Effectiveness of Attribution Retraining on Women's Depression and Anxiety After Miscarriage

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Date of Submission: Feb 23, 2013

Date of Acceptance: Feb 23, 2013

How to cite this article: Sharifi M, Hajiheidari M, Khorvash F, Mirabdollahi MA. Effectiveness of attribution retraining on women's depression and anxiety after miscarriage. Int J Prev Med 2013;Suppl 2: S239-44.

ABSTRACT

Background: Given miscarriage psychological consequences on the women health, the aim of the present study is the survey of effectiveness rate of attributive retraining interventions on women depression and anxiety reducing after miscarriage.

Methods: The present study is semi-empiric and it's made using control group, pre- and post-test execution and follow-up. Thirty-two women, who had recent experience of miscarriage, were selected among female referents to obstetricians and clinics in Esfahan city by accessible sampling and then they were placed on two groups, case and control, randomly. Case group participated in 6 weekly sessions for attributive retraining interventions and both groups completed hospital depression and anxiety questionnaire on three steps: Pre-test, post-test, and follow-up. Collected data were analyzed statistically, using Statistical Package for the Social Sciences (SPSS) software and variance by repeated measuring.

Results: Obtained results show that average post-test and follow-up scores of depression and anxiety in case group is less than average post-test scores in control group, significantly ($P < 0.0005$).

Conclusions: The findings of this research, "Attributive Retraining Effectiveness on Women's Depression and Anxiety Reducing after Miscarriage," were confirmed.

Keywords: Anxiety, attributive retraining, depression, miscarriage

Original Article

INTRODUCTION

Spontaneous miscarriage is the commonest condition in gestation period, which occur in 10-20% of gestation cases,[1] and along with considerable emotional perturbation.[2] Several studies have confirmed the prevalence of depression syndrome and anxiety disorders in these women immediately after miscarriage and up to several weeks after the loss.[2-4] Some evidences show that depression or sadness may continue 1 year after loss.[5] The same reactions as sorrow (mourning) is prevalent in these women, such as despair, anger, quilt-feeling, social seclusion, control loss, obsessive rumination, personality disorder, somatization, and death anxiety.[6] On the same base, it's emphasized on the necessity of providing the follow-up cares in such conditions.[7-9]

Studies show that some factors can influence the level of perturbation after miscarriage such as demography variables, psychological backgrounds, special factors of gestation, pregnancy background, satisfaction from providing cares by healthcare-givers, social support perception and information about loss reason.[10]

In this line, the study of relationship between loss and psychological perturbation shows that women have high enthusiasm for receiving the information about miscarriage (abortion) cause and this is one of their disturbance reflective in relation to personal responsibility.[9,11]

Until now, many factors have been identified for spontaneous miscarriage occurrence which are generally genetic factors, endocrinologic problems, anatomic problems, immunologic problems, and microbiologic factors.[12] In two-third of spontaneous miscarriage cases, some factors are the commonest one such as placental problems, chromosomal immodal, developmental limitation, and bacterial infection,[13] although many women in confronting to sudden abortion tend to present causal attributions. According to cognitive opinions, every individual has special ideology about the world which influence her version about problems' origin and her responsibility for their analysis.[14] Such rationales and explanations are called attributive style, and in addition to it gives to individuals the ability to analyze their and others behaviors, it influences its subsequent behaviors and feelings too.[15] On the same concern, observations show that individuals in confronting to suddenly and unexpected experiences such as loss and death of their dear ones look for an explanation for the event and they have high disturbances about some cases like why this happened? Who is responsible? What is the cause?[11,16,17] In a condition like spontaneous miscarriage, the main disturbance of parent is finding an explanation for the reason of this sudden loss.[11,18,19]

In such positions, guilt feeling and self-blame are common endoplasms which contain some attributed multiple means to embryo loss.[11,20] Relative attributive styles to depression such as internal attributions (I'm responsible for this happening), consistent (this happening will be repeated), general (this happening will influence other things), and uncontrollable (I cannot do any work) are reported attributions by mothers at miscarriage position. It seems that most of the mothers in such conditions tend to make internal attributions.[21] According to 25% evidences, such women believe in self-personal responsibility in relation to miscarriage;[22] and this responsibility feeling and self-blame have significant relation to high level of anxiety and depression and post-damaging disorder syndrome after miscarriage.[7,11,23] Such mal-adaptive attributions can influence pair's adjustment with together in relation to "who did/didn't do the work and what work done?" Downey *et al*.,[17] believed that self-blame or husband's blame for miscarriage can relatively increase of psychological syndrome and marriage disturbances. In a structured interview on 65women who experienced miscarriage, it is shown that among external attribution i.e., to blame the husband and the oldest age of the child (to blame the others), and among internal attributions i.e., self-blame are the best predictors for depression in these women,[24] while this belief that "there is a medical reason for anxiety and depression" is low. It seems that the absence of an acceptable medical reason will involve individual in self-blaming thoughts and behavior.[11] In this line, review on the research background about women's emotional problems after miscarriage shows that although following cares presentation can generally play a role in reducing the perturbation of these women, preparing the support and or psychological information alone, won't have significant effect.[25] While annexation medical counseling sessions to psychological counseling process will reduce depression, anxiety, and self-blame of women, effectively.[26] In many studies, the necessity of providing medical information including probable justifications of miscarriage and its influence on next pregnancies has supported.[7,8,27] It seems that if no such information is received, women anxiety and depression won't decrease completely and their psychological adjustment will face problem.[26]

As it is mentioned before, based on evidences, there is a relationship between beliefs, conceptions and pairs, attributions about miscarriage to subsequent psychological syndromes of loss. Therefore, it seems that attributive retraining interventions can be effective in reducing their anxiety and depression. In fact, attributive retraining is a method for the change of individual's conception about events causes and for converting

maladaptive attributive patterns to more adaptive ones.[15]

So, regarding to background limit in this field, the aim of present research is to determine the effectiveness rate of attributive retraining interventions on reducing the women's depression and anxiety after miscarriage.

METHODS

This research is a semi empiric intervention with a pre-test and post-test and it is of control test kind.

Statistical community includes women who had recent experience of miscarriage and have referred to obstetricians in Esfahan city in summer 2011. At first, 32 women with recent experience of miscarriage were identified by accessible sampling and by referring to many relative clinics and by giving information and enrolling female referents. Then they were selected after primitive interviewing and studying the entrance criterion for research. After receiving the written satisfaction, they were placed on two groups randomly: Case and control (16 persons in each group). Entrance criterions to research include:

- Spontaneous miscarriage background in maximum 3 months before research.
- Diagnosis of relative anxiety and depression to miscarriage experience by psychologist.
- Lack of suffering to serious psychological disorders (basic depression, post damage stress disorder and…)
- Disuse of any psychoactive (psycho stimulants), opioid, and alcoholic drinking.

In order to observe the research morality, participants were assured that obtained information from the research is completely confidential and will use merely for research performing by researchers.

Information collecting tool is Hospital anxiety and depression scale which is completed in three steps: Pre-test, post-test, and follow-up by two groups. This scale (questionnaire) has contained 15questions and it has formed of two micro scales i.e., anxiety and depression. Each question is numbered based on a 4-grade scale from zero to three, 21 is the maximum number of anxiety and depression in it.[28] Numbers from zero to seven are normal, and from 8 to 10are mid-disorders and up to 10 are considered as suspicious of disorder. Alpha cronbach's coefficient is reported to be 78% for Persian copy of this questionnaire.[29]

In order to provide intervention, the first participant women in case group participated in medical counseling sessions along with husband and obstetrician and some information about written cause of miscarriage in medical file was given to them. Then, five group meetings of attributive retraining intervention (two session per week, forty-five minutes per session) were hold with the aim of studying validity, control, and present attributions advantages, particularly internal attributions and reducing cognitive distortion and women's negative attributions such as self-blame, husband-blame, and concerning about next pregnancy, so that individuals can replace more adaptive attribution for miscarriage. Also, because of special conditions of these women (involving in relative issues to loss and death), the tool of feeling about loss, normalize of emotional tool, concerns about next pregnancies, and fascinating the event emotional processing regarded in sessions. After ending the intervention-therapy and for follow-up of 5 weeks, hospital anxiety and depression questionnaire (scale) was completed by both group and then the results studied between two groups by variance analyzing and by repeated measuring. It is necessary to say that intervention-therapy was performed in control group after ending of follow-up session.

RESULTS

Women age average in test group is ½ + 12/25 years old and in case group is 311 = 51,126 years old. Miscarriage experience in the first pregnancy was in 85.45%, 12.1% in the second pregnancy, and 2.5% in several pregnancies.

Descriptive relative indexes to pre-test, post-test, and follow-up of anxiety and depression scores is observed in two groups of case and control in Table 1.

As it is indicated in Table 1, in both anxiety and depression variables, the average of post-test and follow-up scores reduced in comparison with pre-test in case group but there was no sensible change in control group.

Variance of analysis by repeated measuring plan was being used to significantly observe differences between the two groups. It is necessary to mention that before analyzing, co-variance homogeneity

Table 1: Average and standard deviation of pre-test, post-test, and follow up scores for anxiety and depression in two groups (case-control)

Varied	Group	Number	Pre-test Average and standard deviation	Post-test Average and standard deviation	Follow up Average and standard deviation
Depression	Case	16	9/68±0/70	4/81±0/54	4/43±0/51
	Control	16	9/75±0/57	9/75±0/57	9/93±0/68
Anxiety	Case	16	9/000±0/89	5/12±0/80	4/81±0/65
	Control	16	8/78±0/71	9/18±0/54	9/25±0/57

assumptions for measuring dependent variables are considered with performing Macholi test whose results have been presented in Table 2.

Table 2 shows that there is covariance homogeneity condition in these scales and variance analyzing by repeated measuring can be made in these data.

As it is shown in Table 3, regarding the computed *f* coefficient, it is observed that there is a significant differences intervention between two groups (case and control) ($P < 0.0005$). So, attributive retraining intervention influences on reducing the participants, anxiety, and depression in case group in which their affection is 86% and 93%, respectively. Also, one statistical exponent and zero significant level indicate the capacity of sample volume.

The trend of changes for anxiety and depression scores average in pre-test, post-test, and follow-up steps in two groups has been shown in Figures 1 and 2.

Table 2: Summary of Macholi test results for anxiety and depression measures

Measures	W Macholi	Chi-Square	df	*P*
Depression	0/697	10/486	2	880/005
Anxiety	0/623	13/70	2	880/001

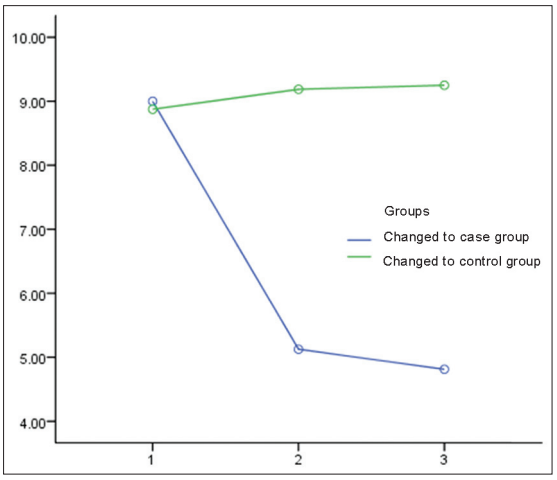

Figure 1: The trend of changes in average of depression scores in three steps (pre-test, post-test, and follow-up) in two groups

DISCUSSION

Based on the present research results, attributive retraining intervention has significant effect on decreasing women anxiety and depression after miscarriage ($P < 00.0005$). This result agrees with the effect of cognitive restructuring along with medical counseling on reducing the syndrome of perturbation after miscarriage. It seems that conception of this matter that miscarriage is due to embryo-anomaly or to other medical reasons results in reducing women depression and anxiety, because they will assure that miscarriage has not been due to their or others mistake.[11,19,24,26] The study of Nikcevic *et al*. showed that women, who had clear cause for miscarriage, presented less self-blame and perturbation than women who had no dear cause for the loss.[19] These researchers suggest that etiological discussion about miscarriage cause can increase emotional adaptive after loss. Also, Jind believes that causal attributions associated with syndrome of post damage stress disorder until several weeks after loss, positively and significant while identification of miscarriage cause and attribution of loss to medical factors can reduce self-blame feeling, depression, and anxiety.[11]

James and Kristiansen study showed that these women attributions are associated with their emotional reaction, closely. Women, who blame themselves, husband or doctor, represent stronger reaction to miscarriage. These researchers believe that among checking strategies, perceptual

Table 3: The summary of the findings from internal retraining effect test on the anxiety and depression scale

Varied	Sum Square	df	Mean of Square	F Significant	*P*	Eta Cufficient	Power
Depression	294/000	1	294/000	420/835	0/000	0/933	1
Error	20/95	30	0/69				
Anxiety	187/04	1	187/04	186/26	0/000	0/861	1
Error	30/12	30	1/00				

F= For depression 420/835 and for anxiety 186/26

restructuring will have more effective role in reducing stress, maladaptive reactions, and social isolation.[30] Swanson believes that focused perceptual restructuring on attributive styles increases more adaptive emotional consequences after miscarriage, effectively.[5]

As present research results showed annexation of medical counseling meeting, psychological counseling process can facilitate perceptual restructuring in these women. The necessity of medical information providing including probable rational of miscarriage and it is effect on next pregnancies has supported in many studies.[7,8] Medical counseling by clearing the wrong conceptions of women is useful for reducing self-blame feeling and personal responsibility for loss and results in decreasing concern and perturbation about next pregnancy.

It seems that if there is no reception of such information, anxiety, and depression in women won't decrease completely and their psychological adaption faces problem.[26]

Also research has indicated that providing the psychological support without presenting medical information about miscarriage won't have significant effectiveness on reducing emotional perturbation syndrome.[25]

CONCLUSIONS

Attributive retraining intervention effectively reduces women anxiety and depression after miscarriage, prevents from emotional mal-adaptations and anomaly reactions in them, and supports their well-being. Of course, according to some studies, miscarriage influences women and their husbands and men like women experience emotional perturbation after miscarriage.[31,32] So, it is suggested that effectiveness of such interventions on decreasing men perturbation will be studied in the future.

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Source of Support: Nil, **Conflict of Interest:** None declared.