Original Article

The Effect of Prayer on Level of Anxiety in Mothers of Children with Cancer

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Abstract

Introduction

Cancers are one of the most common chronic diseases in children that cause fear and anxiety in them and their families. Praying is one of the methods can be used for reducing anxiety. In this study, we examined praying effect on anxiety in mothers with children suffer from cancer.

Materials and Methods

This randomized clinical trial was done on 60 mothers divided in two groups (n=30). In first group prayer therapy was done for three weeks by mothers. In control group prayer therapy was not done. Data was collected by state anxiety spilberger test and mean anxiety was compared between two groups by analytical statistical test.

Results

The results showed that difference between mean anxiety in two groups was significant (p=0.001), and mean anxiety reduced after praying from 56.2+_13.9 to 40.9+_12.4 in case group (p=0.001).

Conclusion

The results of this study showed that praying can reduce anxiety in mothers with children suffer from cancer and could be useful for them.

Key words

Neoplasms, Anxiety, Child, Mothers

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Introduction

Cancer is a chronic, long-term illness that affects not only the child but also the family as a whole (1, 2). Researchers have suggested that childhood cancers can be considered as a family disease. Parents describe the diagnosis and treatment of a child with cancer as one of the most stressful times during their lives (1) .The stress begins immediately after the diagnosis and continues through the treatment. Caring for a child with cancer brings an enormous physical, psychological, social and economic burden on the family (3), with the period of child's cancer treatment often described as a struggle by the families (4, 5). The "Burden of Care" is the reflection of the undesirable events and difficulties brought about by the disease upon the members of the family. The burden of care in the family is related to the frequent and long treatments and hospitalizations, medical problems of the children, and the ever-present risk of relapse (3). The burden is often experienced most by mothers, since they often take on the major responsibility of care giving. Providing Emotional and physical care for their child not only increases the mother's workload but may cause her own physical health to suffer. In a recent study, mothers reported higher levels of stress than fathers (6). Various studies have shown that mothers display symptoms such as hopelessness, despair, anger, stress, anxiety, and depression (6, 7). In the last decade approximately 20 studies, in parents of survivors of childhood cancer have shown having a child with cancer may cause the mothers to be socially isolated because cancer diagnosis requires long and expensive treatment and care plans. Also, there can be repeated hospitalizations, or the child may receive care at home. Most studies have shown that during the course of the disease, mothers primarily participated in the child's care. Working mothers often quit their jobs and could not participate in social activities or have time for them, resulting in high levels of anxiety and depression (3, 8). Some studies found that 34 % of the mothers of children with cancer in various phases of their child's disease were diagnosed with a psychiatric disorder (9).

A recent study, mothers interviewed said they tried to cope with their situation through talking with their husbands, talking with other mothers experiencing similar problems, smoking and praying. Prayer is the natural language of religious experiences (3). It is a spiritual and for many also a religious practice (10). Prayer can be generally defined as human communication with divine and spiritual entities. Spiritual practices such as prayer have been used by individuals for every type of illness and across all age groups, cultures and religions. One of the largest religions in the world is Islam. In illness, the awareness of God increases and Muslims becomes closer to God (11).

Most cancer patients use religious and spiritual resources in response to their disease (12). They use prayer to cope with distressing symptoms, anxiety-provoking medical procedures, also patients and family caregivers reported using prayer as a strategy for managing cancer pain (10). For this study, prayer is defined as an activity and expression of the human spirit reflecting connectedness with God. But various aspects of prayer are unclear and also research about prayer in mothers of children with cancer was not performed in Yazd and use of prayer as a therapeutic intervention is controversial, hence the purpose of this study was to measure efficacy of praying on the anxiety level of mothers with cancer children. We hope it will be useful for health professionals especially nursing in the management of child with cancer and their family.

Materials and Methods

This randomized clinical trial was done on 60 mothers with cancer children hospitalized in pediatric oncology department. The mothers divided randomly into two groups (n=30). Sample size was calculated using power analysis with a significance level of 5% and power of 80%. After cases agreed to participate in the study, Pray therapy was done in the cases group for three weeks and in control group prayer therapy was not done. Mothers were educated to pray three times a day for 10 minutes (preferably at the time of Azan in the hospital mosque) so they communicated with God by praying practices, include: reading Quran, praying, and remember of god by zikr and praying book entitled "communication with God" and attending to hospital mosque, and hearing of Quran by their mobile. The researchers encouraged cases to do the process. Data was collected by Spielberger's and completed with an interview before intervention and 21 days after. State Anxiety Inventory and mean anxiety were compared between two groups by analytical statistical t independent test.

Statistical Analysis

Statistical analysis of data was done by SPSS version 16, the chi-square analysis, and independent t-test. Inclusion criteria were: Muslim religion and Iranian nationality, ability to read and write awareness of disease and having child with cancer. Exclusion criteria were: having chronic illnesses such as cardiovascular, respiratory, renal, hepatic and psychotic disease, and use of antipsychotic drugs in children and their mothers. Spielberger's State Anxiety Inventory consists of 20 items that ask how a person feels now, and reflects situational factors that may influence anxiety levels. Scores range from 20 to 80 and the higher the score the greater the level of anxiety. All items are rated on a 4-point scale (e.g., from “Almost Never” to “Almost Always”). Higher scores indicate greater anxiety. Internal consistency coefficients for the scale have ranged from 0.86 to 0.95; test-retest reliability coefficients have ranged from 0.65 to 0.75 over a 2-month interval. Test-retest coefficients for this measure in the present study ranged from 0.69 to 0.89. Considerable evidence attests to the construct and concurrent validity of the scale (13).

Results

The mean age of mothers in controls was 36+-2.75 and cases 35.12+-3.46 years and there was no significant difference between two groups in terms of mother's age, education level and type of cancer in children . The most percentages of all children with cancer were acute lymphoblastic leukemia (36.7%, n=22). The mean age of all children was 5.56+_3.13 years (cases group: 5.12+_3.46 and controls: 6+_2.7).the mean duration disease in all children was 1.36+_1.22 years (cases: 1.26+_1.30 and controls1.47+_1.14).Totally there were 34 male and 26 female in children in two groups (controls: male 63.3%, female: 36.7% and cases: male50%.female:50%). There was no significant difference between two groups in terms of children age and duration disease by t independent test and their sex by chi-square. The results showed that difference between mean anxiety before intervention (controls: 58/93+-9/95 and cases: 56.2+-13.94) was not significant statistically in two groups. (p=0/386) (table1) but it was significant after intervention (p=0/001) so that considerably reduction was done in the mean anxiety scores of mothers in cases (40/96+_12/4) relation to controls (58.93+_9/8) (Table 2).The difference between mean changing in two groups pre and post intervention was significant (p=0.001) (table 3).

Table1.Means score anxiety difference between two groups of mothers before pray therapy

group	N	Mean	Std. Deviation	p-value
control	30	58.9333	9.95138	
case	30	56.2000	13.94917	0.386

Table 2.Means score anxiety difference between two groups of mothers after pray therapy

group	N	Mean	Std. Deviation	p-value
control	30	58.9333	9.85387	
case	30	40.9667	12.42213	0.001

Table 3. Comparison between mean differences in two groups' pre and post intervention

group	N	Mean	Std. Deviation	p-value
control	30	.0000	.74278	
case	30	-15.2333	5.48781	0.001

Discussion

In our study the mean score of anxiety in mothers in case group reduced after praying. Researches show that religion, belief and spirituality play an important role in management of anxiety, sickness, and disease. Religious coping has been widely used by patients with all types of chronic diseases, including cancer. Many current studies focus on the importance of prayer, and communicating with God in curing the patients and affecting their well-being (14). Some studies on various diseases including cancer indicated the impact of praying on patients out come for example anxiety, depression (15). Researchers also have found that using prayer can improve quality of life (16, 17). There are some studies about prayer in other medical fields .They found that private prayer was more effective than intercessory prayer in patients with rheumatoid arthritis (18) and other study revealed positive effect of prayer on blood pressure (19). Some researchers found that

after the prayer therapy physical health measures improved significantly (20). One qualitative descriptive study suggested that nurses should support the mothers with cancer children. They found one of the ways that mothers were trying to cope with their situation is praying (3). Our study showed mean anxiety in both groups before intervention was severe because their mean score was near to 60 and score between 60-80 has been known as severe. So nurses should consider that mothers of cancer children experiencing anxiety and other intense stress that have negative effect on caring of their child (3). Despite many studies that showed the impact of prayer on patients outcomes with chronic disease there are also that showed no efficacy (21). Confounding variables include stage of disease could be affected these results. Prayer as therapy has been studied widely, and the evidence is mixed. Marwick 7 reviewed 115 articles on prayer and health outcome: 37articles showed a positive effect, 47 a negative effect, and 31 showed neither. King and Bushwick 6 found that many patients wished their physicians would ask about their spiritual lives. According to their results, 48% expressed they would like their physician to pray with them, and 42% believed that a physician should ask patients about spiritual experiences (22).

Conclusion

Our studies showed nurses can improve anxiety in mothers of children with cancer by encourage them for praying and help them for coping with this situation. It had some limitations, including talking to other mothers or their relatives, or they may use radio and television and, etc but our sampling was divided randomly between two groups .It is suggested the nurse, and other health professionals use prayer therapy for all patients especially, they have chronic disease and for mothers with cancer children.

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Conflict of Interest

None declared.

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