

Articulo de investigacion

The effect of a social group work based on hope therapy on social isolation among women with cancer

El efecto de un trabajo de grupo social basado en la terapia de la esperanza en el aislamiento social de las mujeres con cáncer

O efeito de um trabalho de grupo social baseado na terapia da esperança no isolamento social entre mulheres com câncer

Recibido: 16 de enero de 2019. Aceptado: 06 de febrero de 2019

Written by:
Atefeh Mosayebi¹¹⁵
Maliheh Arshi(Corresponding Author)¹¹⁶
Hamideh Addelyan Rasi¹¹⁷

Abstract

Cancer is one of the hardly curable diseases from which a large number of people suffer. In addition to having physical painful effects on patients, this disease has a lot of psychological and social effects on patients. One of the social consequences of this diseases is social isolation. The Hope Therapy intervention is one of the interventions affecting patients' psychological and social aspects. The aim of the present study is to investigate the effect of Hope Therapy on social isolation of patients suffering from cancer. The present study was conducted via the clinical trial method and using the experimental pretest-posttest design. Research instruments were the Social Isolation Scale with 38 items and the Social Isolation Scale with five items. Their validity was confirmed via formal and content validity techniques, and their reliability was confirmed via Cronbach's alpha. The study was conducted by random selection of 49 female patients suffering from cancer selected from charity centers of Behnam Daheshpour and Mahyar (in two 28-participant experimental and 21-participant control groups). The experimental group received 8-session Hope Therapy intervention with the Growth and Development Social Work Model consisting of three components of Goal, Will and Progress. The results of the present study were analyzed via the

Resumen

El cáncer es una de las enfermedades difícilmente curables que sufren una gran cantidad de personas. Además de tener efectos físicos dolorosos en los pacientes, esta enfermedad tiene muchos efectos psicológicos y sociales en los pacientes. Una de las consecuencias sociales de estas enfermedades es el aislamiento social. La intervención de Hope Therapy es una de las intervenciones que afectan los aspectos psicológicos y sociales de los pacientes. El objetivo del presente estudio es investigar el efecto de la terapia Hope en el aislamiento social de los pacientes que padecen cáncer. El presente estudio se realizó a través del método de ensayo clínico y utilizando el diseño experimental pretest-posttest. Los instrumentos investigación fueron la Escala de Insolación Social con 38 ítems y la Escala de Aislamiento Social con cinco ítems. Su validez se confirmó mediante técnicas de validez formal y de contenido, y su fiabilidad se confirmó mediante el alfa de Cronbach. El estudio se realizó mediante la selección aleatoria de 49 pacientes femeninas con cáncer seleccionadas de los centros de beneficencia de Behnam Daheshpour y Mahyar (en dos grupos de control experimental de 28 participantes y de 21 participantes). El grupo experimental recibió una intervención de 8

¹¹⁵ Master in social work, Department of Social work, University of Social Welfare and Rehabilitation Sciences, Tehran, Iran; Email: Mosayebi.a.sw@gmail.com

¹¹⁶ PhD of Social work, Department of Social work, University of Social Welfare and Rehabilitation Sciences, Tehran, Iran; Email: marshisw@yahoo.com

¹¹⁷ Department of Social Work, Faculty of Social Sciences, Allameh Tabataba'i University, Tehran, Iran, E-mail: hadelyan@yahoo.com

independent t-test and paired t-test. The results of the study indicated that the Hope Therapy intervention can be effective on the subjective aspect in Hawthorne' scale and the objective aspect of social isolation (in the scale of Kalantari. In addition, this intervention results in reducing social isolation in the experimental groups. However, the intervention has no significant effect of other subscales. The Hope Therapy intervention and teamwork have been effective on reducing social isolation of patients suffering from cancer. Since cancer affects humans' physical, mental, and social dimensions, therapeutic interventions on patients should consider social aspects as well.

Keywords: Social isolation, Hope therapy, Group social work.

sesiones de terapia de esperanza con el modelo de trabajo social de crecimiento y desarrollo que consta de tres componentes: meta, voluntad y progreso. Los resultados del presente estudio se analizaron mediante la prueba t independiente y la prueba t pareada. Los resultados del estudio indicaron que la intervención de Hope Therapy puede ser efectiva en el aspecto subjetivo en la escala de Hawthorne y en el aspecto objetivo del aislamiento social en la escala de Kalantari. Además, esta intervención resulta en la reducción del aislamiento social en los grupos experimentales. Sin embargo, la intervención no tiene efecto significativo de otras subescalas. La intervención de Hope Therapy y el trabajo en equipo han sido eficaces para reducir el aislamiento social de los pacientes con cáncer. Dado que el cáncer afecta las dimensiones físicas, mentales y sociales de los humanos, las intervenciones terapéuticas en los pacientes también deben considerar los aspectos sociales.

Palabras claves: aislamiento social, terapia de la esperanza, trabajo social grupal.

Resumo

O médico é uma das doenças que mais curáveis que uma grande quantidade de pessoas. Os efeitos clínicos são dolorosos nos pacientes, estão enfermos com muitos efeitos psicológicos e sociais nos pacientes. Una das consecuencias sociais de estas enfermedades es el aislamiento social. A intervenção de Terapia Esperança é uma das intervenções que afetam os aspectos psicológicos e sociais dos pacientes. O objetivo do presente estudo é investigar o efeito da terapia Esperança no desenvolvimento social do paciente que acomete o câncer. O presente estudo é realizado através do método de ensaio clínico e pode ser usado experimental pré-teste-pós-teste. Os instrumentos de investigação para a Escala de Insolação Social com 38 itens e a Escala de Aislamiento Social con cinco items. Su validez se confirma com técnicas de validez formal e de contenido, e sua fiabilidad se confirma - com a alfa de Cronbach. O estudo pode ser realizado através da selecção aleatória de 49 pacientes com o cancro da mama das Centros de Beneficência de Behnam Daheshpour y Mahyar (em grupos de controlo experimental de 28 participantes e de 21 participantes). O grupo experimental é baseado em uma intervenção de terapia de esperanção com o modelo de trabalho social de desenvolvimento e desenvolvimento de componentes: meta, voluntariado e evolução. Os resultados do presente estudo estão sendo analisados com o exercício da independência e da prática pareada. Os resultados são Estêvão Indeterminado Que A Intervenção De Terapia Esperança Pode Ser Realmente Na Percepção Sobre A Escala De Hawthorne E No Aspecto Do Espetáculo Social Na Escala De Kalantari. Además, esta Intervention result in the reducción del aislamiento social en los grupos experimentales. Não embargo, a intervenção não tem efeito significativo de outras subescalas. A intervenção de Terapia da Esperança e o trabalho em equipe foram eficazes para reduzir o sofrimento social dos pacientes com câncer. Dado que o câncer afeta as dimensões físicas, mentais e sociais dos humanos, as intervenções terapêuticas nos pacientes também debem considerar os aspectos sociais.

Palavras-chave: social social, terapia da esperanza, trabalho social grupal.

Introduction

In today's world, the concept of "health" has become complicated and multidimensional. According to the definition of the WHO, health

refers to "a state of complete physical, mental, and social well-being and not merely the absence of disease or infirmity" (the WHO, 1948)



constitution). As this definition shows, health is not a physical matter, but it covers different aspects and indices. Thus each physical disease can be both engaged in physical and psychosocial aspects.

Cancer is a life-threatening disease and one of the main causes of mortality in the world (Lepore & Revenson, 2007). Cancer is one of the diseases killing many people. According to the statistics released by the WHO, only in 2014, a number of 53500 people died of cancer. With regard to the population of Iran died because of cancer in the same year was 7642400 people (about 0.7% of the total population of Iran). In addition, with regard to the statistics presented by the WHO, the mortality rate in 2014 in Iran was 395000 deaths; therefore, it can be inferred that 13.54% of the total deaths of that year were caused by cancer (the WHO, 2014).

Cancer has a diverse range of effects on physical, psychological, and social aspects of patients' lives. By causing disorders in daily performance (Zemestani et al, 2013), the loss of physical and mental balance (Bijari et al, 2009), skin changes and hair loss (the National Cancer Institute), disorders in patients' sleep, reduction in quality of sleep, vomit and nausea, effects on the degree of sexual desire, arousal, and satisfaction and in general the degree of sexual wellbeing, cancer is effective on physical health (Zemestani et al, 2013; Bakht & Najafi, 2010; Wang et al, 2013).

Those symptoms gradually or concurrently result in other psychological disorders such as anxiety and concerns about the future (Enache, 2011; Lepor & Renson, 2007), depression and reduction in self-esteem (Enache, 2011), reduction in quality of life (Zemestani et al, 2013; Ursaru et al, 2013), sense of disappointment (Pehlivan et al, 2012) effects on patients' compatibility in family relationships (Zemestani et al. 2013), and their positive beliefs regarding themselves (Lepore & Revenson, 2007).

Other problems caused by cancer are social ones; because cancer draws patients to social isolation and death, its social aspect should be considered as well (Pedro, 2001). Causing the sense of loneliness in patients and reducing their relations with others, cancer results in different social problems (Mardani Hamouleh et al, 2012). Affecting the compatibility with workplaces, social compatibility, social relations (Zemestani et al, 2013; Lepore & Revenson, 2007), and elimination of the patients' ability to play their social roles, cancer reduces their social networks

(Heidari, 2009), sense of loneliness (Pehlivan et al. 2012), patients' negative evaluation of their own performance (Pedro, 2001), and social isolation (the National Cancer Institute).

Cancer in women, as a half of the society with key roles in families, is an important problem. Women's significant roles in families cause growth and development of other family members; therefore, any threat imposed on this key group of the society can have devastating effects on the whole society. As a result, paying serious attentions to cancer is very significant because of its increasing prevalence.

Cancer in women has many different types: breast, colorectal, gastric, esophageal, lung, ovarian, etc. cancers totally covered 0.7% of mortality rate of Iranian women's deaths in 2012. Breast cancer with 9795 cases of death in 2012 and its prevalence rate of 24.5% has the highest frequency among Iranian women (Statistics of the International Institute for Cancer Research, 2012), while a report published by the WHO in 2012 regarding 10 main mortality among women of the world, breast cancer was in 8th rank. With regard to the fact that breast cancer in women is the most prevalent one, thus the issue of cancer is very important for Iranian women.

As mentioned, negative consequences of cancer, especially in cases of reducing patients' positive self-concept and its negative social consequences can lead to female patients' social isolation. In this regard, studies show that physical diseases can lead to increasing social isolation (Cornwell & Waite, 2009).

Social isolation has two aspects of social disconnectedness (such as physical isolation of others) and perceived isolation (such as sense of loneliness and the lack of social support) (Cornwell & Waite, 2009). Chalabi and Amir Kafi considered five dimensions of social isolation as family relationships, neighborhood relationships, trans-local relationships, associative relationships, instrumental social capital (Chalabi & Amir Kafi, 2004).

Social isolation is a phenomenon which is correlated with variables correlated with hope such as quality of life (Shekarabi-Ahari et al, 2012; Snyder et al, 1999; Sotoudeh Asl et al, 2009). In addition, with regard to the studies considering loneliness as a factor risk for social isolation (Cacioppo & Hawkley, 2003; Priscilla, 1990), it can be concluded that social isolation is

correlated with depression. Therefore, it seems that social isolation is correlated with hope.

According to Snyder, the concept of hope has three components of, goal setting, pathways thoughts, and agency thoughts, and hope results in better resistance against cancer in different stages (prevention, treatment, etc.) (Snyder et al, 1999).

With regard to positive effects of hope and its effects on variables correlated with social isolation, it seems that the intervention that can enhance hope in women suffering from cancer can result in reducing social isolation as well.

Reviewing literature indicating the Hope Therapy intervention can result in reducing depression and anxiety (Cheavens et al, 2006), reducing sense of disappointment (Steen, 2004), enhancing hope (Berg, 2007; Karbasi, 2010), and reviewing experimental and quasi-experimental studies on social isolation in Iran and other countries, only a few interventions have been effective on reducing social isolation (Findlay, 2003; Cattan et al, 2005; Dammeyer, 2004; Nicholson & Shellman, 2013). In addition, with regard to searches in SID.ir, Magiran.com and Civilica.com, the researcher found little research conducted on effectiveness of interventions on reducing social isolation. The present study was conducted with the aim of investigating effectives of group social work based on the Hope Therapy intervention on social isolation of women suffering from cancer. The approach used in the study is development in group social work.

Method

The present study was conducted via a clinical trial method with pretest-posttest design on two control and experimental groups. The arrangement of the study is based on the simultaneous parallel arrangement or Comparison Group Pretest-Posttest Arrangement (Rafiei, 2008).

The population of the study consists of all women suffering from cancer in Tehran City. Among this population, 75 of the women with medical records in Behnam Daheshpour and Mahyar amnesty institutes and enjoyed the inclusion criteria were selected as participants. The inclusion criteria were participants' consent to participate in the study, their ability to write and read, the diagnosis of at least one type of cancer in them, their residence in Tehran, and

completion of the acute phase of an aggressive treatment. Finally, 49 participants were selected to attend the study. 28 participants were put the intervention (experimental) group and 21 ones were selected as the control group: in the first stage of selecting participants, 75 participants were selected from the population of women suffering from cancer via the random sampling method and then were divided into two intervention and control groups; and in the second stage, the participants selected in the first stage were non-randomly put in the intervention group and the control group was selected via matching. The data were collected using the two instruments of the Social Isolation Scale (Hawthorne, 2006) and the Social Insolation Scale (Kalantari & Hosseinizadeh, 2015) in such a way that the objective and subjective aspects of social isolation were evaluated via Hawthorne's scale (2006) and the objective aspect of social isolation was evaluated via the scale of Kalantari et al. (2015). All moral considerations such as participants' voluntary presence in research, confidentiality, participants' freedom of to exit study, no influence of patients' not participating in the study on other services of the institutes, and consideration of cultural and religious values in using methods. After making aware of the general aim of the study, ensuring confidentiality and anonymity as well as getting the general results of the research, participants participated in the study with informed consent.

Results

As a result, 49 women suffering from cancer had the inclusion criteria and participated in the study in Behnam Daheshpour and Mahyar amnesty institutes in 2016. 28 participants were put in the experimental group and 21 in the control group. Most of the participants (38.8%) aged from 50 to 60 years; 57.1% of them held diploma, 81.6% of them were housewives, 65.3% of them were married, and most of them (83.7%) suffered from breast cancer.

To evaluate the homogeneity of the members of the intervention and control groups, differences of their demographic characteristics and social isolation were investigated. The results of t-test for the variable of social isolation and age, and the results of chi-square test for demographic characteristics illustrated that the two groups had no significant differences in the pretest stage.

After investigating the homogeneity of the two groups, the experimental group received 8



sessions of Hope Therapy, while the control group received no intervention. After the end of the intervention period, the posttest was administered on the two groups. To investigate the normality of the population which is the presumption of using the t-test for evaluating the effectiveness of the intervention, Kolmogorov-Smirnov test was employed. Since the significance level of the test in all variables was higher than 0.05 in both groups, the presumption of the t-test available; as a result, to analyze findings, independent t-test and paired t-test were used.

According to table I, the results obtained from the tests for investigating effectiveness of the intervention on social isolation showed that the Hope Therapy intervention generally can significantly reduce social isolation of the intervention group by investigating the subjective dimension of the Hawthorne's scale (2006) (sig.=0.04) and the objective dimension of the scale of Kalantari et al. (2015) (sig.=0.04) (table 2), while in the control group, both in the subjective (sig.=0.1) and objective (sig.=0.8) dimensions, the means of the posttest are not significant different from those of the pretest.

Table 1. the difference between mean scores of the pretest and posttest of social isolation in terms of the subjective dimension of the intervention group

| Group statistic index | Mean | SD | t-value | Mean difference | Sig. |
|-----------------------|------|-----|---------|-----------------|------|
| Pretest | 6.9 | 4.1 | 2.11 | 1.3 | 0.04 |
| Posttest | 5.5 | 3.5 | | | |

Table 2. comparison of means variation scores of social isolation in its objective dimension of the pretest and posttest administered to the two groups

| Groups | Mean | SD | t-value | Mean difference | Sig. |
|--------------|-------|-----|---------|-----------------|------|
| Intervention | 2.50 | 9.5 | 2 | 5.2 | 0.04 |
| Control | -2.71 | 7.7 | 2 | 3.2 | 0.04 |

According to table 3, the Hope Therapy intervention has no significant effect on any of the

subscales of social isolation in its objective dimension

Table 3. comparing variations of mean scores of subscales of social isolation in its objective dimension

| Subscales | t-value | Mean difference | Sig. |
|-----------------------------|---------|-----------------|------|
| Family relationships | 0.2 | 0.19 | 0.8 |
| Neighborhood relationships | 1.6 | 1.5 | 0.09 |
| local relationships-Trans | 1.8 | 2 | 0.07 |
| Associative relationships | 0.3 | 0.34 | 0.7 |
| Instrumental social capital | 0.8 | 0.7 | 0.4 |
| | | | |

Findings

The results of the present study indicated that the Hope Therapy intervention can evaluate the degree of social isolation whether in its objective dimension via the scale of Kalantari et al. (2015) or in its subjective dimension via Hawthorne's scale (2006) and reduce it significantly. However, this intervention cannot reduce the subscales of social isolation.

The results of the present study can be justified with Durkheim's Anomy Theory. Durkheim believes that isolation is the feelings of emptiness and self-alienation. Thus when hope raises, feelings of emptiness and social isolation reduce. Therefore, intervention that can enhance hope in patients can reduce their social isolation. Moreover, Merton's theory of deviance believing that it can show more creative ways to patients suffering from disappointment can pull back them from states such as "ritualism, retreatism, rebellion, and innovation" and guide them towards better ways, confirms the findings of the present study because one of the axes of the Hope Therapy intervention, finding ways, can make patients far from social isolation.

Theoretical framework of the study of Chalabi and Amir Kafi (2004) shows the final conclusion of this research saying effectiveness of the Hope Therapy intervention on reducing social isolation because according to Chalabi and Amir Kafi (2004), with the increase in hope, trust enhances and social isolation reduces. In addition, the data obtained from the present study is explainable via social psychological theories because attending in courses of hope therapy managed by the mutual support technique, can increase social relationships and reception of social supports from members. This issue means that social support reception can reduce social isolation.

Findings of the present study can be confirmed by Groupman's theory; according to Groupman, hope can cause patients' more compatibility with their conditions. Thus, by making patients suffering form cancer compatible with their new life conditions, the Hope Therapy intervention can pull back them from isolation and return to normal life.

Findings of the present study are also consistent with those of Nicholson and Shellman (2013). Their study, conducted on 56 old persons, showed that the CareLink intervention is

effective on prevention of social isolation, but those findings are inconsistent with the study of Dammeyer (2004) which conducted on 34 old persons and showed that the group memorization intervention cannot be effective on indices considered for social isolation. Furthermore, the results of the present study is consistent with those of the systematic review of Cattan et al. (2005) indicating that only few interventions focus on the aspect of knowledge and skill learning of their own members and can reduce social isolation. Findings of the present study are also consistent with those of Howard et al. (2014) which was conducted on 30 adult cancer survivors and emphasize the effect of quality of life on reducing social isolation because studies showed that Snyder's Hope Therapy intervention can promote quality of life (Howard et al. 2014).

As a conclusion, it can be said that in the present study, integration of group social work with the Hope Therapy intervention can have significant effects on reducing social isolation of women suffering from cancer. By linking hope therapy to which social workers pay attention and group social work with the development approach, the present study could paved the path for providing services for patients suffering from cancer. The development approach in social work results in promoting the sufficiency in humans for doing their social activities. Since improvement in relationships among members was considered in the present study; therefore, social isolation of members of the intervention group reduced significantly. Considering the mentioned discussions, the Hope Therapy intervention with the group social work can result in promoting humans' sufficiency and reduce their social isolation. Since social isolation and alienation of others face patients and their families with many problems, doing preventive and therapeutic plans can reduce their problems. Therefore, the present study confirms the significance of the Hope Therapy intervention with the group social work and its fundamental role in reducing social isolation of patients with cancer. intervention has inevitable contributions to increasing quality of life of patients suffering from cancer and consequently promoting public health.

Suggestions and conclusions

With regard to the results obtained from the present study, it is recommended that officials



should hold sessions of Hope Therapy interventions for patients suffering from cancer in medical centers and hospitals. In fact, the approach of those centers should be guided towards training activities. In addition, holding hope therapy classes for families of patients suffering from cancer can have significant effects on reducing social isolation of patients with cancer. Furthermore, since sampling of the present study was conducted in two centers and the sample size was small, it is recommended that for generalization of the results, further research should be conducted with bigger sample sizes and in more centers. In addition, similar studies should be conducted in other parts of Iran with considering ethnic and racial factors with the aim of increasing generalizability of the results.

Given that successful interventions for reducing social isolation have been few, it is recommended that more interventions should be conducted in this regard. In addition, considering the very few studies evaluating effectiveness of the Hope Therapy intervention on the social aspects of patients' lives, studying effectiveness of this intervention on different social dimensions of their lives is presented as a research suggestion.

Reference

Bakht, S., & Najafi, S. (2010). Body image and sexual dysfunctions: comparison between breast cancer patients and healthy women. Social and Behavioral Sciences, 5, 1493–1497. Retrieved November 30, 2015, from http://sciencedirect.com

Berg, C, J. (2007). The effectiveness of a hope intervention in coping with cold pressor pain. PhD thesis. University of Kansas. Retrieved February 2016 from proques

Bijari, H. et al. (2009). Investigating the effectiveness of group therapy based on the hope therapy approach on increasing the life expectancy of women with breast cancer. Journal of Educational Studies and Psychology Studies of Ferdowsi University of Mashhad, 10 (1), pp. 171-184, extracted in January 2015 from www.sid.ir.

Cacioppo, J. T., & Hawkley, L. C. (2003). Social Isolation and health, with an emphasis on Underlying Mechanisms. Perspectives in Biology and Medicine, 46, 39-56.

Cattan, M. White, M. Bond, J. Learmouth, A. (2005). Prevention social isolation and loneliness among older people: a systematic review of health promotion interventions. School and

society. 25(1), pp 41-67 Retrieved February 2016 from proquest

Chalabi, M. & Amir Kafi, M. (2004). Multivariate analysis of social isolation. Journal of Sociology of Iran, 5 (2), pp. 3-31.

Cheavens, J. S. Feldman, D. B. Gum, A. Michael, S. T. Snyder, C. R. (2006). Hope therapy in a community sample: a pilot investigation. Social indicators research, 77:61-78

Cornwell, E. Y., & Waite, L. J. (2009). Social disconnectedness, perceived isolation, and health among older adults. Journal of health and social behavior, 50(1), 31-48.

Dammeyer, M, M. (2004). Does social isolation among facility dwelling elderly decrease using a reminiscence group intervention? PhD thesis. University of Wyoming. Retrieved February 2016 from proquest

Enache, R. G. (2011). The relationship between anxiety, depression and self-esteem in women with breast cancer after surgery. Social and Behavioral Sciences, 33, 124 – 127. Retrieved November 30, 2015, from http://sciencedirect.com

Findlay, R, A. (2003). Interventions to reduce social isolation amongst older people: Where is the evidence?. School and society. 23, pp 647-658

Hawthorne, G. (2006). Measuring social isolation in older adults: development and initial validation of the friendship scale. Social indicators research, 77, 521-548

Heidari, S. (2009). Investigating the size of the social network and the sources of emotional support and their related factors in patients with cancer. Journal of Nursing Research. 2 (12 & 13), pp. 91-101, extracted in April 2016 from www.sid.ir.

Kalantari, A. & Hosseinizadeh, Arani, S. S. (2015). City and social relations: The study of the relationship between the level of social isolation and the level of social support received with the level of experience of loneliness (Case study: Tehran citizens). The Journal of Urban Sociological Studies, 5 (16), pp. 87-118, extracted in May 2017 from www.sid.ir.

Karbasi, A, L. (2010). A randomized clinical trial examining the effectiveness of a hope intervention for low SES children. PhD thesis. Xavier university. Retrieved February 2016 from proquest

Lepore S, Revenson A. (2007). Social constraints on disclosure and adjustment to cancer. Social and personality psychology compass, 1: 110-21. Available at wiley

Mardani Hamouleh, M., Ebrahimi, E. & Mostaghasi, M. (2012). The effectiveness of

psychological training program on social anxiety in patients with cancer. Journal of Nursing and Midwifery, Birjand University of Medical Sciences, 9 (3), pp. 181-189 Extracted in March 2013 from www.sid.ir.

Nicholson, N, R. Shellman, J. (2013). Decreasing social isolation in older adults. Research in gerontological nursing. 6(2), pp 89-97.

Pedro, L. W. (2001). Quality of life for long-term survivors of cancer. Cancer nursing, 24(1), 1-11 Pehlivan, S. Ovayolu, O. Ovayolu, N. Sevinc, A. Camci, C. (2012). Relationship between hopelessness, loneliness, and perceived social support from family in Turkish patients with cancer. Support care cancer, 20:733-739

Priscilla, S. (1990). Physical and psychosocial adaptation, social isolation, loneliness, and self-concept of individuals with cancer. (PhD PhD), The Catholic University of America. Proquest database

Rafiei, H. (2008). Interdisciplinary research methods on addiction and other social problems and deviations (qualitative and quantitative research methods). Tehran: Danjeh Publication. Shekarabi-Ahari, GH. Younesi, J. Borjali, A. Ansari-Damavandi, SH. (2012). The effectiveness of group hope therapy on hope and depression of mothers with children suffering from cancer in Tehran. Iran journal cancer prevention, 4(5), pp 83-88

Snyder, C. R., Michael, S. T., & Cheavens, J. S. (1999). Hope as a psychotherapeutic foundation

of common factors, placebos, and expectancies. In M. A. Hubble, B.L. Journal of Personality and Social Psychology, 60, 570–585.

Sotoudeh Asl, N., Sahbet Esmailpour, M., & Bigdeli, I. (2016). The effect of hope therapy on the quality of life of patients dependent on methadone maintenance treatment. Quarterly of Clinical Psychology, Vol. 8 (1), pp. 51-60 Extracted in the spring of 2016 from www.magiran.com.

Steen, J, H. (2004). Measuring the efficacy of the Snyder hope theory as an intervention with an inpatient population. PhD thesis. The university of Mississippi. Retrieved February 2016 from proquest

Ursaru, M., Crumpei, I., & Crumpei, G. (2013). Quality of Life and Religious Coping in Women with Breast Cancer. Paper presented at the 4th World Conference on Psychology, Counseling and Guidance, Turkey

Wang, F., Chen, F., Huo, X., Xu, R., Wu, L., Wang, J., & Lu, C. (2013). A Neglected Issue on Sexual Well Being following Breast cancer Diagnosis and Treatment among Chinese Women. PloS ONE, 8, 1-7.

Zemestani, M., Hassannejad, L., & Nejadian, A. (2013). Comparison of sleep quality and social adjustment of patients with cancer and normal people in Ahvaz City. Medical Journal of Urmia, 24 (7), pp. 471-482 extracted in January 2015 from www.sid.ir.