

THE EFFECTIVENESS OF STORYTELLING ON REDUCING DEPRESSION IN CANCER PATIENTS

A EFICÁCIA DA NARRATIVA NA REDUÇÃO DA DEPRESSÃO EM PACIENTES COM CÂNCER

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Abstract: This study was carried out aimed to investigate the effectiveness of storytelling in reducing the depression of cancer patients in 2018. The present study as a semi experimental research was carried out using a pre-test and post-test with control group. The research sample was selected using purposive sampling method among cancer patients in Fars province boarding centers in 2018. After screening, 30 patients with cancer (12 to 18 years old) were randomly assigned into two groups of experimental and control. Data collection tool was Beck's Depression Inventory. For the experimental group, 12 sessions of an hourly baccalaureate were held at a time interval of 6 weeks and two sessions each week. During the sessions, communication was established between the researcher and the children, using stories and presenting activities in the form of stories; opportunities and opportunities for engaging and activating the child's executive actions. 12 sessions of one-hour story therapy were held for the experimental group during 6 weeks and two sessions each week. During the sessions, opportunities for engaging and activating the child's executive actions were provided while communicating between the researcher and the children using the story and providing activities in the form of stories. Post-test was performed after the end of the storytelling period on two groups of experimental and control. According to the results of this study, the depression scores decreased in the post test in the experimental group. Therefore, the hypothesis of research based on the effectiveness of story therapy on the reduction of depression in patients with cancer is confirmed.
Keywords: Reading story. Storytelling. Depression. Cancer. Children.

Resumo: Este estudo foi realizado com o objetivo de investigar a eficácia da narração de histórias na redução da depressão de pacientes oncológicos em 2018. O presente estudo, como pesquisa semiexperimental, foi realizado utilizando um pré-teste e pós-teste com grupo controle. A amostra de pesquisa foi selecionada usando método de amostragem intencional entre pacientes com câncer em centros de embarque da província de Fars em 2018. Após a triagem, 30 pacientes com câncer (12 a 18 anos) foram aleatoriamente designados em dois grupos de controle experimental. A ferramenta de coleta de dados foi o Inventário de Depressão de Beck. Para o grupo experimental, 12 sessões de um bacharelado por hora foram realizadas em um intervalo de tempo de 6 semanas e duas sessões por semana. Durante as sessões, foi estabelecida comunicação entre o pesquisador e as crianças, utilizando histórias e apresentando atividades na forma de histórias; oportunidades e oportunidades para engajar e ativar as ações executivas da criança. Foram realizadas 12 sessões de terapia de uma hora para o grupo experimental durante 6 semanas e duas sessões por semana. Durante as sessões, as oportunidades para envolver e ativar as ações executivas da criança foram fornecidas durante a comunicação entre o pesquisador e as crianças usando a história e fornecendo atividades na forma de histórias. O pós-teste foi realizado após o término do período narrativo em dois grupos de experimentais e controle. De acordo com os resultados deste estudo, os escores de depressão diminuíram no pós-teste no grupo experimental. Portanto, a hipótese de pesquisa baseada na eficácia da terapia da história sobre a redução da depressão em pacientes com câncer é confirmada.

Palavras-chave: História de leitura. Contar histórias. Depressão. Câncer. Crianças.

Introduction

Depression is considered as one of the most prevalent and most disabling psychiatric disorders that people with physical illnesses and diseases, such as cancer, suffer it and depression disorder is most common psychiatric illness. Patients with depression become more disable than stressful patients with cancer (Davidson & Meltzer-Brody, 2006) and people with depression in comparison with the cancer patients who suffer from physical illnesses and pains (Powers, Cross, Fani & Bradly, 2015). According to the results of different studies, cancer strongly predicts a wide range of mental disorders independently of other psychological aspects (Berenbaum, Boden, Baker, Dizen, Thompson & Abramowitz, 2006). In contrast, people who suffer from cancer may not be able to manage their negative emotions and have less mental health (Barrett, Gross, Christensen & Benvenuto, 2001; Kang & Shaver, 2004; Kashdan, Ferssizidis, Collins & Muraven, 2010). Anxiety and depression are considered as key factors which have significant effect on mental health directly and indirectly through illnesses such as cancer (Boden, Bonn-Miller, Kashdan, Alvarez & Gross, 2012). Since, the years that go along with the disorder in people's lives can be measured using common tools (Disability – adjusted Life years (DALY)), so depression is the fourth most common cause of going away of life of people with illness compared to other medical diseases and mental disorders and other illnesses and is predicted to be the second cause of this problem in 2020 (Muray & Lopez, 2016). The dimensions and therapeutic characteristics of depression are related to almost all patients with psychiatric disorders in various clinical situations due to the prevalence of depression. Nowadays, the positive psychology approach with the motto of human talents and abilities has attracted much attention of researchers from various fields of psychology. This approach is implemented aimed to identify the structures and practices that provide well-being and happiness for human and is considered as one of the new therapy methods of storytelling and reading story.

Storytelling leads to emotional, emotional and mental health growth of children. Recently, many studies have been carried on the importance of storytelling for children and it has proven that it has a significant effect on mental development of them. Therefore, psychologists and educational experts advise parents to tell story for their children from the very early years. A story is a literary text that has secondary educational and therapeutic applications (Asghari Nekah, 2003).

The special uses of story in treatment are confirmed by studying the theories, studies, and clinical experiences. Cook, Taylor & Silverman (2004) have used storytelling techniques for children and conclude that many clinical findings suggest is that story therapy can be used and useful in cognitive-behavioral therapies for children. Stories in story therapy can be considered as an important source of change and improvement in children's problems and disorders by providing opportunities, creating a context for emotional discharge and imitation, and raising the child's perception (Crawford, Brown & Crawford, 2004; Frederberg & Wilt, 2010).

Nowadays, the story therapy approach is used to treat children with special needs, including children with cancer, and there are has studies to prove the usefulness of this approach. In 2016, Khodadost (2016) during a study entitled "the effect of Storytelling in reducing the anger and aggression of children" concluded that the mean scores of aggression and its dimensions in the experimental group were significantly different from the control group in the post-test, which this difference means the decrease in aggression, therefore, it can be concluded that the use of storytelling plays a key role in reducing aggression and anger.

Faranak Forouzanfar (2017) during a study entitled "The Effectiveness of storytelling on Children's Social Skills" concluded that storytelling, in addition to the effectiveness of storytelling on social skills can also be used in the teaching and promotion of emotional expression, self-care and empathy which are considered as social skills. Given the theoretical foundations and the experience of depression in patients with cancer and considering this issue that cancer patients during this period experience different levels of anxiety due to environmental and individual problems and there is a direct relationship between these experiences and their beliefs and thoughts. Research in this field is very important. Psychology first focused on negative emotions, such as anxiety and depression in comparison with positive emotions; therefore, the present study investigates the effectiveness of storytelling in reducing the depression of cancer patients.

After the end of the storytelling period, post-test was performed on two groups of experimental and control.

Literature review

In works such as the effect of storytelling on decreasing the anxiety and disturbance of preschool children (Sahardakht, 1395), the study of the effectiveness of storytelling on reducing the anxiety and aggression and depression in cancerous children (Zahra Zamimi, 1395), the effectiveness of storytelling on depression and aggression Preschool Children (Qashqai, 1395), The Effect of Story Therapy on Reducing Anxiety and Improving Sleep Apnea in Children With Chemotherapy Levels (Ajourlou, 1395), The Effect of Story Therapy on Improving Social Adjustment in Children with Conduct Disorder (Asgharzadeh Salmasi, 2011) There are some valuable subjects about the various aspects of the storytelling effects of But so far, no work has been found to examine the effectiveness of stories (storytelling) in reducing the depression of cancer patients in Shiraz.

Method

This study as a semi experimental research was carried out using a pre-test and post-test method with a control group. The sample was selected using purposive sampling method among cancer patients in Fars province boarding centers in 2018. After screening, 30 cancer patients (12 to 18 years old) were randomly assigned into two groups of experimental and control groups. Data collection toll was Beck's Depression Inventory. For the experimental group, 12 sessions of an hourly baccalaureate were held at a time interval of 6 weeks and two sessions each week. During the sessions, communication was established between the researcher and the children, using stories and presenting activities in the form of stories; opportunities and opportunities for engaging and activating the child's executive actions.

The Beck Depression Inventory Second Edition (BDI-II): In 1996, Depression Inventory was designed and developed by Beck. It was introduced to examine quantitatively the amount of depression and distress of individuals and it includes 21 items and covers all elements of depression based on cognitive theory. According to the results of Beck et al. this questionnaire has a high internal consistency (Cronbach's alpha coefficient is 0.91) (Beck et al. 1996). It has reported that test-retest reliability of this scale during one week is 0.93. Fetti et al. reported that the Cronbach's alpha is 0.91 and its test-retest reliability is 0.94 (Fetti et al., 2005). Many psychometric studies have been carried out on its psychometric properties due to the importance of this tool in the diagnosis of clinical intervention. One of the most important studies is the meta-analysis that was carried out in 1988 by Beck, Steer, and Garbeen. Beck et al after investigating the studies which use this tool conclude that its coefficient of validity was varied from 0.48 to 0.86 in terms of the interval between implementation times and the type of population tested. In 1996, Beck et al has reported that the validity coefficient of test-retest during one week is 0.93. Many studies have also been carried out on the validity of the Beck Depression Inventory. The mean correlation of Beck's Depression Inventory with the Hamilton Rating Scale for Depression (HRSD), Zung *Self-Rating Depression Scale* and the Wiggins Content Scale of Depression (DEP) of the Minnesota Multiphasic Personality Inventory (MMPI), The multiple sclerosis depression rating scale and SCL-90 is more than 0.60. In our country, many studies have also been carried out that measure the psychometric properties of this tool. Among these studies, we can mention the study of Tashakori and Mehriar in 1994, which its reliability coefficient in Iran was equal to 0.78. In other studies such as study conducted by Partoy in 1974, Wahhabzadeh in 1979 and Chegini in 2002, it has reported that the reliability of Beck's questionnaire is high and varied from 0.70 to 0.90.

Results

First, the normality of the variable was investigated. The Kolmogorov-Smirnov test and the Kurtosis and skewness indices were used to determine the distribution of data (normal). Results are reported in Table 1.

If the significance level obtained for each variable is greater than 0.05, it can be concluded that the distribution of that variable is normal and therefore there is no problem in using parametric tests. About Kurtosis and skewness indices, some statisticians prefer the interpretation of ± 1 about Kurtosis and skewness, or both (Mirz et al., 2012).

Table 1: Kurtosis and skewness values and Kolmogorov - Smirnov test

Variable	Kolmogorov-Smirnov test		skewness	kurtosis
	The statistics Z	Significant Kolmogorov- Smirnov		
depression	0.163	0.196	-0.233	0.623

According to the results of the Kolmogorov-Smirnov test, the research variable has a normal distribution and the distribution of these variables can be considered normal. The significance level of the Kolmogorov-Smirnov test for the research variable is greater than the value of 0.05 ($P < 0.05$), therefore the variable is normal. Investigating the values of Kurtosis and skewness shows that given that the values of skewness for all variables are obtained between -1 to +1, and also the Kurtosis values for a variable varied between -1 to +1, it can be concluded that the variable is normal or close to normal. In the following, the results of descriptive analysis of the effect of story therapy on the depression of cancer patients are presented in Table 2.

Table 2: Descriptive statistics of depression index

Variable	Test	Average	The standard deviation
Experimental Group	Pre - test	25.78	2.469
	Post - test	18.94	2.738
Control group	Pre - test	24.94	3.169
	Post - test	24.37	3.195

Table 2, shows the mean and standard deviation of the depression variable separately for each of the groups. According to the results, the depression scores decreased in the post test in the experimental group. It should be noted that the depression questionnaire respond each item from zero to three based on a four-option Likert scale. In this test, the minimum score is zero and the maximum is 63. The individual's score is obtained directly by calculating the sum of the individual's scores in each of the items. The following scores can be used to indicate the overall level of depression: 0 to 13: no depression or **the lowest depression rate** is observed; 14 to 19: mild depression; 20 to 28: moderate depression; and 29 to 63: severe depression. Covariance analysis was used in order to investigate the research hypothesis based on the effectiveness of story therapy on decreasing depression in cancer patients in the experimental and control groups, (Table 3).

Table 3: Results of covariance analysis in two groups of control and experiment

Source of changes	Sum of squares	Degrees of freedom	Average squares	Coefficient F	Significance level	Squared ETA	Statistical power
Intergroup variance	1198.533	1	1198.533	25.360	0.021	0.97	1.00
Intra group variance	614.400	28	47.262				
Total	1812.933	29					

According to the results of Table 3, the level of significance is 0.021 in the inter-group variable, and this value is smaller than the significance level of the criterion ($P \leq 0.05$) and also because the F-value obtained is 25.360 and greater than the table value with degrees of freedom of 29 and 1,

therefore, the hypothesis of research “the effectiveness of story therapy on reducing depression in patients with cancer”, is confirmed. Also, the effect or difference (ETA) is equal to 0.96, that is, reduced depression in the post test of the experimental group is related to the effect of the story therapy with a probability of 97%. The statistical power is equal to 1.00, in other words, the research hypothesis is confirmed if the present study is repeated 1000 times.

Discussion and conclusion

According to the results of this study, the depression scores have decreased in the post test in the experimental group. Therefore, the research hypothesis “the effectiveness of the story therapy on reducing depression in cancer patients” is confirmed. In the explanation of the findings of this study, it should be noted that the language of the storytelling is based on the nature of human beings and the interest in the stories and their hearing. Because children are closer to nature, they love story and storytelling and are affected by it and can be used as an educational and therapeutic technique. So, during this study, in the first step, it has tried to focus on the attractive process of stories, and the techniques and skills of storytelling and communicating with children utilizing the capacity of story therapy. Also, in the stories, implicitly and indirectly, the inhibition of the hero of the story, as well as his patience in achieving success and ignoring the immediate and immediate rewards to achieve better and longer rewards has been addressed. At the end of the treatment sessions with repetition and practice as well as imitating children from their favorite characters in the stories, we could activate the components of children’s patience and happiness and reduce the depression in comparison with pre-treatment period significantly. Stories can also have a significant effect on social, emotional, and moral education, and transfer many regulations, social norms, and life-style guidelines. The stories tell how to deal with problems, solve them and many behavioral patterns in different social and age groups. If the parents or therapists have ability to understand the child’s secret thoughts or identify their hidden feelings, even if their interpretations are correct, but the child loses the opportunity to achieve the feeling of a successful encounter with his/her problem by listening to the story in succession and thinking about it. For this reason, the narrative approaches emphasize psychotherapy and the stories play an important and effective role in the behavior and the facts of children. Stories provide unexpected and amazing solutions and at the same time achievable and positive for children, yet positive and positive. The use of literature, story and story therapy is the result of the efforts of researchers and therapists. Some problems of children emotional and behavioral problems are due to the lack of knowledge and lack of social skills, correct verbal pattern, community-friendly behaviors, communication skills and making friend, accountability, etc., therefore teaching these skills to these children may partly prevent the occurrence of these problems. Psychologists and therapists of the child can show more seriousness in using stories in childhood and adolescent treatment interventions and parents and teachers should focus on the wider use of targeted stories in educational programs for children, especially this also has its own position in educational tradition of our culture.

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