

Impact of a Group-Based Play Therapy on the Levels of Anxiety and Self-Esteem in Children with Cancer

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Abstract: The aim of this research was to show the importance and role of play therapy in improving anxiety and self-esteem in children even with incurable diseases, which may not have been given much attention. This study was carried out in order to use and importance of play therapy and equipment of play room in children's departments. The method used in the present research was an interventional study. The research population in this research includes all the children aged 6-15 years old with cancer who were hospitalized and had files in a Medical and Welfare Center (support center for children with cancer) in 2022, and in this study 30 children with cancer was selected using available sampling. The subjects were randomly divided into two groups (16 intervention people and 14 control people). Play therapy sessions (seven 2-hour sessions) were performed in the play room on the intervention group. The results showed that play therapy was significantly effective in reducing anxiety and improving self-esteem among children with cancer. The results of the research showed that play therapy can be used as an effective method to improve anxiety and self-esteem in children with cancer. Therefore, it is necessary to consider a play room in children's wards, especially those where patients are admitted for a longer period of time.

Keywords: Children, Cancer, Play Therapy, Anxiety, Self-Esteem

Introduction

Cancer is significant at any age, but the death rate caused by it is higher in children between the ages of 3-14 years than other patients (Malm et al., 2019; Chaharbaghi et al., 2022; Caspersen et al., 1958). Pediatric cancer consists of a group of malignancies, each of which has its own epidemiology-pathology and mortality rate. This disease, which has more diversity than adult disease, is the most common cause of death between the ages of 1-16 years in western countries (Lahart et al., 2019; Schwartz et al., 2019; Baniyasi et al., 2022). Changes caused by cancer or its treatments and changes in roles and communication patterns in sexual performance are among the most important factors in damaging self-esteem and causing adaptive disorders, which are associated with depression in cancer patients (Abdoshahi et al., 2022; Gholami & Rostami, 2021). Children at any age show two general feelings towards this disease: anger and guilt. About 30% of children with cancer eventually die. It was concluded from

several studies that even children who are relatively well are well aware of the severity of this disease and may expect their early death (Ghorbani et al., 2020; Baniyasi et al., 2022).

The prevalence of cancer is equal in both genders during pre-puberty and the ratio of girls to boys increases by 2 to 1 in adolescence. Scientists believe that acute depression and anxiety is very common among children. About 2% of children aged 6-12 and 4% of teenagers suffer from depression and anxiety (Naeimikia & Gholami, 2018; Bull, et al., 2020; Sallis et al., 2016; Baniyasi et al., 2022; Baniyasi et al., 2022). According to the criteria of DSM IV-TR for major anxious disorder in children and adolescents, despite the growing increase of these disorders in children, it is not included in the list of mental disorders of children and adolescents due to the fact that it is not specific in these age groups. However, the International Mental Health Research Center of Australia has provided a children's behavioral assessment checklist that has classified behavioral problems into two general groups and specific categories. In this category, children's anxiety disorders and depression are included in the special disorders category (Chaharbaghi et al., 2022; Štefan et al., 2018; Sheikh et al., 2021).

Treatment of anxiety in children is similar to that of adults. 1- Drug therapy, 2- Electroshock therapy, 3- Psychotherapy, and 4- Play therapy. The history of children's psychotherapy is full of attempts to strengthen the benefits of psychotherapy, recognizing the importance of play is an important step in this effort (Sheikh et al., 2022; Dana et al., 2022; Hashemi et al., 2022). The scientific assumption is that a child can gain important information about himself and his problems through play. They describe play therapy as a therapeutic approach as follows: play therapy is an ongoing relationship between a trained therapist and a young client who has behavioral or emotional problems by using various activities based on play that leads to therapeutic changes (Hazrati et al., 2022; Mohammadi et al., 2022; Saeedpour-Parizi et al., 2020; Saeedpour-Parizi et al., 2021; Cid et al., 2019). Play therapy is a creative work in child psychotherapy.

In recent years, direct approaches to play therapy have become popular. It has been proven that such approaches are useful in developing children's problem-solving skills and social skills and other cognitive-behavioral adaptive solutions (Farhangnia et al., 2020; Golaszewski & Bartholomew, 2019; Abdi et al., 2022; Harter, 2012). One of the most important advantages of this approach is that the goals and treatment methods are completely specific. Such an approach makes it possible to clearly define treatment goals (Seyedi et al., 2016; Santos et al., 2014).

In qualitative research under the title of communicating through art, the role of using art as a means to express the feelings of children hospitalized in Swedish hospitals has been investigated. In this study, 22 children aged 6 to 12 years were studied for 3 years. The research method was to record children's statements before and after playing therapy in the form of painting, playing with clay and patchwork. Researchers found that children show their unique emotions through games (Taghva et al., 2020; George et al., 2019; Sumimoto et al., 2010; Khosravi et al., 2023). In a longitudinal study, the effect of play therapy on the trauma caused by sexual abuse of children was investigated. In this study, children who were subjected to sexual abuse underwent play therapy for 6 months. The results showed that the anxiety, depression and tension caused by sexual misconduct decreased significantly (Green et al., 2005; Seyedi et al., 2021; Hwang & Kim, 2017). In another study, the effect of play therapy on children with chronic diseases was investigated. The findings showed that play therapy was significantly effective in reducing anxiety symptoms and behavioral problems. On the other hand, it has been very effective in increasing the child's adaptation to diabetes and reducing the resistance in accepting the diabetic diet (Ball et al., 2010; Garcia et al., 2019).

The aim of this research is to show the importance and role of play therapy in improving anxiety and self-esteem in children even with incurable diseases, which may not have been given much attention. This study was carried out in order to use and importance of play therapy and equipment of play room in children's departments.

Methods

The method used in the present research is an interventional study. The current study was conducted based on the ethical considerations contained in the Declaration of Helsinki. The research population in this research includes all the children aged 6-15 years old with cancer who were hospitalized and had files in a Medical and Welfare Center (support center for children with cancer) in 2022, and in this study 30 children with cancer was selected using available sampling. The subjects were randomly divided into two groups (16 intervention people and 14 control people). Then, before entering to protocol, all subjects completed related questionnaire for anxiety and self-esteem. Then, play therapy sessions (seven 2-hour sessions) were performed in the play room on the intervention group and at the end of the play therapy program again on both groups, the test was performed after one week. The control group, the predetermined program (routine) of the test center was followed. There were 16 people in the intervention group before the play therapy, of which two people left the rehabilitation center was removed from the

group and the intervention group after the game therapy was reduced to 14. The number of the control group before and after the game therapy was 14 people.

The method of play therapy was the use of art games in the form of painting, which is visual art in order to access the unconscious part of the therapist's mind and express emotions in objective and visible ways and help people's self-awareness and its safety, and on the other hand, the person himself can easily get the result of the work. The tools and materials needed for children's painting were: crayons, varnish, watercolor box, sheet, glue and colored paper.

The Hospital Anxiety and Depression Questionnaire (Yu et al., 2019) was used to measure depression and anxiety in this study. It is a 14-item self-report tool that is used to screen for the presence of depression and anxiety and the severity of depression and anxiety symptoms during the past week. The duration of its implementation is less than 5 minutes and it has two 7-part subscales for depression and anxiety. Each component is scored on a Likert scale between 0 and 3 and its range is 0 to 21. Scores: 0-7 are considered normal, scores: 8-10 are considered mild, scores: 11-14 are moderate, and scores: 15-21 are considered severe. The reliability of this questionnaire was measured in this study and its Cronbach's alpha was 0.90.

Also, to measure self-esteem, Cooper Smith's self-esteem questionnaire (Slootmaker et al., 2009) was used. The self-esteem questionnaire contains 58 items that describe a person's feelings, opinions or reactions, and the subject must answer with these items by marking in four boxes "Similar to me (yes)" or "Not similar to me (no)". This tool has an overall score and can be implemented individually or in groups. The scoring method is zero and one. The minimum score is zero and the maximum score is 50. It should be noted that the reliability of this scale in the current research was 0.92.

The collected data were analyzed with the help of statistical methods in two descriptive and inferential sections. In the descriptive part, frequency indicators, frequency percentage, mean and standard deviation were discussed. In the inferential part, the data was analyzed based on the goals and hypotheses of the research and with the help of inferential statistics methods such as the independent t tests. Significant levels were considered at the alpha level of 0.05.

Results

7.69% of participants had Hodgkin's disease, 50% of them had ALL, 15.38% had Ewing's sarcoma and other types of disease included 3.84%.

According to Table 1 and Figure 1, according to the mean of depression and anxiety in the intervention and control groups before the game therapy, which is 16.95 and 15.24, respectively, there is no significant difference ($p=0.684$). Results of posttest (Table 2 and Figure 1) showed that the mean depression score in the intervention and control groups after play therapy were 11.29 and 14.98, respectively, which is a significant difference ($p=0.001$).

Table 1. Mean and standard deviation of the depression and anxiety in the pretest

| Intervention | | | Control | | | P |
|--------------|-------|------|---------|-------|------|-------|
| Number | Mean | SD | Number | Mean | SD | |
| 14 | 16.95 | 2.58 | 12 | 15.24 | 1.97 | 0.684 |

Table 2. Mean and standard deviation of the depression and anxiety in the posttest

| Intervention | | | Control | | | P |
|--------------|-------|------|---------|-------|------|-------|
| Number | Mean | SD | Number | Mean | SD | |
| 14 | 11.29 | 2.08 | 12 | 14.98 | 2.14 | 0.001 |

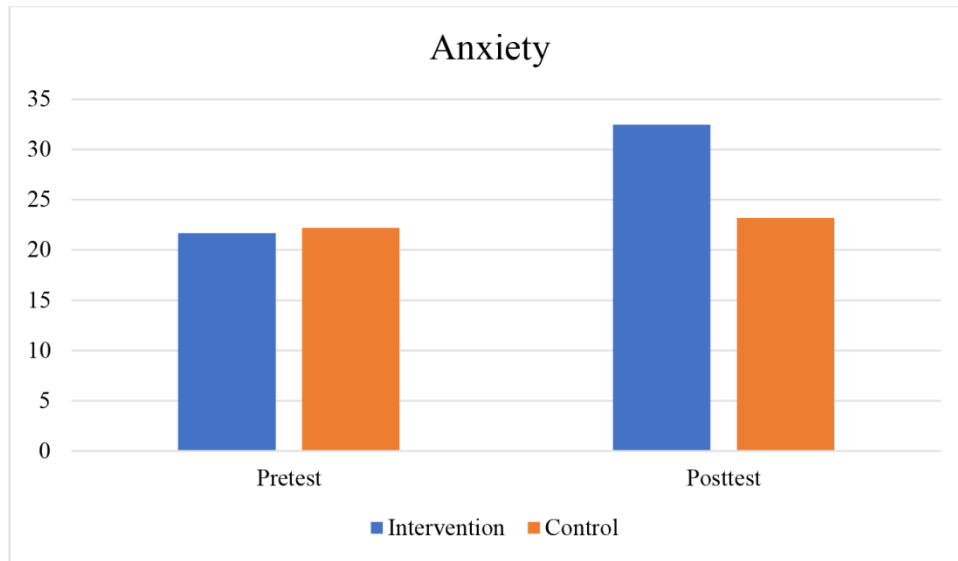


Figure 1. Mean of the depression and anxiety in the pretest and posttest

According Table 3 and Figure 2, according to the mean of self-esteem in the intervention and control groups before the game therapy, which is 21.69 and 22.21, respectively, there is no significant difference ($p=0.527$). Results of posttest (Table 4 and Figure 1) showed that the mean depression score in the intervention and control groups after play therapy were 32.48 and 23.18, respectively, which is a significant difference ($p=0.001$).

Table 3. Mean and standard deviation of the self-esteem in the pretest

| Intervention | | | Control | | | P |
|--------------|-------|------|---------|-------|------|-------|
| Number | Mean | SD | Number | Mean | SD | |
| 14 | 21.69 | 4.94 | 12 | 22.21 | 3.28 | 0.527 |

Table 4. Mean and standard deviation of the self-esteem in the posttest

| Intervention | | | Control | | | P |
|--------------|-------|------|---------|-------|------|-------|
| Number | Mean | SD | Number | Mean | SD | |
| 14 | 32.48 | 5.02 | 12 | 23.18 | 3.09 | 0.001 |

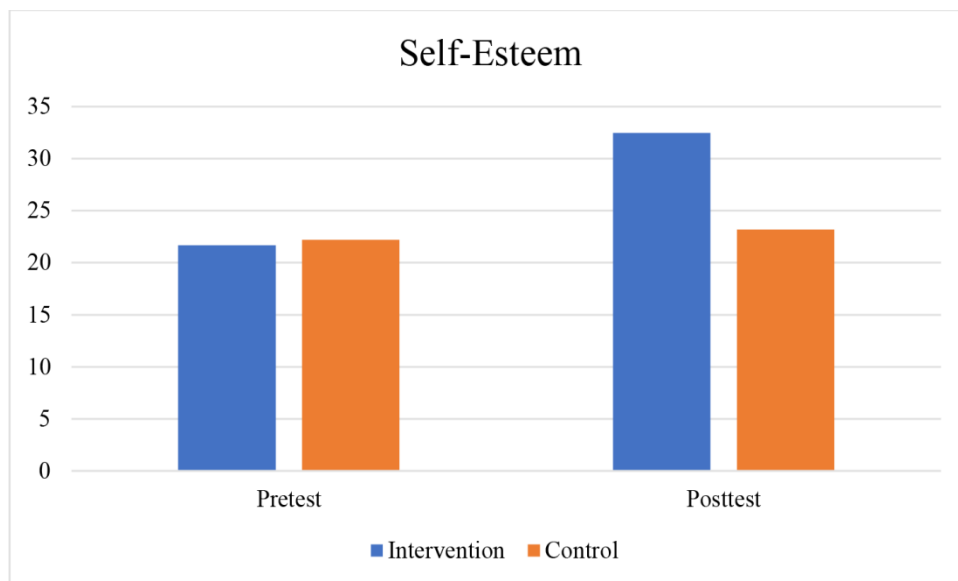


Figure 2. Mean of the self-esteem in the pretest and posttest

Discussion

The aim of this research was to show the importance and role of play therapy in improving anxiety and self-esteem in children even with incurable diseases, which may not have been given much attention.

Data analysis confirmed the main research hypothesis under the title "Group play therapy reduces the level of anxiety and self-esteem in children with cancer". In other words, play therapy has been more effective in reducing the anxiety score in the intervention group compared to the control group, and the hypothesis of the research was confirmed, and it can be concluded that play therapy significantly reduces the anxiety of the intervention group in comparison to control group (Mohammadi et al., 2022; Saeedpour-Parizi et al., 2021; Golaszewski & Bartholomew, 2019; Garcia et al., 2019). In a study titled Children's Life Services, the children's life program in many advanced medical centers has been studied. In these centers, by using the interaction of child psychologists and medical staff, play therapy has been used as a primary means of creating a child's adaptation to the hospital environment and conditions, creating a sense of well-being and finally improving the child's life plan (Bull et al., 2020; Štefan et al., 2018; Hazrati et al., 2022; Ball et al., 2010).

In research entitled Review of play therapy, the effect of play therapy in accepting the hospitalization process and the different ways of expressing children's feelings through play have been discussed, and that each child shows their unique feelings from their hospitalization experience by playing free games they give (Ghorbani et al., 2020; Baniyasi et al., 2022; Saeedpour-Parizi et al., 2021; Abdi et al., 2022). In research entitled "Investigation of the effect of school games on reducing the level of depression and social problems and the feeling of well-being in children with cancer", it was stated that while playing a role, children were able to experience a sense of well-being and improve their shortcomings in social skills. Our study is consistent with the results of previous studies (Naeimikia & Gholami, 2018; Sheikh et al., 2021; Seyedi et al., 2016; Seyedi et al., 2021). Age has not been effective in the effect of play therapy (Seyedi et al., 2021; Hwang & Kim, 2017; Garcia et al., 2019; Sloodmaker et al., 2009), that is, anxiety is not affected by the gender of children and there is no significant difference between girls and boys. In another study, the effect of play therapy on children who are in the stages of grieving process was discussed, and the results showed that play therapy was very effective in helping children express their feelings and go through these stages (Abdoshahi et al., 2022; Sheikh et al., 2021; Saeedpour-Parizi et al., 2020; Seyedi et al., 2016; Seyedi et al., 2021).

The results of the research showed that play therapy can be used as an effective method to reduce depression in children with cancer. Therefore, it is necessary to consider a play room in children's wards, especially those where patients are admitted for a longer period of time (Hazrati et al., 2022; Golaszewski & Bartholomew, 2019). One of the tools that can be used in the hospital to reduce children's fear and anxiety is ordinary games. It is suggested to increase the effect. Therapeutic play and stress relief for hospitalized children, the appropriate type of play is determined, and each child is guided to play a game appropriate for their age (Taghva et al., 2020; Seyedi et al., 2021; Hwang & Kim, 2017; Sloodmaker et al., 2009).

Conclusions

The results of the research showed that play therapy can be used as an effective method to improve anxiety and self-esteem in children with cancer. Therefore, it is necessary to consider a play room in children's wards, especially those where patients are admitted for a longer period of time. One of the tools that can be used in the hospital to reduce children's fear and anxiety is ordinary games. It is suggested to increase the effects of therapeutic play and stress relief for hospitalized children, the appropriate type of play is determined, and each child is guided to play a game appropriate for their age. Considering the importance and effect of play therapy in the anxiety and self-esteem of children with cancer, it is suggested that this non-invasive and safe method, which is accompanied by cheerfulness and fun, will advance the therapeutic goals in terms of training and empowering children's nurses and getting to know them as much as possible. Serious measures should be taken with play therapy methods.

Conflict of interests: None to declare

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