

## Assessment of Patients Knowledge Undergoing Chemotherapy toward Self Care after Gastrectomy at Oncology Unit of AL-Haboby Teaching Hospital in AL-Naseria City

تقييم معارف مرضى سرطان المعدة الخاضعين للعلاج الكيماوي تجاه العناية الذاتية بعد استئصال المعدة في وحدة الأورام في مستشفى الحبوبى التعليمي في مدينة الناصرية

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الخلاصة:

**خلفية البحث:** تعد معرفة الرعاية الذاتية مؤشراً مهماً لتقييم نتائج العلاج والبقاء على قيد الحياة على المدى الطويل لمرضى السرطان. **الاهداف:** تهدف هذه الدراسة إلى تقييم معرفة المرضى تجاه الرعاية الذاتية بعد استئصال المعدة، وتحديد العلاقة بين معرفة المرضى خصائصهم الاجتماعية الديموغرافية.

**المنهجية:** أجريت دراسة وصفية للفترة من 26 / كانون الأول / 2020 إلى 1 / حزيران / 2021، في وحدة الأورام بمستشفى الحبوبى التعليمي، من خلال عينة غرضية غير احتمالية اختيرت من المرضى الذين تم تشخيصهم بالخضوع للعلاج الكيماوي. وتحقق الاعتماد على موثوقية الاستبانة من خلال دراسة تجريبية، ومن ثم عرضها على خبراء لتثبيت مصداقيتها، من خلال استخدام الاستبيان والمقابلة. جمعت البيانات وحللت من خلال تطبيق الإحصاء الوصفي والاستنتاجي.

**النتائج:** تشير النتائج إلى أن (32.5%) من المرضى ضمن الفئة العمرية (56-60) سنة بمتوسط (73.8) سنة، (65.0%) ذكور، (60.0%) تعليم ابتدائي، (87.5%) متزوجون و ربة منزل في الغالب ويحصلن على دخل شهري غير كافٍ. تُظهر النتائج أن معلومات عينة الدراسة تم تقديمها بمستوى منخفض من المعرفة حول المعلومات العامة حول سرطان المعدة واستئصال المعدة، ومعلومات عامة عن العلاج الكيماوي والرعاية الذاتية للآثار الجانبية للعلاج الكيماوي. النتائج المقدمة لم تكن هناك علاقة ذات دلالة إحصائية بين معرفة المرضى وبياناتهم الديموغرافية. **الاستنتاج:** استنتجت الدراسة أن المرضى عيروا عن ضعف المعرفة تجاه الرعاية الذاتية بعد استئصال المعدة، وتلك المعرفة لم تتأثر بخصائصهم الديموغرافية.

**التوصيات:** إنشاء مراكز متخصصة لتثقيف المرضى حول الرعاية الذاتية لسرطان المعدة وعوامل الخطر المسببة للأمراض وأهمية الكشف المبكر عن السرطان. بالإضافة إلى كتيب يتضمن الآثار الجانبية للعلاج الكيماوي وكيفية إدارته، يجب كتابته بكلمات بسيطة واستخدام صور جذابة تُعطى للمرضى وعائلاتهم.

**الكلمات المفتاحية:** المرضى، المعرفة، العناية الذاتية، استئصال المعدة.

### ABSTRACT:

**Background:** Knowledge of self-care is an important index for evaluating the outcomes of treatment and the long-term survival of patients with cancer.

**Aims of the study:** This study aimed to assess patients' knowledge of self-care after Gastrectomy; and determine the relationship between patient's knowledge and their socio-demographic data.

**Methodology:** A descriptive study is conducted for the periods of 26 / December / 2020 to 1 / June / 2021. The study is carried out at the Oncology Unit of AL-Haboby Teaching Hospital. By non-probability purposive sample was selected from patients who were diagnosed with undergoing chemotherapy. The validity of the questionnaire was achieved through a panel of experts, and reliability achieved through a pilot study. Through the use of questionnaires and interviews, data were collected and analyzed through descriptive and inferential statistics.

**Results:** Findings indicate that (32.5%) of the patients within the age group of (56-60) years with a mean of (73.8) years, (65.0%) were males, (60.0%) primary school educated, (87.5%) were married, mostly housewife and insufficient monthly income. Shows that study sample information was presented low level about general information about stomach cancer and gastrectomy, general information of chemotherapy' and self-care of side effects of chemotherapy. Findings showed there were the no-significant relationship between patient's knowledge and their demographic data.

**Conclusion:** Patients were poor express knowledge of self-care after gastrectomy and those not influenced by their socio-demographic data.

**Recommendations:** Establishing specialized centers to educate patients about self-care stomach cancer and disease-causing risk factors and the importance of early detection of cancer. As well as, a booklet of the 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.

**Keywords:** Patients, Knowledge, Self-Care, Gastrectomy.

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## INTRODUCTION

Stomach cancer refers to any malignant neoplasm in the region that runs between the pylorus and the gastric esophagus. About 95% of the stomach tumors are adenocarcinoma-like and epithelia. Adenocarcinomas, however, are rare, squamous and undifferentiated <sup>(1)</sup>. Stomach cancer is characterized by a proliferation of cancer cells in the stomach lining, which is sometimes slowly spreading for several years leading to a true cancer and regularly causes early changes in the stomach's inner lining (mucosa). Stomach cancer can spread in various ways (metastasize) <sup>(2)</sup>. Self-care behavior was performed and followed by the patients before side effects become persistent or severe through prior information of side effects and their management techniques <sup>(3)</sup>. In addition, Stromberg advocates teaching self-care to encourage persons with cancer to increase their sense of self-control and lessen feelings of helplessness that often accompany cancer and its treatment <sup>(4)</sup>. The nurse is further challenged to teach patients to actively participate in their care rather than remaining dependent on the healthcare professional <sup>(5)</sup>. Using skill as a patient educator, the nurse enlists the patient and family members in a partnership to promote self-care <sup>(6)</sup>. This requires the nurse to use great creativity and flexibility to individualize the approach to patient management problems. Patient knowledge for self-care orientation is the main objective of intervention <sup>(7)</sup>. According to Foster and colleagues, cancer patient self-management is an individual's strategy for controlling disease conditions to maximize well-being, or approaches chosen by an individual to optimize living conditions with cancer <sup>(8)</sup>.

## AIMS OF THE STUDY

The study aims at:

1. To assess patient's knowledge towards self-care after Gastrectomy.
2. To determine the relationship between patient's knowledge and their socio-demographic data.

## METHODOLOGY

A descriptive study is conducted to investigate the knowledge for the periods of December 26th 2020 to Jun 1st 2021. The study is carried out at the Oncology Unit of AL-Haboby Teaching Hospital. By non-probability purposive sample was selected from patients who were diagnosed with undergoing chemotherapy. A questionnaire consists of the following parts including:

**Part I:** Socio-demographic data of nurses includes age, gender, and level of education, marital status, occupation, residents, and monthly income.

**Part II:** Knowledge of gastric carcinoma patients undergoing chemotherapy after gastrectomy towards self-care. These domains divided into three sub-domains include:

- A. Knowledge of gastric carcinoma patients undergoing chemotherapy after gastrectomy about general information about stomach cancer and gastrectomy include of (8) items.
- B. Knowledge of gastric carcinoma patients undergoing chemotherapy after gastrectomy about general information of chemotherapy which include of (6) items.
- C. Knowledge of gastric carcinoma patients undergoing chemotherapy after gastrectomy about self-care of side effects of chemotherapy and self-care of daily activities include of (14) items.

A content validity was achieved through an (11) panel of experts, and reliability was achieved through a pilot study. It conducted on (10) were selected among chemotherapy patients at the Oncology Unit of AL-Haboby Teaching Hospital. Cronbach's Alpha= .83 which indicates a pass questionnaire items.

The data collection process used the interview technique and questionnaire and is analyzed through descriptive and inferential statistics.

## RESULTS:

**Table (1):** Distribution of the Study by their demographic characteristics

Basic Information	Groups	Frequency	Percent
Age groups	36-40	2	5.0
	41-45	4	10.0
	46-50	6	15.0
	51-55	4	10.0
	56-60	13	32.5
	above 60 Y	11	27.5
	$\bar{x} \pm S.D.$	7.38 $\pm$ 1.531	
Gender	Male	26	65.0
	Female	14	35.0
Level of Education of Patients	Illiterate	0	0.00
	Can Read & Write	3	7.5
	Primary School Graduate	24	60.0
	Secondary School Graduate	7	17.5
	Institute Graduate	3	7.5
	Bachelor's degree	3	7.5
	Postgraduate graduate	0	0.00
Marital status:	Married	35	87.5
	Single	2	5.0
	Widowed	2	5.0
	Divorced	1	2.5
Occupation Status	Employee	6	15.0
	Free job	8	20.0
	Retired	2	5.0
	House wife	13	32.5
	Student	4	10.0
	Unemployed	7	17.5
Monthly Income	Sufficient	3	7.5
	Barely Sufficient	13	32.5
	Insufficient	24	60.0

This table indicated that 13 (32.5%) of the patients within the age group of (56-60) years with a mean of (73.8) years. Related to the gender cooperative in study most of study sample were male 26 (65.0%) of all study samples, regarding the educational level of patients in the study sample, the majority with primary school graduation 24 (60.0%). Concerning the social status, the greater number of the study sample are 35 married and accounted for (87.5%). Regarding the level of occupation status, the greater number of them with house wife and they account for 13 (32.5%) of the sample. With respect for patient's monthly income the majority of the study sample with insufficient monthly income and account for 24 (60.0%) of the whole sample.

**Table (2):** Knowledge of gastric carcinoma patients about general information about stomach cancer and gastrectomy

L.	Knowledge items	Mean	S.D.	Ass.
1	Refers ----- to any malignant tumor that arises from the area between the portal and the gastro esophageal junction.	1.28	0.452	L

2	Lymph nodes are bean-sized structures that help with---?	1.30	0.464	L
3	The risk of gastric carcinoma is higher for people who eat a diet rich in -----?	1.15	0.362	L
4	Having ----- is the most dangerous risk factor for gastric carcinoma if left untreated for a long time.	1.18	0.385	L
5	In the second stage of gastric carcinoma:	1.05	0.221	L
6	As a late symptom of gastric carcinoma:	1.10	0.304	L
7	In a complete gastrectomy surgery the doctor is performed by a -----?	1.47	0.506	M
8	In the event that the stomach is removed completely, it will be exposed to a lack of vitamins, especially -----?	1.23	0.423	L

Level of Assessment, (1-1.33) = Low; (1.34-1.67) = Moderate; (1.68-2.00) = High.

Findings show that study sample information was presented a low level of knowledge at all items except (7) which presented as (Moderate) level.

**Table (3):** Knowledge of gastric carcinoma patients about general information of chemotherapy

L.	Knowledge items	Mean	S.D.	Ass.
1	Chemotherapy is a treatment that is used to eliminate---?	1.45	0.504	M
2	Chemotherapy treatments intended for intramuscular injection are very limited due to-----?	1.08	0.267	L
3	One of the factors that increase the chances of responding to chemotherapy?	1.35	0.483	M
4	Anemia due to chemotherapy occurs as a result of a decrease-----?	1.18	0.385	L
5	As a side effect of chemotherapy:	1.35	0.483	M
6	Which of the following side effects of chemotherapy causes you to lose weight?	1.18	0.385	L

Level of Assessment, (1-1.33) = Low; (1.34-1.67) = Moderate; (1.68-2.00) = High.

Findings show that study sample information was presented Moderate level of knowledge at items (1, 3 and 5).

**Table (4):** Knowledge of gastric carcinoma patients about self-care of side effects of chemotherapy and self-care of daily activities

L.	Knowledge items	Mean	S.D.	Ass.
1	To reduce the symptoms of anemia, you must get enough sleep in as----?	1.18	0.385	L
2	To avoid infection, the patient should:	1.28	0.452	L
3	To reduce the psychological effects of hair loss, the patient should:	1.10	0.304	L
4	To avoid loss of appetite, the patient should:	1.28	0.452	L
5	To avoid nausea and vomiting, the patient should:	1.22	0.423	L
6	To avoid pain, the patient should:	1.18	0.385	L
7	You can improve your diet by:	1.30	0.464	L
8	During daily exercise, the patient should:	1.33	0.474	L
9	To monitor weight on a daily basis, the patient should:	1.23	0.423	L
10	10- To improve supportive public relations, the patient should:	1.18	0.385	L
11	Should you avoid high-fiber foods because they?	1.40	0.496	M
12	To aid in the digestion of food and as a result of stomach secretions and cramps being affected by cancer, should you?	1.30	0.464	L

13	To aid relaxation and ease of sleep, should you?	1.33	0.474	L
14	To help you quit smoking, should you?	1.25	0.439	L

Level of Assessment, (1-1.33) = Low; (1.34-1.67) = Moderate; (1.68-2.00) = High.

Findings show that study sample information was presented a low level of knowledge at all items except (11), which presented as (Moderate) level of assessment.

**Table (5):** Relationship between patients' knowledge and their socio-demographic data

Demographic variables	F	d.f.	p-value
Age	1.460	39	0.964
Gender	0.476	39	0.494
Education level	1.378	39	0.262
Marital status	0.461	39	0.711
Monthly income	3.059	39	0.078

Findings presented there were the no-significant relationship between patient's knowledge and their demographic data.

## DISCUSSION

According to the Table 1, the highest age group was 56-60 years old with a percentage of 13 (32.5%) with a mean of (73.8) years, and this result was consistent with Chen et al. (2016)<sup>(9)</sup>. The average age of those living with stomach cancer was  $60.6 \pm 6.6$  years.

The prevalence is increasing with the age of gastric cancer. Aging is linked to increased injury susceptibility, delayed cure of gastric mucosa, and expression of cancer stem cell markers. Furthermore, H. pylori gastritis rises with age. However, it was not clear, whether the prediction of gastric cancer already known worsened with age<sup>(10)</sup>.

Related to the gender cooperative in study the majority of study sample were male 26 (65.0%) of all study sample. There are no apparent explanations for these disparities. Exposures to the environment or work may take on a function. For example, men have traditionally been more likely to smoke tobacco products, including in countries where men and women have equal levels of smoking. Still higher concentrations of men tend to exist. Alternatively, sex distinctions may represent variations in physiology. Estrogens can protect against gastric cancer growth<sup>(11)</sup>.

Regarding to educational level of patients in the study sample, the majority with primary school graduation 24 (60.0%). Increased education of both sexes has been linked to a declining risk of esophagogastric cancer. Compared with elementary school graduation, higher education posed a lower threat to both sexes. This relationship was close for each of the 4 esophagogastric cancer subtypes and may be greater for gastric cancer<sup>(12)</sup>.

Concerning the social status, the more significant number of the study samples are 35 married and accounted for (87.5%). This result was consistent with findings the investigated the prevalence and prognostic implications of psychological distress in patients with gastric cancer<sup>(13)</sup>.

Regarding to the level of occupation status, the greater number of them with house wife and they account for 13 (32.5%) of the sample. This finding disagrees with the outcome of the environmental factors in the etiology of gastric cancer<sup>(14)</sup>.

Rural people only see physicians as problems occur. This could lead to higher mortality in rural areas compared to urban areas through delayed diagnosis and treatment. Policymakers should propose improving the understanding of gastric cancer through education in health care and extending early detection screening and early therapy to minimize the disparity in gastric cancer mortality across urban and rural areas<sup>(15)</sup>.



For patients' monthly income, the majority of the study sample with insufficient monthly income and account for 24 (60.0%) of the whole sample, this result was consistent with gastric cancer screening in low-income countries that reported; Gastric cancer shows significant geographical variations in and within regions with over 70% of the incidence cases clustered in countries with low and mid-income <sup>(16)</sup>.

Self-care is an active agent in patient health outcomes, with higher care patients taking greater responsibility to adopt behaviors that address their chemotherapy-related symptoms and their outcomes. Therefore, our findings show that study sample information was presented low level of knowledge about general information about stomach cancer and gastrectomy, general information of chemotherapy and self-care of side effects of chemotherapy (tables 2, 3, and 4). Those results come because the cancerous patients were lack of knowledge to interest to themselves. This reflects patients that need to the educational program to maintain self-care during chemotherapy treatment.

In those regards, the findings of the study conducted in Pakistan come to agree with our findings. It illustrated results that cancer patients who receive chemotherapy were reported poor to moderate self-care due to lack of information about the self-care. The study recommends that patients need to be educational program about managing their self-care after receiving chemotherapy <sup>(17)</sup>.

Moreover, the participant cancerous patients towards self-care behavior at Tikur Anbessa Specialized hospital, Addis Ababa Ethiopia, in 2018 depicts that 55.10% of studied patients were with poor self-care during chemotherapy. As well as, the patients express poor self-care in dryness of mouth and lips, nausea and vomiting occurs, loss of appetite, fatigue, headache, depression and frustration. The lack of self-care were associated with patients knowledge and patients need awareness towards management of themselves, and, the health care provides deals with cancerous patient need to be qualifications <sup>(18)</sup>.

The assessment of self-care among cancer patients was demonstrated poor self-care when the patients take chemotherapy. In those regards, findings were confirmed that the poor self-care was associated with an information need, which means the patients needed to workshop deals with self-care during chemotherapies <sup>(19)</sup>.

Findings presented there were the no-significant relationship between patients' knowledge and their demographic data (table 4). As well as, study conduct in Thailand on self-care behavior and patients undergo chemotherapy, there was no association between self-care and their socio demographic characteristics. However, study conducted in Thailand showed that chemotherapy individual's demographic characteristics were not significantly associated with self-care behavior <sup>(20, 21)</sup>.

## CONCLUSION

Patients expressed poor knowledge of self-care after gastrectomy and that knowledge not influenced by their socio-demographic data.

## RECOMMENDATIONS

It is specialized centers to educate patients about self-care stomach cancer and disease-causing risk factors and the importance of early detection of cancer. As well as, a booklet of the side effects of chemotherapy and how to manage it should be write in simple words and use attractive pictures given to the patients and family.

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