The effectiveness of stress management on volunteer mothers’ anxiety and depression to cesarean surgery

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Abstract
The purpose of the study is to determine the stress management effectiveness of cognitive-behavioral therapy on psychological indexes of volunteer mothers to cesarean. The study was done by Quasi-experimental with pre-post test and control group. 46 mothers were selected on the list of cesarean in 2014 had been assigned randomly to experimental (N=12) and control group (N=12). Data gathered of questionnaire for demographic and clinical information, state anxiety inventory-trait Spilberger and depression inventory beck. The experimental group underwent Stress management training for five 60-minute sessions. However, the control group didn’t receive this intervention. Results showed that test scores of anxiety, depression compared to the experimental group had a significant reduction (p<0.05). The conclusion shows that stress management cognitive-behavior intervention can be an elective psychotherapy for volunteer mothers’ anxiety and depression to cesarean.

Keywords: Stress management of cognitive-behavioral, anxiety, depression, cesarean

Introduction

A cesarean section is a surgical procedure in which one or more incisions are made through a mother's abdomen (laparotomy) and uterus (hysterotomy) to deliver one or more babies, or, rarely, to remove a dead fetus. It is usually performed when a vaginal delivery would put the baby's or mother's life or health at risk, although in recent times it has also been performed upon request for childbirths that could otherwise have been vaginal (Louise and Health. 2012; Finger, 2000).

The World Health Organization (WHO) officially withdrew its previous recommendation of a 17% C-section rates in 2014. Their official statement read, "There is no empirical evidence for an optimum percentage. What matters most is that all women who need cesarean sections receive them. The US national institutes of health says rises in rates of cesarean sections are not, in isolation, a cause for concern, but may reflect changing reproductive patterns. While
the reasons for increasing CS rates have been widely debated (Obstet, Matthews; Matthews). Fear of pain during childbirth is cited as one of the contributory factors (Roxby).

Given that presurgical anxiety serves as a major predictor of postoperative pain and recovery, prenatal maternal anxiety may determine maternal pain experiences of CS. Anxiety in the birth partner may contribute to maternal experiences of CS, some researches have exclusively targeted the interactive pattern that such psychosocial agents may have on the pain experiences of mothers during elective CS (Kain et al.; Caumo et al.).

Before caesarean as a surgery, patients are usually suffering from stress, anxiety and fear of the unknown (Black, Hokanson). Of patients are anxious and long-term position in this situation has a serious impact on long recovery and mental and physical health(Taylor, Lillis, Lemone). As anxiety, pain has a negative impact on healing and tissue repair. Too much anxiety and pain during physical and mental energy to stimulate the system of autonomic, muscle tension and addition the production of corticosteroids (Brunner, Smeltzer, Bare).

The cesarean showed mortality risk in mothers who deny their anxiety, over those who have expressed anxiety, depression and improve outcomes including surgical factors include: positive attitude, informed consent, patient education (the surgical approach), how a tolerance for pain, family support before and after cesarean (Sadok, Kaplan, Sadok).

The late pattern of stress management programs were purely mechanical, and physical health symptoms were the cause and seek to eliminate the causes were not, the stress was re-appear. But today, with a variety of stress management, relaxation, visualization techniques to reduce anxiety and cognitive-behavioral, cognitive restructuring, coping effectiveness training, rage management expressiveness and combined (Beck).

Stress management in accordance with a fourth theory component and a specified sequence, educational process four steps to increase awareness, assessment activities, and confronting responses to rage management division. Simple to operate this program in advance of coping strategies and ultimately the individual is between activities. The goal of stress management programs cognitive-behavioral increasing sense of control, self-efficiency, self-esteem, fight efficiently, improving well-being and decreased negative affect and social isolation (Antoni).

People usually is needed to emphasize the others in way and emphasis on maintaining independence and avoiding exclusion. Depression in people with symptoms such as feelings of being ignored and being who become alone, abandoned and desperate to be seen. Cognitive-behavioral therapy, including specific applications and empirical focus is on cognition and behavior, but the emphasis is on changing thoughts and understanding, the result is that some patients are challenged with thoughts of failure, one of the most useful interventions to treat mental disorders such as anxiety and depression, cognitive-behavior.

Cognitive interventions proven to reduce of distress and changing the mode cannot be far away from our problems or is supposed to happen in the future, changes to provide stability (Hawton, Salkovskis).

Considering the important role in the treatment of anxiety and its relation to such patients were expressed by some psychological problems. The present research considers the character and surgical stress management techniques and cognitive behavioral interventions was a way to reduce of psychological disorders including anxiety and depression.

**Materials and Methods**

In this empirical research project, there was two-stage pre-test for two experimental and control groups. Cognitive-behavioral therapy as an independent variable applied only in the
experimental group and its effect on test anxiety and depression was tested. This study was conducted on all women who had elective cesarean section in Rafsanjan, on March 99 46.

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selected women using random sampling divided into control and experimental groups. There were 12 cases in each group (N=12).

Data gathered of: 1- Questionnaire for demographic data (age, sex, educational level, residence, occupation and type of admission) and clinical information (including history of hospitalization, previous surgery, hospital stay before surgery) 2- State anxiety inventory-trait Spilberger. This questionnaire was presented in 41 by Spilberger and was revised in 41. The test has 41 questions. Coefficient alpha of this questionnaire, the state-trait anxiety scale mode, 0421 and the property 0121 has been reported (Abdoli ,1004 367).

Techniques to deal with stress management based on cognitive-behavioral therapy were applied in 7 sessions, each session was 01 minutes. For to two days a week, it lasted for over 7 weeks.

Table 1: The general topics of intervention sessions
Meeting General meeting as Behavioral stress management techniques stress definition, the gradual relaxation of 1-muscle

Cognitive appraisals+ progressive 1-muscle relaxation with visualization

Progressive 1-muscle relaxation and autogenic traing

Meditation and rage management, passive muscle relaxation, and the fourth autogenics with imagery

Assetiveness raining + passive 1-muscle relaxation

The data were analyzed by SPSS-16 software. It also was done by both descriptive and inferential. Descriptive level indicators such as mean and standard deviation were used. Inferential level research hypotheses were tested by analysis of covariance.

Results

Table 1: Overview of the demographic characteristics of the samples studied
Surgical history Not Admission Above License Admission Diploma Average Diploma age Specifications N
In order to test the parametric the default should be respected

**Table 3**: Results of covariance on scores

<table>
<thead>
<tr>
<th>Variable</th>
<th>Sum of Degrees of Freedom</th>
<th>Mean of F</th>
<th>Significance</th>
<th>Eta Squared</th>
<th>Power</th>
</tr>
</thead>
<tbody>
<tr>
<td>Trait anxiety</td>
<td>1291</td>
<td>1</td>
<td>1262</td>
<td>1247</td>
<td>1211</td>
</tr>
<tr>
<td>State anxiety</td>
<td>1244</td>
<td>1</td>
<td>1244</td>
<td>1292</td>
<td>1211</td>
</tr>
<tr>
<td>Depression</td>
<td>1244</td>
<td>1</td>
<td>1240</td>
<td>1251</td>
<td>1211</td>
</tr>
</tbody>
</table>

As that was specified, the default normality and equal variance between the variables in the case is confirmed, the use of covariance analysis the findings of parametrics is permitted. The covariance analysis showed that there are significant differences in the two groups ($p=121111$). High effect size ($071$, $022$, $052$) shows greater differences in scores between experimental and control groups, due to the stress management intervention. The statistics showed that the probability of a type II error is low and has proper ability to generalize.

**Discussion**

In this study, stress management, cognitive-behavioral therapy before cesarean in the experimental group has been effective than in the control group test. In other words, the test group and control reduction of anxiety in the independent variable, there was a significant difference. The findings are equal with the findings by Parker et al (1011) Sikars et al (1111) Spek et al (1111).

One way to deal with stressors of progressive muscle relaxation techniques of stress management techniques of cognitive is behavior, which seems to be that are using this technique can be physical adverse effects eliminates the stress and the symptoms caused by these destructive agents prevented progressive muscle relaxation techniques to create balance in the posterior hypothalamus and the anterior hypothalamus is, thus preventing the undesirable effects of stress and anxiety and time that when people asked that positive
thinking will replace negative thoughts, better judgment and before surgery had less anxiety. When the patients had a mental image of the surgery and ready to act on what will happen and that it and about their fears regarding the operation talk to each other or when the train. The relaxation was used, conquer their anxiety better (Omidi, 4110).

The covariance analysis results indicate Stress Management Effectiveness of cognitive-behavioral tests on depressed patients before surgery group than in the control group's posttest. These findings are equal with the findings Hallon et al (1998) and Hope et al (1999) time-was-read.

Susceptibility to depression, cognitive style and your personality is closely linked to autonomy and people-oriented shows. Based on individual assessment of their personal autonomy and control of progress can be. People-oriented person is needed to confirm the others in style and emphasis on maintaining independence and avoiding exclusion.

Depression in people with symptoms such as feelings of being ignored and being who become, alone, abandoned and desperate to be seen (Hawton, Salkovskis, 1998).

Cognitive-behavioral therapy including specific applications and empirical focus are on cognition and behavior, but the emphasis is on changing thoughts and understanding, the result is that some clients are challenged with thoughts of failure, one of the most useful interventions to treat mental disorders such as anxiety and depression, cognitive-behavior.

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