients with migraine syndrome with general anxiety symptoms; Comparison of the effectiveness of ACT and CBT on emotional, behavioral, and cognitive components in patients with illness anxiety disorder

# Seminars, congress, and Workshops

Four seminars, two national congresses, and forty five educational workshop were held.

#### **Conflict of Interests**

Authors have no conflict of interests.

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