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# Factors related to effectiveness of psychological intervention on Breast Cancer

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### ABSTRACT

Potentially diagnosis and progress of breast cancer, specially after losing breast in one eastern country make several complication, which should be considered during therapy. Cancer especially breast cancer is involved with known and unknown mechanisms. Effectiveness of many therapeutic methods examined on breast cancer are mainly divided to pharmacological and non-pharmacological treatments. It seems therapies is not effected patients in the same way. On the other word similar therapies in different study indicated different results among breast cancer patients. Therefore, in this study briefly we reviewed the previous literatures and summarized in this short report. Although we focused on non-pharmacological therapeutics, but we found some variables, interfere or facilitate effectiveness of any kind of treatments. In this report, some implication and effective variables mentioned briefly which is effect the recovery and interventions effectiveness in breast cancer such as age, economic level, stage of illness, depression and mood and distress.

Key words: Breast cancer, Psychotherapy, Psycho-oncology therapy.

### **INTRODUCTION**

According to last statistics in Iran, 6160 breast cancers cases are diagnosed annually and mortality rate is about 1063 each year.<sup>[1]</sup> Breast cancer affects the Iranian women at least a decade earlier than women in developed countries and most of the patients with this disease are aged between 40 to 49 years old in Iran.<sup>[2]</sup> On the other hand, the age of standardized mortality rate of breast cancer increased considerably during last ten years from 1.40 to 3.52 per 100,000 and its mortality was increasing 151.4% for Iranian

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women, although it seemed that the rate leveled off from 2002 to 2004. Moreover, the increasing rate was more significant for females aged 15 to 49 compared to cases aged above 50 years old.<sup>[3]</sup> A range of analgesics and adjuvant medications are accessible to the patients. These medicines provide satisfactory analgesia, but are allied to a number of side effects. Hence, more effective ways for managing breast cancer pain are needed. However, further studies are needed for the novel therapies and agents to assure fast and adequate pain relief with minimum side effects.<sup>[4]</sup>

In long survival of breast cancer patients, several factors contributed with complementary and alternative therapy also take obvious place among effective therapies. In fact, despite inconsistent findings, the belief that psychotherapy promotes survival in people who have been diagnosed with breast cancer has persisted.<sup>[5]</sup> Using alternative and complementary therapy has a distinct approach in response to chronic patients' physical and emotional problems. Although this approach is not always successful. Below discussed some barrier which could affect the efficacy of interventions.

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## Breast cancer and factors related to effectiveness of psychological intervention

The management of cancer commonly includes determined stages after comprehensive assessment and diagnosis of causes when cancer diagnosed primary disease modifying treatment such as surgery, chemotherapy or radiation beside needed pharmacological treatments according to analgesic ladder. However, as every cancer patient has antique condition, it is highly recommended that it should be tailored to each individual, as different etiological, pathological, physiological, psychological, cultural and other patient-related factors or any combination of them altogether contribute to the complexity of cancer syndrome. Cancer treatment is not dependent on a special formula, the feasibility, appropriateness; potential benefits along with possible adverse effects of a treatment method should be taken into consideration in developing a coping strategy.<sup>[6]</sup>

The belief that psychological factors affect the progression of cancer has become prevalent among the lay public and some oncology professionals.<sup>[7]</sup> Therefore, considerable attention has been attracted to developing and testing the efficacy of different management methods. Considering breast cancer patients complain frequently from pain, fatigue and low quality of life. Several studies aimed to improve the quality of life and coping of breast cancer patients. Spiegel, et. al. (2004) surveyed the survival rates of cancer patient. They find out that many studies aimed to investigate whether psychotherapy increases survival proved it negatively, however a positive endpoint was the fact that the quality of life has been improved among many of patients.<sup>[7]</sup> Changes in quality of life because of psychosocial interventions are supposed to involve changes in mediating variables. Potential mediators include, for instance, improvements in feelings of control, increased perceptions of social support, constructive emotional processing and expectancies regarding symptoms. It is suggested that interventions works on patients through adjust to cancer include cognitively processing threatening information about the world and oneself.<sup>[8]</sup>

Several factors can affect the efficacy of intervention. The previous studies reported prevalent disorders such as adjustment, mood disorder, distress, anxiety, depression, worry etc. The range is vary but most estimates agree upon rates above general population.<sup>[9]</sup>

Another point is that some patients are face in lower distressed situations and some can cope in better way. This can interfere or help to effectiveness of psychotherapy. Sociocultural issues such as age, having child, marriage status, educational and economical level and even sex activity are inter related with level of stress and acceptance of cancer. Some researchers found younger adult breast cancer patients commonly indicated higher prevalence of anxiety and depression.<sup>[10]</sup> However in another large study the finding was not similar and found only a weak inverse relationship between distress and age.<sup>[11]</sup> Elderly patients experienced long duration of disease, high probability of cancer metastasis, expected to suffer more comorbidity and associated disability and these conditions increase anxiety and depression. In old patients social support and income is lower while the disease stage is advance. It has been suggested that age associated factors like these, and pain, are predictors ormediators of distress in elderly people.<sup>[12]</sup>

Marital status is another demographic character, which is related to higher social support, income and lower cancer-related distress.<sup>[13]</sup> Fox (1998) believed that difference of income of patients is a factor, which can predict longer survival, and it is one of the main effective characters in efficacy of treatment and follow ups.<sup>[14]</sup>

Cancer and medical treatment stages are also effective in efficacy of alternative treatment. The initial impact of diagnosis and treatment is highly disruptive even in some cases it results to symptoms of post-traumatic stress disorder. However most of patients experience symptoms of anxiety and depression initially over first two years after diagnosis and they finally over come to symptoms specially in case of breast cancer.<sup>[4]</sup> Nikbakh et. al. (2014) found Mehrnoush Mokrivala et. al. Factors related to effectiveness of psychological intervention on Breast Cancer.

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anxiety and depression had significantly associated with the type of treatment, high frequency was observed in the patients who received chemotherapy as a single treatment (66.7% had symptomatic depression and 77.8% symptomatic anxiety).<sup>[11]</sup> Different types and stages of medical treatment also carry different stresses, either in the process of treatment (e.g. chemotherapy, or in long-term disabling or disfiguring effects, as mentioned.<sup>[15]</sup>

Clinicians working in cancer services have recognized that depression is often undiagnosed and untreated and that these shortcomings in care can have substantial effects, not only on patients quality of life, but also on their acceptance of cancer treatments.<sup>[16]</sup> Distress level also strongly trends to predict effectiveness of psychotherapy. Pain is also considered as distress related frequently.<sup>[17]</sup> Distress may increase significantly in last or first stages of cancer. Therefore, stage of disease also is another moderator. In a systematic review relationship found between distress, advance of disease, physical symptoms, greater disability and quality of life.<sup>[18]</sup> Who suffer poorly controlled symptoms i.e. pain and fatigue or lack of social support, death of friend or family member.<sup>[19]</sup> Although in one interesting study, the recent meta-regression by Schneider et. al. (2010) found that neither age, gender, marital status, nor cancer type produced a significant association with therapy effect size when screening in for baseline distress was controlled, although advanced cancer stagedid.<sup>[17]</sup>

In view of Kline (2004) for primary researchers, the challenge is to address the knotty problem of reaching distressed subpopulations, who will often have the socio-demographic and medical characteristics mentioned, and to do so in a way that can be economically sustained beyond the experiment into clinical reality. Considering the ethical and practical complexities of researching with vulnerable people, perhaps a different, more appropriate research design would be necessary, such as the single case study, with multiple replications. Alternatively, perhaps small sample sizes in controlled research should be accepted as valid and can provide detailed

information via close monitoring the changes and needs of patients.<sup>[20]</sup>

### **CONCLUSION**

Considering mentioned results and reasons it seems risk of distress is one of the main, which effects physical and psychological therapies. Initial regular distress screening should be built in a guidelines and procedures. It is important to identify problem before seeking help by patient in late stages. This screening is more important shortly after diagnosis, near to end of medical treatment, breast loss, metastasis and recurrence. Interventions should include functional needs such as education and social supports. Lower income is one of the main source of stress in some patients therefore; they cannot provide cost of therapy. This is necessary to educate social workers or provide insurance help. For clinicians, our findings suggest considering vulnerable socio-demographic or medical status, screening distress, and providing therapeutic intervention where elevated distress is indicated rather than on the assumption that cancer patients generally should come and complain.

### REFERENCES

- Alizadeh Otaghvar H, Hosseini M, Tizmaghz A, Ahmari H, Arab, F, MohtashamAmiri N. Breast Sarcoma: a review article. Iran J Surg 2014, 22 (1), 1–11
- Shibuya K, Mathers CD, Boschi-Pinto C, Lopez AD, Murray CJ. Global and regional estimates of cancer mortality and incidence by site: II. Results for the global burden of disease 2000. BMC cancer. 2002 Dec 26;2(1):1.
- Taghavi A, Fazeli Z, Vahedi M, Baghestani AR, Pourhoseingholi A, Barzegar F, Pourhoseingholi MA. Increased trend of breast cancer mortality in Iran. Asian Pacific Journal of Cancer Prevention. 2012;13(1):367-70.
- Satija A, Ahmed SM, Gupta R, Ahmed A, Rana SP, Singh SP, Mishra S, Bhatnagar S. Breast cancer pain management-A review of current & novel therapies. The Indian journal of medical research. 2014 Feb 1;139(2):216.
- Coyne JC, Stefanek M, Palmer SC. Psychotherapy and survival in cancer: the conflict between hope and evidence. Psychological bulletin. 2007 May;133(3):367.

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### **REVIEW ARTICLE** Nov-Dec 2016

- Moyer, A., et al, (2012) Mediators of Change in Psychosocial Interventions for Cancer patients: A Systematic Review; Behavioral Medicine Journal; 38(3); 90-114.
- Spiegel, D., & Giese-Davis, J. (2004). Examining the evidence that psychotherapy improves the survival of cancer patients: Reply. Biological Psychiatry, 56, 62–64.
- Situ D, Wang J, Shao W, Zhu ZH. Assessment and treatment of cancer pain: from Western to Eastern. Annals of palliative medicine. 2011 Oct 21;1(1):32-44.
- Spiegel D. Commentary on "Meta-analysis of the effects of psychosocial interventions on survival time and mortality in cancer patients" by GeirSmedslund and Gerd Inger Ringdal. Journal of Psychosomatic Research. 2004 Aug 31;57(2):133-5.
- Vahdaninia M, Omidvari S, Montazeri A. What do predict anxiety and depression in breast cancer patients? A follow-up study. Social psychiatry and psychiatric epidemiology. 2010 Mar 1;45(3):355-61.
- Nikbakhsh NO, Moudi SU, Abbasian S, Khafri SO. Prevalence of depression and anxiety among cancer patients. Caspian J Intern Med. 2014 Jan 1;5(3):167-70.
- Chirico A, Lucidi F, Mallia L, D'Aiuto M, Merluzzi TV. Indicators of distress in newly diagnosed breast cancer patients. PeerJ. 2015 Jul 21;3:e1107.
- Andersen BL, Kiecolt-Glaser JK, Glaser R. A biobehavioral model of cancer stress and disease course. American psychologist. 1994 May;49(5):389.
- 14. Fox, B. H. (1998). A hypothesis about Spiegel et al.'s 1989 paper on psychosocial intervention and breast cancer survival. Psycho-Oncology,7, 361–370.
- 15. Gotay CC, Moinpour CM, Unger JM, Jiang CS, Coleman D, Martino S, Parker BJ, Bearden JD, Dakhil S, Gross

HM, Lippman S. Impact of a peer-delivered telephone intervention for women experiencing a breast cancer recurrence. Journal of Clinical Oncology. 2007 May 20;25(15):2093-9.

- Walker J, Hansen CH, Martin P, Sawhney A, Thekkumpurath P, Beale C, Symeonides S, Wall L, Murray G, Sharpe M. Prevalence of depression in adults with cancer: a systematic review. Annals of Oncology. 2012 Nov 21:mds575.
- Schneider S, Moyer A, Knapp-Oliver S, Sohl S, Cannella D, Targhetta V. Pre-intervention distress moderates the efficacy of psychosocial treatment for cancer patients: a meta-analysis. Journal of behavioral medicine. 2010 Feb 1;33(1):1-4.
- Sellick SM, Crooks DL. Depression and cancer: an appraisal of the literature for prevalence, detection, and practice guideline development for psychological interventions. Psychooncology. 1999;8(4):315–33.
- Heron-Speirs HA, Harvey ST, Baken DM. Moderators of psycho-oncology therapy effectiveness: meta-analysis of therapy characteristics. Journal of psychosocial oncology. 2013 Nov 1;31(6):617-41.
- 20. Kline R. Principles and practice of structural equation modeling. New York: Guilford; 2005

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