



# The Effect of Attitude and Prayer-Related Behaviors on Depression: A Systematic Review

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## Abstract

**Background and aims:** Prayer means reading and asking for help and satisfying the need. The prevalence of mental diseases has had an increasing trend in Iran. The aim of this study was to know the role of attitudes and praying-related behaviors in the treatment of patients with depression in Iran.

**Methods:** By searching in the databases such as SID, Magiran, Medlib, Iranmedex, Google Scholar, Web of Science, Scopus, and PubMed, 16 relevant articles were extracted. Data were analyzed by using meta-analysis (random effects model). Moreover, heterogeneity of the studies was checked using Q and I<sup>2</sup> statistics.

**Results:** To examine the relationship between the rate of depression and praying, it analyzed in both case and control groups as pretest and posttest. It was reported that the rate of depression before the test in the case group was 49.4 (95% CI: 34.04-64.04) and in the control group was 27.51 (95% CI: 15.51, 39.51). For the case group, it was reported that the rate of depression decreased to 12.43 (95% CI: 2.4-22.4) and for the control group it was 19.83 (95% CI: 11.8-27.83).

**Conclusion:** The attitude and the praying-related behavior had positive effects on the depression of individuals and it could cause the depression level diminishing. Therefore, this therapeutic approach can be considered as a common method in the treatment of mental disorders and the psychologists and the therapists can use this method for the treatment of their patients in therapeutic centers.

**Keywords:** Depression, Mental health, Meta-analysis, Prayer, Systematic review

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## Introduction

Believing in the power of the Lord and worship in soothing the pain offers human beings the ability to tolerate. It is also causing peace in humans not to experience tension.<sup>1</sup> Behaviors such as relying on God, patience, praying, pilgrimage, etc can provide the internal peace for individuals as believing in the fact that God exists to control the situation and is responsible toward his worshipers can reduce the anxiety associated with the situation to a large extent.<sup>2</sup>

Religious beliefs, faith, religious orders, and religious ceremonies are all factors that can be influential in the treatment and prevention of mental disorders.<sup>3</sup> The use of attitude, training customs, and religious worship, have more favorable results in the treatment of religious. Obviously, as a principle in any therapeutic program, in addition to any cognitive assessment of the referring believers, their demographic characteristics, etc, other required information collected through diagnostic interview is also important, as it is used in the treatment process.<sup>4,5</sup>

In many cultures, in addition to conventional medical treatment, there are organized methods for coping with mental illnesses. In this respect, faith and religious beliefs have always been important and treatment based on the belief in God as a metaphysical force, has an ancient history among various religions followers.<sup>3</sup> By 2 next decades, mental diseases will be the major health priority all over the world. So it is now out of 10 major diseases that cause disability, 4 of them related to mental disorders.<sup>6</sup>

Religious beliefs affect the initial assessment and as a result it can affect the methods of dealing and coping with these events.<sup>7</sup> Different studies have examined the relationship between the application of religious copings and mental health.<sup>8</sup> According to various studies in Iran and all over the world, different results have been reported regarding the effect of praying and its related attitudes on the mental health of individuals. Therefore, this study aims at specifying the effect of attitude and praying-associated behavior on the mental health of individuals in Iran and developing a unified pattern in this regard

by using the meta-analysis study method. Regarding the design of the study, a basis for the implementation of psychological interventions used in the treatment of depression in patients in Iran.

## Methods

### Search Strategy

The internal and the external valid scientific information databases are research sites for data collection purposes in the present study. To do this, all the available articles have been downloaded using and searching the key words: attitude, behavior, prayer, depression, mental health, and Iran in the scientific informational databases such as Magiran, SID, Iranmedex, and Google Scholar. Furthermore, the required search was carried out in the following informational databases by using the key words prayer, depression, mental health, Metacognition, and Iran through Google Scholar, PubMed, Science direct, Web of Science, and Scopus.

### Articles Selection

At first, a list of titles and the abstracts of all the existing articles in the informational databases was prepared and analyzed by the researcher to determine and select the best relevant titles. According to these stages in the first primary search 63 articles were extracted. Next, by examining the titles and the abstracts, 20 papers were

deleted. In addition, by reading the whole texts of the remaining articles 24 further articles were skipped. Three other articles related to a congress, associated with the subject of this study, and not completely published anywhere were also excluded from the study.

Finally, 16 relevant articles were chosen for the meta-analysis survey (Figure 1) and inserted into a format designed and prepared for extracting the data, thus all the information were entered and then the data transferred into Excel software. Then, the data was transferred from Excel software into R and STATA software version 11.2.

### Statistical Analysis

In both the case and the control groups, the mean and standard deviation (SD) before and after the test, scheduling, the year of conducting the research, number of the cases, the author's name, the location of the study, and the result of the test were entered in to the content checklist. Then, the checklist data was transferred to Excel software and entered into SPSS software to perform a series of preliminary data analysis on the data. Furthermore, the data was transferred to STATA software version 11.2 and by this software the meta-analysis process of the data was executed.

Q statistics  $I^2$  index was used by applying Der Simonian and Laird model<sup>9</sup> for examining the consistency among the studies (heterogeneity) because the inconsistency

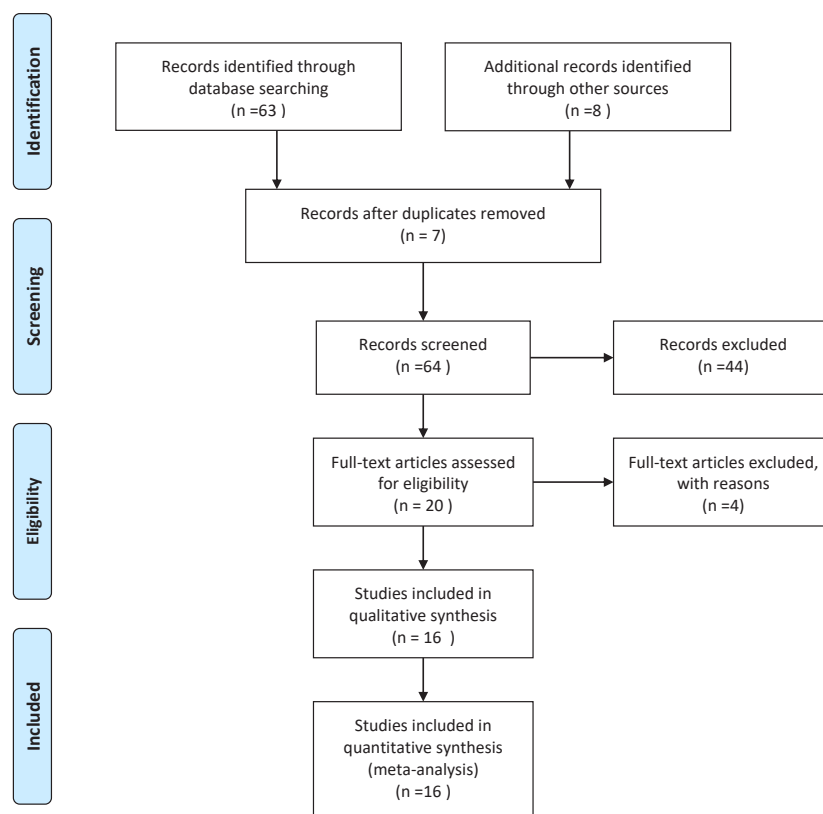


Figure 1. Flowchart of the Data Entry Stages for Systematic Review and Meta-Analysis.

among the studies was significant. The size of the overall effect by using the method of random effect model (sensitivity analysis) was calculated. For analyzing the effect of each study on the overall effect was calculated by the removal of the study from each overall effect model and for checking the relationship between the years and the number of the samples with the effects size, meta-regression was used. Furthermore, for investigating the effect of publication bias, publication bias plot was used.

## Results

In this study 16 articles were used for analyzing the effect of praying and its related behaviors on people's depression in Iran. These studies have been conducted between the years 2000 to 2013 (Table 1). The total number of samples was 1996. Articles specifications are presented in Table 1. Ten of these studies were conducted in one group and 6 studies in 2 groups in order to examine the impact of praying on people's depression. In most of these studies the Paloutzian Ellison Spiritual Health Questionnaire was used. In this study 10 articles were finally selected and entered into the analysis process for investigating the rate of mental health. The estimated value was 76.19 with 95% CI (57.33-95.1) (Table 2 and (Figure 2).

The middle point of each segment indicates mean estimation in every study. The diamond sign indicates the mean for all studies in the whole country. Meta-regression shows that there is not significant relationship between mean of mental health and the year of conducting the study.

The relationship between the depression and praying was analyzed in 2 case and control groups in the stages before and after treatment. The results are presented in Table 3.

It was reported that the mean of depression before the test in the case group was 49.4 (95% CI: 34.04-64.04) and in the control group was 27.51 (95% CI: 15.51, 39.51). It means that the patient group had experienced more depression amount. After having experienced praying by the patient or the case group, the rate of depression after treatment in case group was 12.43 (95% CI: 2.4-22.4) and in the control group it was 19.83 (95% CI: 11.8-27.83). This means that praying in the patient group caused a reduction in depression.

## Discussion

In terms of lexis, the word prayer has several implications and different meanings but all of them have the same intention that is asking for a need and seeking help. The meaning of prayer has a close link with its idiomatic meaning. In this study, 16 articles that have been carried out between the years of 2000 to 2013 were used to analyze the effect of praying and its related behavior on depression in Iran.

The total number of samples were 1996 persons. The relationship between the rate of depression and praying was examined in both case and control groups before and after treatment. The rate of depression before the test in the case group was 49.4 (95% CI: 34.04-64.04) and 27.51 (95% CI: 15.51, 39.51) in the control group.

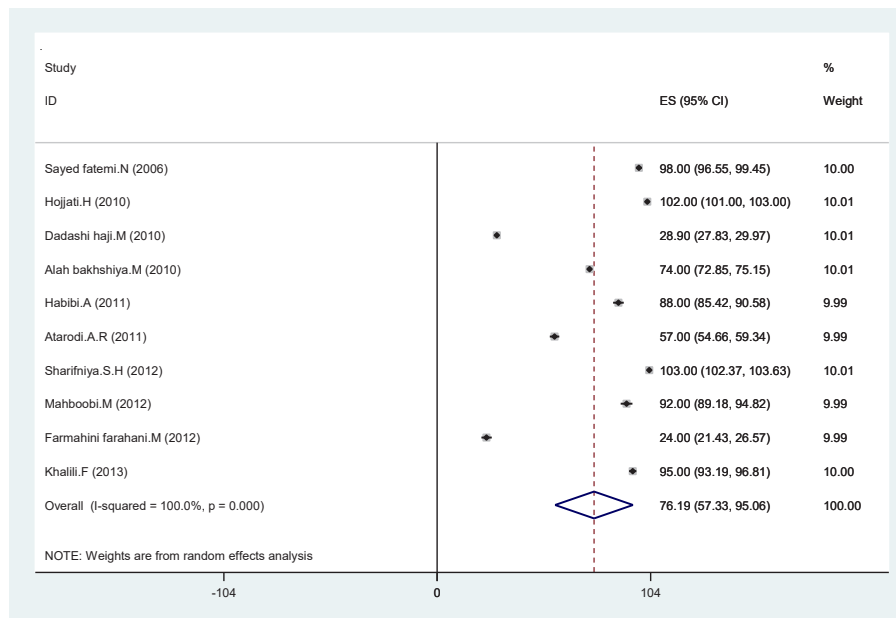
After having the experience of praying by the patients,

**Table 1.** Characteristics of Studies Included in Meta-Analysis

First Author	Publication Year	City	Sample Size	Age Group Mean± SD	Type of Questionnaire
Saied Fatemi <sup>10</sup>	2006	Tehran	189	>20	Mental Health Paloutzian & Ellison
Sharifniya <sup>11</sup>	2012	Amol	44	54±5.1	Mental Health Paloutzian & Ellison
Etefagh <sup>25</sup>	2007	Tehran		-	Clinical examination
Veysi <sup>12</sup>	2012	Ahvaz	15	-	Depression 1 (BDI)
Sedighi <sup>23</sup>	2009	Tehran	69	38±9	Self-efficacy
Hejati <sup>13</sup>	2010	Gorgan	122	47±1	Alterative prayer Maravigilya and mental health Paloutzian & Ellison
Dadashi Haji <sup>14</sup>	2010	Tehran	20		GHQ28 mental health
Mohamadi <sup>15</sup>	2011	Tehran	61	32.5	-
Habibi <sup>16</sup>	2011	Ardabil	68men	43±19	Alterative prayer Maravigilya and mental health Paloutzian & Ellison
Mahbobi <sup>17</sup>	2012	Kermanshah		41±1	Mental health and anxiety Lobitos social
Hejati <sup>18</sup>	2009	Amol	34	66±7	Alterative prayer Maravigilya and mental health Paloutzian & Ellison
Amiri Farahani <sup>24</sup>	2012	Arak	31	20±9.0	Herth mental health and hope GHQ28
Kamyan <sup>19</sup>	2013	Tehran	50	92.47	-
Atarodi <sup>20</sup>	2011	Gonabad	35	13±8.0	-
Allah Bakhshyan <sup>21</sup>	2010	Tehran	83men	36±9	Paloutzian & Ellison mental health, Msis-29
Khalili <sup>22</sup>	2013	Esfahan		67±7	Mental health Paloutzian & Ellison

**Table 2.** Mean  $\pm$  SD of Anxiety, Depression, Physical Health, Mental Health, Attitude Toward Praying, Prayer Experience, and Prayer Ritual Performance of Studies Included in Meta-Analysis

First Author	Anxiety	Depression	Physical Health	Religious Health	Mental Health	Attitude Toward Prayer	Prayer Experience	Prayer Ritual Performance
Saied Fatemi <sup>10</sup>	98 $\pm$ 14		43 $\pm$ 10	54 $\pm$ 5	98 $\pm$ 14	38 $\pm$ 4	51 $\pm$ 7	94 $\pm$ 12
Sharifniya <sup>11</sup>								
Etefagh <sup>25</sup>				103 $\pm$ 3	25.17			
Veysi <sup>12</sup>		28 $\pm$ 3.1						
Hojati <sup>13</sup>			51 $\pm$ 4	50 $\pm$ 5	102 $\pm$ 7	191	198	240
Dadashi Haji <sup>14</sup>			8.6 $\pm$ 4		28 $\pm$ 3			
Mohamadi <sup>15</sup>	17 $\pm$ 6.1	16 $\pm$ 11						
Habibi <sup>16</sup>			44 $\pm$ 8	44 $\pm$ 7	88 $\pm$ 15			
Mahbobi <sup>17</sup>	10 $\pm$ 32		51 $\pm$ 4		92 $\pm$ 14			
Hamid Hojati <sup>18</sup>					75.63	95.73	25.72	6.81
Amiri Farahani <sup>24</sup>					24 $\pm$ 9			
Kamyari <sup>19</sup>					99			
Atarodi <sup>20</sup>					57 $\pm$ 10		98.63	
Allah Bakhshyan <sup>21</sup>			40 $\pm$ 5	34 $\pm$ 4	74 $\pm$ 9			
Khalili <sup>22</sup>			40 $\pm$ 9	54 $\pm$ 7	95 $\pm$ 13			

**Figure 2.** Mean of Mental Health Score and its 95% CI in the Reviewed Articles According to the Name of the Author and the Year of Study Conduction.

the rate of depression decreased to 12.43 (95% CI: 2.4-22.4) in the case group, thus it was 19.83 in the control group. It also was shown that the influence of prayer on reduction of depression in patient was significant.

In a study by Ahmadi Abhari<sup>26</sup> in 1997, they examined the treatment technique based on strengthening the belief in God's mercy on 3 patients with psychiatric disorders. The results showed that the above technique decreased patients' depression levels, which is in line with the results of this study.

In the other study by Khosravipour and Sardavii<sup>27</sup> with the purpose of evaluating the effects of religious values on the duration of treatment, it was found that there

was a significant and a negative correlation between the duration of treatment and the religious values variables in all surveyed patients. The researchers concluded that considering religious beliefs of psychiatric patients and strengthening them especially in depressed patients can be effective in reducing the duration of treatment. The result was consistent with the findings of this study as well.

Noghani and Mohtashami<sup>28</sup> carried out a study in order to determine the effect of Sufi culture education on the rate of depression in 2 groups of teachers in Tehran. Their results showed that there was a reduction in depression in the case group compared to the control

group after participating in the special mystical education classes.

However, the results of Pourgodarzi et al<sup>29</sup> aimed at evaluating the fasting ceremony in Ramadan affecting the mental health of 74 persons reported the lack of influence of fasting on the reduction of the rate of depression. The hypothesis was tested in 2 successive years but none of the changes were statistically significant. The result was consistent with the findings of the present study.

There are many research works related to the effectiveness of religious beliefs in patients with psychiatric disorders such as depression,<sup>30</sup> especially in the treatment and improvement of symptoms in patients with anxiety disorders and depression,<sup>31</sup> bereavement due to the loss of the beloved ones, psychosomatic disorders,<sup>32</sup> personality, psychological, and sexual disorders.<sup>33</sup> These studies showed that the use of religious therapy was obviously effective in treating the above mentioned mental conditions.

Studies have indicated that in addition to the positive effects of belief in God and belief in his power in the treatment of mental and physical diseases, the effect of special religious ceremony on treatment is important.<sup>34</sup> The rate of spiritual health in this meta-analysis study was estimated as 76.19.

The results of the study conducted by Tepper et al<sup>35</sup> on the elderly in 2008 indicated that the rate of spiritual health was 80% and this rate is close to the amount of spiritual health in the present study. However, the results were consistent with those of Wink and Dillon's<sup>36</sup> cohort study and were not in line with our study. It is because of the point that the results of this study represented a significant increase in spiritual health in late Middle age (early middle age 50.6), as well as in the younger members of this cohort study up to the elderly. The difference in the results of this study with our study may be due to the lack of a uniform definition for spiritual health. Another reason for this difference may be the low number of compiled studies in meta-analysis. But, in doing this study, there were also some restrictions, for instance, some selected samples for the study were not based on random selection. Another reason may be attributed to the limited number of the surveyed variables and the unavailability of full text articles.

## Conclusion

Today, more than any other time, it is required to think and contemplate on the influence of religious thinking on all human affairs, particularly emotional and spiritual issues. Today, many scholars and experts believe that religion has irrefutable effect on the health of soul and body and other aspects of human life. In this regard, among other divine religions, Islam commands are the

most complete legislatives influenced by the concepts of being normal and abnormal.

Although today the treatment of physical and mental diseases is based on the use of physical methods of conventional medicine and the conventional methods of psychotherapy, the highest amount of emphasis on these methods are observed in educational books and intercultural studies carried out by psychiatrists and psychologists. Genealogy experts show that the relationship between religious faith and belief and recovery is a proven subject not only in the East but among the followers of religions in communities throughout the world. Therefore, the use of potential resources in the improvement of physical diseases and emotional and behavioral disorders has effective treatment impacts.<sup>37</sup>

It must be remembered that the incidence of the disease was not solely because of the biological and physical factors but the soul and the body both are influential in the disease incidence. There is no doubt that modern medicine has had much progress and also had a rapid trend in achieving the most accurate methods for the treatment of patients. New medical technology accompanied by the most complex tools appeared to help physicians and the latest medical, surgical, and diagnostic methods on one hand and the precise methods of psychotherapy based on the recent findings of cognitive psychology on the other hand, have been used for treating and soothing of human mental and physical pain. However, the suffering man became captive by numerous diseases and these advances cannot resolve the problems.

Human insight and belief in religion and his faith in the divine principles improve the course of the disease and reduce the pain and suffering and it also increase the tolerance of disease side effects. It has a determinant role and the application of these potential and valuable forces has its importance.

## Ethical Approval

Not applicable.

## Conflict of Interest Disclosures

None.

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