The Effectiveness of Psycho-religious Therapeutic Program in reducing preoperative anxiety

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Abstract:

This study highlights the psychological effects of practicing religious rituals on reducing anxiety. Pre-operative anxiety will be used as a model in this study. The researchers suggested a psychological therapy program based on the principles of Islamic religion (faith, practice and prayer) .The semi-experimental approach whose results were considered to be the most accurate and valid was chosen. The appropriate design was chosen, namely, the design of the two groups (experimental and control). State-Trait Anxiety Inventory STAIof Spielberger and The Templer scale for death anxiety were used for measurement . Finally, we conclude that the differences between the experimental group and the control groups for each test are statistically significant at (0.01) for the control group, which means that the independent variable (the proposed Islamic psychotherapy program) is effective in reducing "preoperative anxiety".

ملخص:

تبرز هذه الدراسة التأثيرات النفسية لممارسة الشعائر الدينية على تخفيض القلق مُتخذتا من القلق الذي يسبق العملية الجراحية نموذجاً في التطبيق، فاقترح الباحثان لذلك بناء برنامج علاج نفسي مُستوحى من أصول الدين الإسلامي(العقيدة ، العبادات الأدائية والذكر)، في شكل جلسات علاجية إرشادية، ومعتمداً في الوصول إلى النتائج على المنهج شبه التجريبي الذي تُعتبر نتائجه من أدق وأوثق النتائج، واختار لذلك تصميماً مناسباً وهو تصميم المجموعتين المتجانستين (التجريبية والضابطة)، ثم القيام بالقياس البعدي لهما عن طريق مقياس القلق لـ"سبيلبرجر" ومقياس قلق الموت لـ"دونالد تمبلر"، ليعالج النتائج إحصائياً عن طريق اختبار(ت) لمعرفة مستوى دلالة الفروق

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بينها، لنصل في النهاية إلى أن الفروق بين متوسطات المجموعة التجريبية والمجموعة الضابطة للاختبارين كلٌ على حدة دالة إحصائياً عند مستوى(0.01) لصالح المجموعة الضابطة بمعنى أن المجموعة التجريبية أقل قلقاً على مقياسي الدراسة مما يعني أن المتغير المستقل (برنامج العلاج النفسي الإسلامي المُقترح) له فعالية في تخفيض "قلق ما قبل العملية الجراحية".

1- Introduction:

Anxiety is known as the most spread and studied psychological trouble. According to the psychological journal of the American association of psychology, we count more than 2064 study and book about anxiety in just the period between 1974-1979, which shows the importance of anxiety and its effects on the different aspects of human behavior. Anxiety could have a very bad consequences on once health, it is proved that anxiety is behind different psychosomatic troubles (Elisaoui, 2000) and when it comes to patients waiting for surgery the consequences could be more dangerous and very complicated, since it may elevate the blood pressure and prevent the surgery or causes other new diseases. .in addition to behavioral manifestations, preoperative anxiety activates the human stress response, leading to increased serum cortisol, epinephrine, and natural killer cell activity (Kain ,Sevarino, and Rinder). Doubts regarding surgical success, fear of anesthesia, and fear of loss of ability are the main causes of preoperative anxiety. Preoperative anxiety and depression is not just a psychiatric diagnosis. It has a negative impact on morbidity and the development of complications after surgery (Surman,1987) . Thus, providing the means that help the patients to reduce, the presumed, inevitable anxiety is a must if we want to avoid the worst.

Some scholars (e g, Bergin, 1991; Richards & Bergin, 1997; Shafranske & Malony, 1996) argue that considering clients religiousness while designing treatment plans might have an important effect on the efficacy of treatment. More recently, Terror Management Theory (Solomon, Greenberg, & Pyszczynski, 1998) argued that an adherence to a religious worldview may minimize death anxiety. Religiosity plays a major part in the life of an individual. It can provide hope in despair. In daily life, people report that they are able to experience deep peace even in the midst of mental distress

(Underwood &Teresi,2002), Moreover a several studies have shown the effects that religion could have in reducing anxiety, for example, in the Islamic context we find the study of Mohamed Esaid Hawala in 1999 who studied anxiety and its relationship with religious concepts and values , and he came to a result that says: the study of religious sciences reduces the level of anxiety. The works of Darifa El-Chouiar seems to support this assertion by showing that relationship between religious commitment and death anxiety between men is negative and strong.

Conversely, some argue that religion has no relationship with any psychological healing, for example, Michael E. McCullough in his meta-analysis that examined data from 5 studies (111 client) that compared the efficacy of standard approaches to counseling for depression with religion-accommodative approaches, he found that there was no evidence that the religion-accommodative approaches were more or less efficacious than the standard approaches (Michael E. McCullough 1999). Others even argue that several patterns of religious beliefs and religious coping (e.g., the belief that one's misfortunes are a punishment from God) are associated with greater psychological distress (Pargament, 1997).Despite such claims, as pointed by Zaffar Ahmad Nadaf (2017) growing mass of psychological, psychiatric, medical, public health, sociological and epidemiological studies conducted during the past two decades have continued to prove the beneficial and protective effects of religious involvement (Foskett, Roberts, Mathews, Macmin, Cracknell, & Nicholls, 2004; Seybold & Hill, 2001; Weaver, Flannelly, Garbarino, Figley, & Flannelly, 2003). A recent article of Shreve-Neiger and Edelstein cited by Flannelly et al. reviewed 17 studies on religion and general anxiety published since 1962. Most of the studies found a negative relationship between religion and anxiety level, five found a positive relationship, and four found no relationship at all (Kalkhoran & Karimollahi, 2007)

The present study comes as a part of the continuous research for the means that could help in reducing preoperative anxiety, and since studies have shown a controversial opinion about the benefits of religion in reducing anxiety, we suggest a psycho-religious therapeutic

program built by the researchers and we will investigate the following questions:

1- Is the suggested program effective in reducing preoperative anxiety?
2-Is there a significant difference between the means of the experimental group and the control group on Spielberg scale after the application of the suggested program?
3- Is there a significant difference between the means of the experimental group and the control group on Donald Templer scale after the application of the suggested program?

1-a Hypothesis:

Regarding the previous studies that dealt with the variables of this study and as a result of our practical observations, we suggest the following hypothesis:

1 The suggested program is effective in reducing preoperative anxiety.
2 there is a significant difference between the means of the experimental group and the control group on Spielberg scale after the application of the suggested program in favor of the experimental group
3 There is a significant difference between the means of the experimental group and the control group on Templer scale after the application of the suggested program in favor of the experimental group.

1-b The goals of the study:

- This study aims to make contribution in the efforts of reducing anxiety before surgery
- building an effective psycho-religious therapeutic program.
- showing the preventive and therapeutic aspects of Islam.

1-c Variables:

Anxiety: anxiety may be defined as a tense emotional state “characterized by unpleasant affective experience marked by significant degree of apprehensiveness about the potential appearance

of future aversive of harmful events" (DiTomasso and Gosch, 2002). this unpleasant state is characterized "by a variety of sympathomimetic symptoms such as chest pain, palpitations, and shortness of breath; painful uneasiness of mind over an anticipated ill; abnormal apprehension; self-doubt as to the nature of a threat; belief about the reality of threat; and lapses or weaknesses of coping potential" (Stein, Hollander, and O.Rothbaum, 2010)

Preoperative Anxiety: For some scholars the preoperative anxiety is a kind of anxiety related to the fact of being in danger of death, that's way for them it is a death-related anxiety. Janet Belsky (1999) defined "death anxiety" as "the thoughts, fears, and emotions about that final event of living that we experience under more normal conditions of life" (Belsky, 1999, p. 368). Belsky argues that as people live their lives, they are continuously suffering varying degrees of anxiety about death. Preoperative anxiety is one of the aspects of death anxiety related to a specific situation which is the danger of the operation, that is way preoperative anxiety is a state of emotional disturbance related the fact of being in danger of death because of the operation, and it is more intensive when the operation is the only option for the patient to avoid the danger related to his illness (Elsabaa, 1995)

Psycho-religious therapy: Psycho-religious therapy is any approach of therapy using religious content, which dovetails these two very active influences on the human condition in their separate identity and finality. The religious horizon of the mind is the seat of faith and superstition. This emotion-packed area first becomes deranged when hit by fear and emotional bombardment. Therefore, in treating it, basically a religious approach is essential.

2- Methods:

The experimental method is the adequate method for such studies, because it is the best way to study the real effect of a phenomenon or a variable, it enables the comparison between two samples one of them is experimental group, which is exposed to the independent variable and the other one is the control group.

2-a Sample:

Convenient sampling method used. The sample consisted of 36 patient waiting for surgery from the tow units of surgery of the hospital of Djelfa (the men and woman units), and they were divided into two equal groups. The gender distribution of the sample was 55,55 percent females and 44,45 percent males. These figures closely represent the gender distribution of the Algerian national average. The age of the participant was from 21 to over 57 years of age.

2-b Procedure:

The researchers independently contacted the hospital of Djelfa. Appointments were made to visit the two units of surgery in order to observe and explain the objectives of the study. After several visits a climate of confidence was established and subjects were told that they would participate in anxiety experiment. The 36 subjectweredivided in two groups:

- The experimental group: 18 subject.
- The control group: 18 subject.

In order to guarantee the homogeneity the repartition of the subjects was done according to the following factors: level of anxiety, age, sex, economic status, educational status, the rank of the surgery, the medical history.

As a first step of the experiment, anxiety was tested among all the subjects of the two groups using the measures used in the study, in the second step only the members of the experimental group were exposed to the suggested program during four days for each patient. The tables 1 and 2 summarize the program. Finely anxiety was retested among all the subjects of the two groups using the previous measures.

2-c The psycho-religious program

The used program is prepared by the researchers according to the following steps:

1- The study of the scientific heritage that have relation with the treatment of anxiety.
2- Using the Holly book (al Quran) and the Souna.
3- Taking in count the advice and orientations of professors and practitioners in the field of anxiety treatment.

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4- The repartition of the program into two dimensions: cognitive and behavioral.
5- Giving the program to psychologists in order to judge its adequacy(they were teachers at universities in Algeria, Saudi Arabia and Qatar), and according to their propositions the program was modified to be as it is in the annex.

2-d The general design of the program

The program is divided into two sub-programs one of them is based on cognitive dimension and applied in the first and third day (Table 01), while the second one is based on behavioral dimension and applied in the second and fourth day (Table 02)

Table 01: The schedule of the first and third day of treatment

The Sessions	The elements	Timing		Period
Session one	belief in god	15 m	45 minutes	The morning
	Belief in faith	15 m		
	Belief in the day of judgment	15 m		
Session tow		15 m	45 minutes	The afternoon
		15 m		
		15 m		
Visit of observation and support	Observation and support	10 minutes		The end of the day

As it is illustrated in the table (1) each patient receives 200 minutes of the psycho-religious treatment based on beliefs (cognition) during the first and third day.

Table 02: The schedule of the second and fourth day of treatment

The Sessions	The elements	Timing		Period
Session three	The prayers	15 m	30 minutes	The morning
	The donation	15 m		
Session four	Prayer	15 m	30 minutes	The afternoon
		15 m		

Visit of observation and support	Observation and support	10 minutes	The end of the day

As it is illustrated in the table (2) each patient receives 140 minutes of the psycho-religious treatment based on practices (behavior) during the second and fourth day.

2-e Measures:

Since preoperative anxiety is a type of anxiety and there is no known instrument to measure it, we will rely on two extensively pretested research instruments in the study:

State-Trait Anxiety Inventory STAIof Spielberger (1983):

The STAI (Speilberger 1983) is a self-report scale that assesses both aspects of anxiety –state and trait- . It has good reliability and validity and has been used extensively in clinical and nonclinical populations all over the world. The STAI-State is a 20-item Likert-type scale with a possible score range from 20 to 80, higher STAI scores indicate greater anxiety.TheSTAI has been validated in Our study population with good validity and internal consistency (Cronbach a >0.87 and test-retest reliability ≥0.78)

The Templer scale for death anxiety

The scale is comprised of 15 items, in which the subjects respond true or false according to their degree of agreement. The scores obtained ranged between 0 and 15. According to Ramos (1983), the analyses of reliability and validity confirm the original data of Devins (1979), Templer (1970), and Warren and Chopra (1979). A reliability analysis among our study population on the 15 death-related items resulted in a Cronbach's alpha of .81, indicating good internal consistency for this measure of fear of death.

Besides its validity for the Algerian population, this scale was chosen because of its ease of application, above all by the sector of the population to which it was targeted. We had to keep in mind the low cultural level of many participants, which made it more difficult to consider the application of others (Moreno et all,2009)

2-f Statistical procedure

To test the hypothesizes of the study, the data were computerized using the Statistical Package of Social Sciences SPSS 21 in processing data that had been taken from the questionnaires and entered in the computer to be statistically processed. Percentages, means, standard variations, and T-tests were used to examine the differences between the two groups of the study.

3- Results:

In this part of the study we are going to present the general results then we expose the hypothesis related results.

3-a Speilberger Inventory results':

Participant' level of anxiety in Speilberger scale after the application of the program can be seen in table (03). As expected the results showed that anxiety was significantly lower for the participants from the experimental group; all the members of the group showed a normal anxiety, while 16 participants from the control group showed medium level of anxiety.

Table 03: Levels of anxiety scores for the two groups on Spielberger's anxiety Inventory

	N	Normal anxiety	Medium anxiety	Severanxiety
Experimental G	18	18	00	00
Control G	18	00	16	02

3-b Templerscaleresults':

the results for the Templer scale after the application of the program are likely the same as the previous ones as it can be seen in the table (04), 15 participant from the control group manifested high level of death anxiety while only 3 participants from the experiment group manifested high level of death anxiety and 10 from the same group showed medium level of anxiety and the rest 5 participants with no sign of death anxiety.

Table 04: Levels of anxiety scores for the two groups on Donald Templer's death anxiety scale

	N	No deathanxiety	Medium level of death anxiety	high level of death anxiety
Experimental G	18	05	10	03
Control G	18	01	02	15

3-c T- test results related to the three hypothesis :

The results presented above of speilberger and templer scales were analyzed by conducting a t-test for independent samples to see if there were significant differences between the control and experiment groups (the results are presented in table 5). The results of t-test analysis between the two groups have shown a significant difference on speilberger scale (t= 14.219, df= 34, P=0.01) , the total mean scores for the experiment group (*M*= 32.75) is lower than the mean of the control group (*M*=51.91).Similarly, the results of t-test for templer scale showed a significant effect of the program (t= 5.012, df= 34, P=0.01), participants of the control group reported high level of anxiety (M=10.56) than did participants of the experiment group (M=7.33).

Table 05 : T- test results related to the three hypothesis testing

Outcome	Group						T	DF
	Experimental			control				
	M	SD	N	M	SD	N		
Anxiety	32.75	5.42	18	51.91	11.23	18	14.219	34
DeathAnxiety	7.33	3.34	18	10.56	5.64	18	5.012	34

4- Discussion:

The goal of this study was to explore the effectiveness of psycho-religious therapy in reducing preoperative anxiety, for this reason we conducted an experimental study using a psycho-religious program and we tested its effectiveness using two extensively pretested measures.

The significant difference found between the control and experiment groups on Speilberger scale support our second hypothesis that predicted a significant difference between the means of the

experimental group and the control group on Spielberg scale after the application of the program in favor of the experimental group.

The significant difference found between the control and experiment groups on Templer scale is in line with our third hypothesis that predicted a significant difference between the means of the experimental group and the control group on Templer scale after the application of the program in favor of the experimental group.

These findings proved the effectiveness of the psych-religious program in reducing preoperative anxiety. At the beginning almost all the participants have had high level of death anxiety on Templer scale (30 from 36 participant) and medium level of anxiety on Speilberger scale (33 from 36participant), but after the application of the program the level of anxiety decreaseamong the subjects of the experimental group while still the same for the subjects of the control group; 15 participant from the experimental group that they have had a high level of death anxiety became less anxious and recorded a medium level of anxiety, for Speilberger scale 16 participant from the experimental group with medium level of anxiety at the beginning of the experiment recorded a normal level of anxiety after the application of the program.

The findings of our study showed a strong relationship between psycho-religious therapy and preoperative anxiety reduction. Religious beliefs help patients make sense of their medical conditions and may enable them to better integrate health changes into their lives. Religious practices can help to relax, district, and counteract the effects of loneliness and isolation that is so prevalent among patients (Kalkhoran&Karimollahi, 2007). The majority of mental health professionals and the general public believe that patients' religious beliefs should be taken into consideration in mental health treatment (Michael E. McCullough 1999).

The above findings have some practical and theoretical implications for future work. However, there were still some limitations of present study to consider. First, there was a deficiency in subjects' level of religiosity. Second, the sample size is relatively small, covering individuals from 21-57 years old and from students to the elderly.

In conclusion, the current findings show that religion content and practice is effective in reducing anxiety among patients suffering from

preoperative or death anxiety. Our findings indicate that interventional strategies to improve the psychological wellbeing of patients before surgery should be based on religious content in order to reduce anxiety and avoid any other complications that could put the patient's life at greater risk.

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