



## Investigate the effect of palliative care on the satisfaction of patients with cancer who referred to Imam Reza Clinic-Seyedoshohada Hospital and Entekhab Center in Isfahan in 2014

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### ABSTRACT

The current study was an attempt to explore the effect of palliative care on the satisfaction of patients with cancer who referred to Imam Reza Clinic-Seyedoshohada Hospital and Entekhab Center in Isfahan in 2014. A quasi-experimental research design was employed to pursue this clinical trial type of study. The population was comprised of all the patients suffering from cancer who also referred to Seyedoshohada Health Center (Palliative Care Center of Imam Reza (AS) and Entekhab Cancer Control Center) in Isfahan within the second 3 months of 2014. Of these, 60 patients were selected through convenient sampling as the research sample. The instruments adopted include: FAMCARE-P16 questionnaire to assess patient satisfaction with palliative care and Patient Information Form. The gathered data were then analyzed using distribution tables and analytical data analysis was also conducted using dependent samples *t*-test. The findings revealed the patient care mean score within the first ( $SD=7.36$ ) and fourth weeks ( $SD=65.83$ ) was 49.6 and 65.83, respectively which demonstrates a 14.37 rate of increase. This increase with  $t = -17.46$  is to be statistically significant ( $p < 0.01$ ). Therefore, it could be concluded that palliative care is effective in the satisfaction of patients with cancer. According to the results obtained, it could be stated that palliative care is effective in the satisfaction of patients with cancer and leads to an increased level of satisfaction of patients suffering from cancer. And this method can be used to help improve patient's condition.

**Keywords:** palliative care, patient satisfaction, cancer

### INTRODUCTION

Cancer is one of the major health problems worldwide and yet it accounts as the third leading cause of death and also as the second non-communicable chronic disease. Currently 12% of deaths in the world result from cancer [1]. It is estimated that by 2020 over 15 million people worldwide will experience cancer [2]. In a similar vein, cancer is considered the third leading cause of death in Iran in the development of which certain factors, such as genetic and environmental factors, plays a role. The incidence of cancer in adult age groups and in different regions of Iran is estimated at 48 to 112 cases per million in women and 51 to 144 cases per million in men [3]. Cancer treatment almost always begins with invasive procedures; it takes months and its adverse effects lead to psychological and

spiritual problems in patients. The patient would have to undergo a long term treatment with toxic drugs. Patients with cancer are involved with many crises [4].

Cancer diagnosis could be a very unpleasant and painful experience. Cancer has an effect on economic, social and familial status of patients which also influences their psychological and sexual performance [5]. Generally, cancer has a negative impact on the quality of patients' life which makes them in need of receiving palliative care. Palliative care is provided for life-threatening illnesses while helping patients cope with chronic illness over the years [6].

Palliative care is a worldwide human need of patients suffering from cancer [1] that aims to reduce their pains and discomforts through identification of pain and other physical, psychosocial and spiritual problems [7]. The importance of palliative care for nurses is the attempt to create a structured manner in providing the care as well as efforts to increase the feeling of well being among the patients and it is delivered to them according to their needs, availability of nurse and their level of compromise with emotional tensions. In fact, palliative care delivered to cancer patients is a comprehensive care [8].

Patient satisfaction as a basic indicator is used in assessing the quality of periodical care and further planning for such care. In this regard, patient satisfaction is the outcome of a complex set of factors and it is necessary for several aspects of services including nursing, medical and back-up cares as well as various organizational parts to coordinate with each other in one way or another so that by full compliance with all aspects of patients rights, it could provide an appropriate condition for their health and betterment [9]. Patient satisfaction is noticed by his comment on the quality of care and by the two-way interaction between him and health service providers; and it could be also observed from the reaction of the care recipient which reflects their overall expectation of the quality of provided services; that can be influenced by social settings [10]. Given the importance of the life quality of cancer patients and its effect on patient satisfaction, it is essential to further examine and assess different methods of treatment and cares so that the best and most effective intervention could be identified. To this end, the current study aimed to explore the effect of palliative care on the satisfaction of patients with cancer. Palliative care can place the patient under its protection and can also be influential in his satisfaction. So far, however, there has been little discussion about it in Iran.

### **Methodology**

A quasi-experimental research design was employed to pursue this clinical trial type of study. The population consisted of all the patients suffering from cancer who also referred to Seyedshohada Health Center (Palliative Care Center of Imam Reza (AS) and Entekhab Cancer Control Center) in Isfahan within the second 3 months of 2014. Of these, 60 patients were selected through convenient sampling as the research sample. The instruments adopted include:

Palliative Care Satisfaction Questionnaire (FAMCARE-P16) and Patient Information Form: Lo, Burman, Rodin and Zimmermann (2009) developed and validated a new scale to measure patient satisfaction with outpatient palliative care for cancer named FAMCARE-Patient scale (FAMCARE-P). It was a 16-item scale which was called FAMCARE-P (FAMCARE-P16). Each scale and the items related to that scale include: somatic symptoms care of the patient (items 1, 2, 5, 7, 8), providing information (items 2, 4, 6, 9, 10), family support (items 14, 15, 16) and access to care (items 11, 12, 13). Participants are expected to respond on the 5-point Likert scale ranging from very satisfied, satisfied, do not know, dissatisfied to very dissatisfied. In order to determine the construct validity of the questionnaire, Lo et al (2009) used FAMCARE-P16 along with FAMCARE (caregivers) in a comparative study of early palliative care and standard cancer care through a cluster-randomized controlled trial; and its validity was confirmed.

### **Procedure**

Selecting the research sample, they were asked to complete the information form. Then, using the pamphlet of palliative care for patients, palliative care was explained and instructed. Besides, patients' needs were specified based upon the palliative care program and the pertinent services were offered. The research sample was put under palliative care. According to the care satisfaction questionnaire, the best time to carry out the measurement is the time span between 1 to 3 months and the recommended time for the first assessment is at the end of the first week and the second assessment at the end of the fourth week. Follwell, Burman and Le et al [11] adopted the same procedure to measure patient satisfaction. In the present research, the participants were assessed after one week by

palliative care satisfaction questionnaire; and again four weeks later this measurement was re-conducted. The data obtained from the questionnaires were collected for further analysis.

## RESULTS

Attempting to investigate the effect of palliative care on the satisfaction of patients with cancer, the participants were asked to fill out the questionnaire of patient satisfaction with palliative care (FAMCARE-P16) as well as Patient Information Form which contained some information related to the patient. The gathered data were then analyzed. The results are demonstrated in the following tables.

**Table 1: Gender-based frequency distribution of care-giver and patient**

Gender	Patient	
	Frequency	Frequency Percentage
Female	28	44.67
Male	32	53.33

As shown in table above, majority of the patients accounts for males (53.33%).

**Table 2: Frequency distribution of patients by type of cancer**

Type of cancer	Frequency	Percent
Lung	8	13.33
Breast	14	23.33
Liver	7	11.68
Uterus	4	6.67
Ovary	2	3.33
Large intestine	5	8.33
Stomach	6	10
Pancreas	8	13.33
Brain tumor	2	3.33
Rectal	4	6.67
Total	60	100

According to the table above, the most common type of cancer observed in patients was breast cancer (23.33%).

**Table 3: Frequency distribution of patients by the stage of disease**

Stage of disease	Frequency	Percent
Stage 1	2	3.33
Stage 2	21	35
Stage 3	28	46.67
Stage 4	9	15
Total	60	100

As is seen in the above table, most patients (46.47 %) participated in the research stand on the stage 3 of the disease.

**Table 4: Results of the t-test to assess the effect of palliative care on the satisfaction of patients with cancer**

Variable	First week	Fourth week	Mean difference	t	df	Sig. level
Care for physical symptoms	12.98 ± 2.65	17.53 ± 2.30	- 4.55	- 14.49	59	0.01
Providing information	16.48 ± 2.83	21.57 ± 2.06	- 5.08	- 13.08	59	0.01
Support for families	9.72 ± 1.70	13.33 ± 1.45	- 3.5	- 14.4	59	0.01
Access to Care	10.42 ± 1.62	13.52 ± 1.51	- 3.10	- 11.77	59	0.01
General care	49.6 ± 7.36	65.83 ± 5.62	- 14.37	- 17.46	59	0.01

As demonstrated in the above table, the mean score of physical symptoms care and patients comfort within the first and the fourth weeks is 12.98 (SD=2.65) and 17.53 (SD=17.53), respectively; that reveals a 4.55 rate of increase and this increase with  $t = -14.49$  is to be statistically significant ( $p < 0.01$ ). Therefore, it could be concluded that palliative care was effective in the physical symptoms care. In like manner, the mean score of patients' information provided within the first and the fourth weeks is 16.48 (SD=2.83) and 21.57 (SD=2.06), respectively; that reveals a 5.08 rate

of increase and this increase with  $t = -113.08$  is to be statistically significant ( $p < 0.01$ ). Therefore, it could be concluded that palliative care was effective in the patient satisfaction of providing information.

Furthermore, table 4 displays that the mean score of support for family within the first and the fourth weeks is 9.72 (SD=1.70) and 13.33 (SD=1.45), respectively; that reveals a 3.5 rate of increase and this increase with  $t = -14.4$  is to be statistically significant ( $p < 0.01$ ). Therefore, it could be concluded that palliative care was effective in the satisfaction of family support among the patients with cancer.

Similarly, as it could be observed in table 4 the mean score of patients' access to care in the first and in the fourth week is 10.42 (SD=1.62) and 13.52 (SD=1.51), respectively; that reveals a 3.10 rate of increase and this increase with  $t = -11.77$  is to be statistically significant ( $p < 0.01$ ). Therefore, it could be concluded that palliative care was effective in the patient satisfaction of access to care.

Generally, the total mean score of patients care in the first and in the fourth week is 49.6 (SD=7.36) and 65.83 (SD=5.62), respectively; that reveals a 14.37 rate of increase and this increase with  $t = -17.46$  is to be statistically significant ( $p < 0.01$ ). Therefore, it could be concluded that palliative care was effective in the satisfaction of patients with cancer.

### DISCUSSION AND CONCLUSION

The results demonstrated that the level of satisfaction with palliative care in patients with cancer has changed during the course of care. This satisfaction level within the first and the fourth weeks significantly differed ( $t = -17.46$ ,  $p < 0.01$ ). This finding is consistent with the findings reported by Mae Parker, Remington and Nannini *et al.* (2013). They investigated the impact of palliative care in cancer patients over the age of 60 and concluded that pain control, advanced care planning, and transitional care planning increase patient satisfaction and comfort to a high degree.

In a similar vein, the results are in agreement with that of Gómez-Batiste, Porta-Sales and Espinosa-Rojas *et al.* [12]. In their study on the effectiveness of palliative care in patients with advanced cancer, they found that such care is very effective in reducing pain and successful undergoing of the crisis. These successes were independent from services such as medium-term stay, hospital support team, and home and clinical care teams.

Besides, another research finding by Follwell *et al* [11] is in line with the findings reported here. Follwell *et al.* [11] studied the phase II of the outpatient palliative care intervention in patients with advanced care. They demonstrated that the level of anxiety was 8.8 in the first week while it stood at 7 after a month; that implies the reduction of anxiety in these patients. It was also effective in reducing symptoms and significant improvements were observed over pain, fatigue, nausea, depression. Furthermore, it increased patient satisfaction. This level of satisfaction during the first week and first month of the treatment displayed a significant difference.

With regard to the purpose of the study, the conceptual structure of the patient satisfaction was examined in four aspects. The results revealed that patient satisfaction with physical symptoms care and comfort significantly changed during the course of treatment. This satisfaction was significantly different within the first and fourth weeks. ( $t = -14.49$ ,  $p < 0.01$ ). The patients' level of satisfaction with support for family changed during the intervention and it was significantly different within the first and fourth weeks ( $t = -14.4$ ,  $p < 0.01$ ). The patient satisfaction with access to care significantly changed during the course of treatment. This satisfaction was significantly different within the first and fourth weeks ( $t = -11.77$ ,  $p < 0.01$ ).

Pain is one of the physical complications of cancer which involves both the patients and their families and influences their life quality and psychological health. The pain derived from cancer is not only a chronic and annoying pain, but also it brings about new psychological distresses intensifying the already spread disease. Hence, in addition to medication to relieve pain, it is also required to use psychological methods in the control and reduction of this acute and chronic pain caused by cancer [13]. Techniques such as hypnotherapy, relaxation, distraction are regarded as a part of the approach of Cancer Pain Management Community. These methods are part of palliative care; and besides proper medical treatment due to the 24/7 availability of doctors and nurses along with accountability and assistance for patients and their families, these patients can use the above-stated psychological techniques to help reduce pain or to make themselves adapt to it. Consequently, when an individual comes to this reduced level of pain or compatibility to it, they would feel better about themselves and their disease and would

experience a better state. Fatigue is also the most common and most annoying symptoms of cancer which affects the life quality of the patients in terms of physical and psychological aspects. Fatigue is the most important factor in awaiting death; and prior to pain and nausea it is rated by the patients as the most uncomfortable symptoms of this disease. Psycho-social interventions include education, supporting groups, individual counseling, cognitive behavioral therapy and stress management training [14]. These symptoms are reduced in palliative care programs through performing appropriate and caring activities.

Moreover, psychological counseling is one of the palliative cares provided to the patient and their families. When the patient regards his disease as a whole new meaning of his life and gets along with it, he in fact changes his condition by changing his attitude and thus his purpose in life would go under change and he does not await death any more rather pursues the future with a much better mindset. Since it takes various aspects of the patient into consideration, palliative care can be effective in improving the condition of the patient and this improvement leads to the patient satisfaction.

#### REFERENCES

- [1] Daher M. Opioids for cancer pain in the Middle Eastern countries: a physician point of view. *J Pediatr Hematol Oncol*, 2011; 1: 8-23.
- [2] Higginson I, Costantini M. Dying with cancer, living well with advanced cancer. *European J of Cancer*, 2008; 44: 1414-1424.
- [3] Mousavi SM, Pourfeizi A. Dastgiri S. Childhood cancer in Iran]. *Journal Pediatr HematoOncol*, 2010; 32(5): 376-82.
- [4] Jan-Bababi, Q., Ravanbakhsh, A., Mousavi-Nasab, S.N.A., Ranjbar, M. & Heydari-far, J. Examining the role of spiritual health and related factors in patients with metastatic gastric cancer. *Religion and health*. 2013; 2(1): 12-9.
- [5] Tabari, F., Zaker-Moghadam, M., Bohrani, N. & Monjamed, Z. Investigating the quality of life in patients with newly diagnosed cancer. *Faculty of Nursing and Midwifery Journal, Tehran University of Medical Sciences (Hayat)*. 2007; 13(2): 12-5
- [6] Van-Mechelen W, Aertgeerts B, De-Ceulaer K, Thoonsen B, Vermandere M, Warmenhoven F, Van-Rijswijk E, De-Lepeleire J. Defining the palliative care patient: A systematic review. *Palliat Med*, 2013; 27(3): 197-208.
- [7] Abrahm JL. Integrating palliative care into comprehensive cancer care. *J Natl Compr Canc Netw*, 2012; 10(10): 1192-8.
- [8] Janice R, Jones R. Resilience and Well-being in Palliative Care Staff: A quantitative study of hospice nurses experience of work. *Psycho-oncology*, 2006; 16(8): 40-733.
- [9] Jolai, S., Haji-Bababi, F., Jafar-Jalal, A. & Bohrani, N. Evaluation of patient satisfaction with nursing care provided in health centers. *Hayat*. 2011; 17(1): 44-35.
- [10] Bakhtiari, A.H. & Haj-Hasani, A.H. Examining Satisfaction levels and related factors in patients referring to physiotherapy clinics in Semnan University of Medical Sciences in the second half of 2001. *Koomesh*. 2004; 6(2): 174-167B.
- [11] Follwell M, Burman D, Le LW, Wakimoto K, Seccareccia D, Bryson J, Rodin G, Zimmermann C. Phase II study of an outpatient palliative care intervention in patients with metastatic cancer. *Clin Oncol*, 2009; 27(2): 206-13.
- [12] Go´mez-Batiste X, Porta-Sales J, Espinosa-Rojas J, Pascual-Lo´pez A, Tuca A, Rodriguez J. Effectiveness of Palliative Care Services in Symptom Control of Patients with Advanced Terminal Cancer: A Spanish, Multicenter, Prospective, Quasi-Experimental, Pre-Post Study. *Journal of Pain and Symptom Management*, 2010; 40(5): 652-660.
- [13] Mohamadi, M. Palliative medicine for families. Tehran: Chistar Publication, 2011.
- [14] Esmelerz, S.S. Cancers and ending stages of life. Translated by: Bahrami, M. Tehran: Hakim- Hijdaji Publication, 2012.
- [15] Lo Ch, Burman D, Rodin G, Zimmermann C. Masuring patient satisfaction in oncology Palliative care: psychometric properties of the famcare-p scale. *qual life res*, 2009;18:742-752.
- [16] Mae Parker S, Remington R, Nannini A, Manuel C. Patient Outcomes and Satisfaction with Care Following Palliative Care Consultation. *Journal of Hospice and Palliative Nursing*, 2013; 15(4): 1-6.