# ASSESSMENT OF THE SELF-CARE AMONG CHEMOTHERAPY PATIENTS AT ONCOLOGY CENTERS IN HILLA CITY

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#### **ABSTRACT**

**Background:** Self-care is an important index for evaluating treatment outcomes and the long-term survival of patients with carcinoma. In light of current medical science limitations, the goal of self-care is controlling symptoms and delaying an illness progression. This study aims to assess self-care among cancer patients who undergo chemotherapy and determine the relationship with demographic data.

**Methods**: To investigate the self-care of patients undergoing chemotherapy, a descriptive study was conducted under the purposive sample is selected according to the criteria among cancers patients. This sample is distributed throughout two oncology centers (Babylon oncology center and Imam AL-Sadiq Teaching Hospital) in Hilla City Center. Patients test their self-care with the constructed questionnaire. This questionnaire was created as a screening method to identify those who are likely to have self-care or not. The questionnaire is composed of (66) items. Data were collected through the use of questionnaire and interview techniques.

**Results:** Findings reveal that there is good self-care in terms of personal hygiene and avoid infection. Moderate self-care in terms of nausea and vomiting, mouth and throat sore occurs, dry skin occurs, and bleeding occurs. Poor self-care in terms of constipation, diarrhea occurs, appetite to eat, hair loss occurs and feelings of stress and fatigue. The overall self-care were moderate level among those who undergo chemotherapy treatment. There is a non-significant association between demographic data and self-care of cancerous patients at p-value >0.05 except, the educational level has been highly significantly associated with self-care at p-value <0.01.

**Conclusion:** Cancer patients who undergo chemotherapy have partial self-care due to a lack of education concerning self-care, as their education has influenced self-care. Therefore, it needs to be conducting rehabilitation and education program to teaching the patients on self-care, and a manual booklet of side effects of chemotherapy and how to manage it should be written in simple words and use attractive pictures given to the patients and family, that indeed helps to develop their management of self-care during chemotherapy.

**Key-wards**: Assessment, Self-care, Patients, Chemotherapy.

# I. INTRODUCTION

Each year further than (8) m persons dead from carcinoma and foreseeable to increase by more than 50 percent over the forthcoming years. For that reason, it is considered the most frequent reason for death globally [1]. The overall estimations of carcinoma were (18.1 m) persons with it and (9.6 m) deaths in year 2018. Pulmonary carcinoma was the commonest kind accounts for (11.6) percent, closely followed by women BC (11.6) percent, prostate carcinoma (7.1) percent, and colorectal carcinoma (6.1)percent, gastric carcinoma (8.2) percent, and hepatic carcinoma (8.2) percent of mortality [2]. Carcinomas and their remediations, like chemotherapy, cause symptoms and adverse effects that adversely affect every aspect of patients' life including self-care [3].

Chemotherapeutic remediation routinely causes a lot of distressing effects. Such effects compromise patients' self-care and QOL. May lead to the decision to postpone or even dismiss remediation that potentially saves the patients' life [4]. Chemotherapy patients stay for a short period in the hospital. Therefore, they are managing a lot of the adverse consequences of carcinoma and its remediations by themselves at home without direct supervision, direction, and education from care providers [5].

Dramatic progress has been made in the curative of carcinoma, which enables the patients to depart the hospital faster and stay at the house whilst still undergoing remediation. As a result, the enablement of self-care for carcinoma survivors increasingly recognized as an essential component of efficient management of carcinoma, which considered a long-date condition [6].

Effective self-care (SC) is the ability to monitor an individual's state to maintain the satisfying QOL. Generally, it is believed to be what people perform to help themselves as a way of improving general well-being [7].

The involvement of carcinoma persons in self-care tactics brings about behavioral changes and promoted health. Thus, self-care is considered the best management way for this chronic condition, which refers to patients' participation in self-observation, recognizes and labelling symptoms, determining their seriousness, assessing and adopting curative options, and evaluating the competencies of SC [8]. Therefore, this study aimed to assess self-care among cancer patients who undergo chemotherapy at oncology centers in Hill city/ Iraq.

# II. METHODOLOGY

To investigate the self-care of patients undergoing chemotherapy, this descriptive study was conducted under the purposive sample is selected according to the criteria among cancers patients. This sample is distributed throughout two oncology centers (Babylon oncology center and Imam AL-Sadiq Teaching Hospital) in Hilla City Center.

Patients test their self-care with the constructed questionnaire. This questionnaire was created as a screening method to identify those who are likely to have self-care or not. The questionnaire is composed of (66) items. All items of the self-care questionnaire were classified into three categories responses, such as (Always, Sometimes and Never).

Data were collected through the use of questionnaire and interview techniques. Through descriptive and inferential statistics, data were analyzed.

### III. RESULTS

Table1:Descriptive Statistic Patients Demographic Variables

Variables	Classifications	F=250	%
Age/years (Mean+ S.d= 49.77+11.426)	20-29years old	16	6.4
	30-39years old	25	10.0
	40-49years old	59	23.6
	50-59years old	101	40.4
	60 and older	49	19.6
Gender	Male	88	35.2
	Female	162	64.8
	Not read and write	56	22.4
	Read and write	15	6.0
Educational level	Primary	104	41.6
Educational level	Intermediate	18	7.2
	Secondary	19	7.6
	Institute and above	38	15.2
Marital status	Single	20	8.0
	Married	225	90.0
	Divorced	5	2.0
Occupation	Unemployed	175	70.0
	Employed	60	24.0
	Worker	15	6.0
Residence -	Rural	100	40.0
	Urban	150	60.0

Caregiver	Patient himself	80	32.0
	Son	120	48.0
	Spouse	15	6.0
	Others	35	14.0
Monthly income	Enough	45	18.0
	Enough to certain limit	105	42.0
	Not enough	100	40.0

The results reflect descriptive statistics of socio-demographic characteristics in terms of frequencies and percentages of cancerous patients.

List M.s. S.d. **Domains** Ass. 250 2.55 0.760 Personal hygiene and avoid infection Good 2 Constipation 250 1.50 0.635 Poor 3 Diarrhea occurs 250 1.19 0.466 Poor 250 1.73 0.534 4 Moderate Nausea and vomiting 5 Appetite to eat 250 1.37 0.539 Poor Moderate 6 Mouth and throat sore occurs 250 2.08 0.367 7 Hair loss occurs 250 1.46 0.683 Poor 8 Dry skin occurs 250 1.83 0.586 Moderate 9 Bleeding occurs 250 1.90 0.600 Moderate 10 Feelings of stress and fatigue 250 1.55 0.633 Poor Moderate **Overall Self-care among Cancerous Patients** 250 1.716 0.5803 Selfcare

Table 2: Statistic of Cancerous Patients Self-care

This table shows the statistical distribution and self-care of cancerous patients who received chemotherapy. Findings reveal that self-care is good in terms of personal hygiene and avoid infection. Moderate self-care in terms of nausea and vomiting, mouth and throat sore occurs, dry skin occurs, and bleeding occurs. Poor self-care in terms of constipation, diarrhea occurs, appetite to eat, hair loss occurs and feelings of stress and fatigue. The overall self-care were moderate level among those who undergo chemotherapy treatment (Fig. 1).

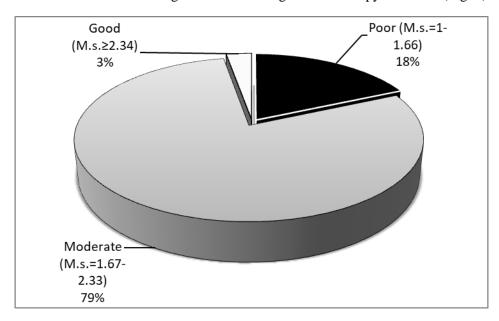


Figure 1: Overall Assessment of Self-care

Relationship between Cancerous Patients Self-care and their Demographic Characteristics

Demographic Data	Chi-Square Value	D.f	P-Value
Age/years	6.426	8	0.600
Gender	1.414	2	0.493
Educational level	56.855	10	0.000

Marital status	8.571	4	0.073
Occupation	2.467	4	0.651
Occupation Residency	0.661	2	0.719
Caregiver	0.661 5.750	6	0.452
-			
Month!:	4 222	A	0.264
Monthly income	4.323	4	0.364

The finding illustrated that there is a non-significant association between demographic data and self-care of cancerous patients at p-value >0.05 except, the educational level has been highly significantly associated with self-care at p-value <0.01.

# IV. DISCUSSION

This study is the first study that attempted to assess self-care behavior on chemotherapy patients in the country. The sample size approximately covered the total number of reviewers attending oncology centers. Involved out of 250 patients participating in the study, age ranged from 50-59 year and made (40.4%) of the total number because most people get carcinoma at advanced ages. The ages of the studied sample in the study were above 55 years, and those come concurrently with this findings [9].

Gender-related results suggest that more than half of cancerous patients were female, composing (64.8%) and the remaining were male. These results come due to the number of reviewers is more women than men. The undergo chemotherapy patients chemotherapy patients were female more than [10]. Also, most of the participants that undergo chemotherapy were females because carcinoma patients were females more than males[11].

# Turkish Journal of Physiotherapy and Rehabilitation; **32(3)** ISSN 2651-4451 | e-ISSN 2651-446X

In terms of education, primary education was predominant among cancerous patients; it composed (41.6%). Because they are of different degrees and they are not united by one specialty. Primary education was the higher due to the geographical area and cultural factors [12].

It is obvious from findings that married patients were taking the majority among findings. They constituted (90.0%) of the total number due to advanced age. Also, married patients were the majority of the study conducted in Turkey as linked to the patient's age [11].

Unemployed patients were dominant, which composed (70.0%) of the total, and those who live in urban areas and their sons took care of them, and most of them make a certain limit enough of monthly income. Those findings coinciding with results mentioned in their study that cancerous patients were unemployed and made low monthly income [13]. In the identification cancer study, the patients were female gender, higher age groups, low level of education, married, unemployed, and cared for by their family. In addition, all patients who undergo chemotherapy were residences in urban areas in Egypt [15].

The demographic characteristics of this studied sample correspond with Indonesian cancerous patients who review the public hospitals. Where findings demonstrated that most of the patients who diagnosed with carcinoma were female aged 40-45 years old primary educated, and married without employment [27].

Most carcinoma patients were females aged over 50 years old with primary educated and who did not work and have moderately monthly income [16]. As well as, this findings come concurring with findings conducted in Nepal among cancerous patients. It demonstrated that more than half of participants were female at a mean age of 52.31 informally educated, and works as a housewife [17].

Self-care is a significant criterion in the patients' health outcomes, patients taking greater responsibility to adopt conduct that addresses their chemotherapy-related symptoms and outcomes. Therefore, this study sample findings show the statistical distribution and self-care of cancerous patients who received chemotherapy. Findings reveal that good self-care in terms of personal hygiene and avoid infection. Moderate self-care in terms of nausea and vomiting, mouth and throat sore occurs, dry skin occurs, and bleeding occurs. Poor self-care in terms of constipation, diarrhea occurs, appetite to eat, hair loss occurs, and feelings of stress and fatigue. Importantly, the present study results offer a moderate level among those who undergo chemotherapy. Those results come because the cancerous patients were suffering from a lack of knowledge concerning self-care and interest in themselves. In addition to the absence of civil society institutions, lack of psychological support, and the absence of rehabilitation centers.

In those regards, the findings of a study conducted in Pakistan come to agree with this findings. It illustrated results that carcinoma patients who receive chemotherapy reported poor to moderate self-care due to lack of information about self-care. The study recommends that they're a need for an educational program about how to manage their self-care after receiving chemotherapy [18].

Moreover, the participation of cancerous patients in self-care tactics in Ethiopia, Addis Ababa Tikur, Anbessa Specialized Hospital, in 2018 depicts that 55.10% of studied patients were with poor self-care during chemotherapy. As well as, they express poor self-care in dryness of mouth and lips, nausea and vomiting occur, loss of appetite, fatigue, headache, depression, and frustration. Where the lack of self-care was associated with patients' knowledge and awareness of the management of themselves. As well as, the health care providers who deal with carcinoma patients need to be qualified [19].

Also, this findings concurring with many studies which depicted that majority of patients have poor self-care concerning constipation, mouth dryness and poor dietary pattern in China <sup>[20]</sup>. In Egypt, the majority of patients did not perform any activities to deal with diarrhea management <sup>[21]</sup>. In Turkey, the majority of patients were poor self-care related to the appetite that occurs during chemotherapy due to psychological status <sup>[9]</sup>. In Thailand, the patients who undergo chemotherapy were express Feelings of stress and fatigue as mostly poor self-care <sup>[22]</sup>. In Koreans, the studied patients suffered from hair loss and worried about their body image and chemotherapy, which could affect their physical well-being and psychological function <sup>[32]</sup>.

Self-care is considered the relation between knowledge and acting. Also, it's correlated with beliefs concerning the abilities to carry out particular behaviours. Where carcinoma patients after CT agents encountered a lot of

ISSN 2651-4451 | e-ISSN 2651-446X

consequences that can passively influence their self-care. Hence, a patient undergoing chemotherapy needs to be done a rehabilitation and educational program to manage and care himself <sup>[24]</sup>.

The assessment of self-care among cancer patients was demonstrated poor self-care when they take chemotherapy. In those regards, findings were confirmed that poor self-care was associated with an information need, which means these patients needed to workshop about self-care during chemotherapies <sup>[25]</sup>.

The finding illustrated a non-significant association between demographic data and self-care of carcinoma patients at p-value >0.05, except the educational level had been highly significantly associated with self-care at p-value <0.01. Education plays an important role in patients' knowledge to manage themselves during chemotherapy. Those findings come to agree with the findings of a study conducted in Tikur. Confirmed findings that education level plays roles in many areas of self-care. Where cancerous patients who are educated had a better outcome than those who uneducated. Therefore, the level of education has been significantly associated with self-care of patients who undergo chemotherapy, as patients who uneducated were three-time have poor self-care than those who educated [26].

As well as, in a study conducted in Thailand on self-care conduct in those who undergo chemotherapy, there was no association between self-care and their socio-demographic characteristics. Also, a study conducted in Thailand showed that chemotherapy individual's demographic characteristics were not significantly associated with self-care conduct [22, 23].

#### V. CONCLUSION

Cancer patients who undergo chemotherapy have partial self-care due to a lack of education concerning self-care, as their education has influenced self-care. Therefore, it needs to be conducting rehabilitation and education program to teaching the patients on self-care, and a manual booklet of side effects of chemotherapy and how to manage it should be written in simple words and use attractive pictures given to the patients and family, that indeed helps to develop their management of self-care during chemotherapy..

### **Ethical Clearance**

All experimental protocols were approved under the Babylon Health Directorate, Iraq and all experiments were carried out in accordance with approved guidelines.

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# Turkish Journal of Physiotherapy and Rehabilitation; 32(3)

ISSN 2651-4451 | e-ISSN 2651-446X

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