Physical Problems of Patients after Colorectal Cancer in Mosul Governorate

المشاكل الجسمية للمرضى المصابين بسرطان القولون والمستقيم في محافظة الموصل

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الخلاصة: بعد سرطان القولون والمستقيم في محافظة الموصل. الهدف: تقييم نوعية الحياة جسدية المنهجية. دراسة وصفية طبقية استعمل فيها أسلوب التقييم تم استخدامه في الدراسة الحالية ل 1 حزير ان 2011 15 2011 تقييم نوعية الحياة ذات العلاقة بالمشاكل الجسدية للمرضى بعد سرطان القولون والمستقيم في محافظة الموصل. اختيرت عينة عمديه قصديه (غير احتمالية) وكذلك المرضى الذين زاروا العيادة الخارجية في المستشفى نفسه للمتابعة طبية وإكمال العلاج تم جمع بيانات الدراسة عن طريق مقابلة يحلف العريضاني الدين والروا الميادة المعارجية في المستعلى من تستعلم عليه وإضاف المحري المعالي الديموغرافية والسريرية مرضى الراقدين والمراجعين في نوعية الحياة ذات العلاقة بالمشاكل الجسدية بعد سرطان القولون والمستقيم. تم إجراء المصداقية والثبات . تم تحليل البيانات من خلال أسلوب الإحصاء لأداة التقييم من خلال الدراسة الاستطلاعية وع (الْتكرار والنسب المئوية) (التكرار والنسب المئوية) تم تحديد ثباتية استمارة الاستبانة من خلال اجراء دراسة مصغرة باستخدام الاتساق الداخلي ومن خلال حساب معامل الارتب) ألفًا على البيانات التي تم جمعها من المرضى وحددت مصداقيتها من خلال الحصول على آراء لجنة مكونة من (13) خبيراً. وقد تم تحليل البيانات من خلال تطبيق التحليل الإحصائي الوصفي (النسب المئوية) والتحليل الإحصائي الاستدلالي (). نوعية الحياة ذات العلاقة بالمشاكل الجسدية للمرضى بعد سرَّطُان القولون والمستقيم النتائج: وليس هناك علاقة معنوية بين نوعية الحياة لهؤلاء المرضى وبعض الخصائص الديموغرافية مثل الجنس وألعمر والحالة الزوجية ومستوى التعليم. ن الاصابة بسرطان القولون والمستقيم هي أكثر شيوعا بين المتزوجين عن اولئك الغير متزوجين، كذلك كانت اعمار نصف المرضى ما بين 40 60 سنة، وكان لديهم مستوى متدنى من التعليم، والعديد منهم عاطلين عن العمل ويقيمون في المناطق الحضرية في الموصل.

ا**لتوصيات**: بإعداد برنامج تثقيفي للمرضى المصابين بسرطان القولون والمستقيم وزيادة الوعي والتثقيف بين عوائل المرضى لتوفير حياة افضل لمرضاهم.

Abstract

Objective: Assessment the quality of life concerning physical problems for patient after colorectal cancer in Mosul Governorate.

Methodology A descriptive cross-sectional design is employed through the present study from 1st June 2011 to 15th December 2011 in order to assess the quality of life concerning physical problems for patient after colorectal cancer in Mosul Governorate.

A purposive (non probability) sample is selected for the study which includes (60) patients diagnosed with colorectal cancer were treated in Mosul Oncology and Nuclear Medicine hospital or the patients who visited the outpatient clinic in the same hospital for medical follow–up and further treatment. Data were gathered through the patients' interviewed. Assessment questionnaire consist of two parts contains demographic characteristic, the other part concerning of quality of life concerning physical problems after colorectal cancer. Reliability and validity of this tool is determined through application of a pilot study and panel of experts. Data were analyzed through the application of descriptive statistical (frequencies and percentages) and inferential statistical (mean of score).

Content validity of the instrument was done through eliciting the opinions of a panel of (13) experts and reliability through a pilot study by using Internal consistency reliability is determined through the computation of the cronbach alpha correlation coefficient of the scale on data gathered from patients.

Results: The Overall results revealed that the quality of life related to physical problems for patients after colorectal cancer were acceptable. So, there is no significant correlation between the quality of life related to physical problems for these patients and some demographic characteristics such as gender, age, marital status and education level.

The study concludes that colorectal cancer are most common in married than in unmarried, half patients age are between 40 and 60 years old, have a relatively low level of education, many are unemployed and they reside in the urban areas in Mosul.

Recommendations: The study recommended to preparation of an educational program for patients with colorectal cancer and to raise awareness and education among families of patients to provide a better life for their patients.

Key wards: physical problems, colorectal cancer

INTRODUCTION

Colorectal cancer (CRC) is a major health concern, worldwide more than one million individuals develop colorectal cancer (CRC) each year, and the disease-specific mortality rate is nearly 33% in the developed world⁽¹⁾.

In Europe cancer of the gastrointestinal tract is the most common cancer: more than half of gastrointestinal cancer cases arise from the colon and around 250,000 new colon cases are diagnosed every year, accounting for around 9% of all the malignancies⁽²⁾.

Colorectal cancer is the third most commonly diagnosed cancer in males after lung and prostate cancer and it is the second in females after lung and breast cancer ⁽³⁾.

Colorectal cancer is a significant health problem in Iraq. It is a common malignancy that accounts for a large portion of all cancer-related morbidity and mortality. It is the seventh most common cancer in Iraq, that accounts 4.7% of all malignant tumors and show rise in both sexes⁽⁴⁾, also its the forth most common cancer in Mosul and it's the fifth cancer deaths in Mosul⁽⁵⁾.

Diagnosis of colorectal cancer and its treatments may have a devastating impact on a person's quality of life. Such problems include, physical problems, psychological problems, and psychosocial problems⁽⁶⁾.

Quality of life (QOL) has become an important outcome measure for cancer patients. The term quality of life refers to a multidimensional concept, which includes, at least, the dimensions of physical, emotional, and social functioning. In addition, assessment of QOL in patients with cancer may improve our understanding of how cancer and therapy influence the patients' lives and how to adapt treatment strategies⁽⁷⁾.

The quality of life of a colorectal cancer patient and his family is deeply modified when faced with this diagnosis as a result of physical and psychological changes induced by it⁽⁸⁾.

Colorectal cancer is one of the most common invasive cancers. The diagnosis and treatment leads to considerable physical, psychological and psychosocial morbidity. The most physical impacts are pain and wound care, flatus, fatigue, constipation, sexual dysfunction, diarrhea, disturbed sleep, weight loss, sore skin and infection, tiredness, not able to carry out everyday tasks as usual, dealing with stoma care and frequent bowel motions, also patient may have peripheral neuropathy, hiccoughs, loss of appetite, and anemia⁽⁹⁾.

WHO group in 1996 constructed measure instrument for assessing quality of life and facts in main six domains: physical, psychological, environment, level of independence, social relationship, and spiritual⁽¹⁰⁾.

Objective: The aim of the study is to Assess the quality of life concerning physical problems for patient after colorectal cancer in Mosul Governorate

METHODOLOGY

A descriptive cross-sectional design is employed through the present study from 1st June 2011 to 15th December 2011 in order to assess the quality of life concerning physical problems for patient after colorectal cancer in Mosul Governorate.

A purposive (non probability) sample is selected for the study which includes (60) patients diagnosed with colorectal cancer were treated in Mosul Oncology and Nuclear Medicine hospital or the patients who visited the outpatient clinic in the same hospital for medical follow–up and further treatment. Data were gathered through the patients' interviewed. Each interview takes approximately (20-25) minute for each patient.

Assessment questionnaire consists of two parts: Part one contains demographic characteristic. Part two concerning of quality of life concerning physical problems after colorectal cancer: It is consisted of (19) items which are measured on 3 levels of likert rating scale, always (3), sometimes (2), never (1).

Reliability and validity of this tool is determined through application of a pilot study and panel of experts. Data were analyzed through the application of descriptive statistical (frequencies and percentages) and inferential statistical (mean of score).

Content validity of the instrument was done through eliciting the opinions of a panel of (13) experts and reliability through a pilot study by using Internal consistency reliability is determined through the computation of the cronbach alpha correlation coefficient of the scale on data gathered from patients.

Reliability and validity of this tool is determined through application of a pilot study and panel of experts. Data were analyzed through the application of descriptive statistical (frequencies and percentages) and inferential statistical (mean of score).

RESULTS:

 Table (1) Frequencies and percentages of Socio-demographical characteristics

 (n=60)

Socio-Demographical Characteristics	Groups	F	%
Gender	Men	33	55.0
Gender	Women	27	45.0
	20 - 29	4	6.7
	30 - 39	9	15.0
A go Cround	40 - 49	15	25.0
Age Groups	50 - 59	15	25.0
	60 - 69	9	15.0
	70 - 79	8	13.3
	Single	3	5.0
Marital Status	Married	51	85.0
	Widow	6	10.0
	Illiterate	14	23.3
	Read and write	8	13.3
	Primary	24	40.0
Education Levels	Intermediate	6	10.0
	Secondary	4	6.7
	Institution and College	4	6.7
	Employed	6	10.0
	Retirement	25	41.7
Occupational Before	Private works	10	16.7
-	House wife	18	30.0
	Unemployed	1	1.7
	Yes	20	33.3
Occupational After	No	40	66.7
Dester	Town	39	65.0
Region	Rural	21	35.0
	Sufficient	12	20.0
Monthly Income	Barely Sufficient	35	58.3
	Insufficient	13	21.7

Table (1) Describe the characteristics of the sample, (55%) of sample were men, most were between 40-60 years age (50% of them), Regarding to the patients marital status,

the majority of the sample are married and they accounted for (85%) of the whole sample, (15%) were either single or widows; almost quarter (23.3%) were illiterate. Overall educational level tends to be low. Few (10%) were employed before the surgery (treatment) and even a higher portion didn't return to their occupation (66.7%). Only (20%) reported that the monthly income was sufficient. (35%) of the sample resident in the rural area in Mosul.

Pervious History of Patients	Groups	F	%
	1 - 2	44	73.3
Duration of illness	3 - 4	9	15
(Per yrs.)	<u>5</u> ≥	7	11.7
	Yes	27	45
Pervious Surgery	No	33	55
	Yes	13	21.7
Family History	No	47	78.3
Smoking Hakit	Yes	31	51.7
Smoking Habit	No	29	48.3
Alashalism	Yes	11	18.3
Alcoholism	No	49	81.7
Distory	Fatty	48	80
Dietary	Not fatty	12	20
Surgical	Yes	54	90
Treatment	No	6	10
Chamath ana mu	Yes	51	85
Chemotherapy	No	9	15
Radiation	Yes	17	28.3
Treatment	No	43	71.7
	Yes	32	53.3
Colostomy	No	28	46.7

Table (2): Frequencies and	percentages for	or clinical	characteristics	of the sample
(n=60)				

Table (2) shows that, the majority of duration of illness (73.3%) were 1-2 years, (45%) of patients had previous surgery. The risk factors for cancer revealed that (21.7%) had a family history of cancer, (51.7%) are current smokers; (18.3%) reported using alcohol; and (80%) ate fatty diet. The medical history included that (54%) have had previous surgery, and the duration of since the colorectal cancer was within two years in (73.3%); (11.7%) were diagnosed 5 years. The treatments that patients received were surgical in (90%), chemotherapy (85%); radiation (28.8%) and (53.3%) had colostomy.

ins	Physical Problems Domain's Items		sical Problems Domain's Items always		sometimes		never		
Sub Domains			n	%	n	%	n	%	M.S.
Sub]									
	1	you have pain when you do some work	27	45.0	19	31.7	14	23.3	2.22
Pain	2	you have pain when you touch somewhere in your body	24	40.0	23	38.3	13	21.7	2.18
	3	you have pain when you carry things	33	55.5	10	16.7	17	28.3	2.27
for	4	you feel discomfort when you do some work	18	30.0	27	45.0	15	25.0	2.05
Discomfor t	5	you feel discomfort when you feel in pain	12	20.0	31	51.7	17	28.3	1.92
D	6	you feel discomfort for not clear reason	31	51.7	15	25.0	14	23.3	2.28
gy.	7	7 you need help when you do daily activities like, changing clothes		56.7	5	8.3	21	35.0	2.22
Energy	8	 8 you need for help when you do daily activities like, doing sport habits 9 you need help when you do daily activities like, washing and bathing 		56.7	8	13.3	18	30.0	2.27
	9			55.0	3	5.0	24	40.0	2.15
	1 0	you feel tired when you do a work that		20.0	20	33.3	28	46.7	1.73
Fatigue	1 1	you feel tired when you standing for a while		30.0	14	23.3	28	46.7	1.83
Fati	1 2			26.7	15	25.0	29	48.3	1.78
	1 3	you feel tired for not clear reason	28	46.7	19	31.7	13	21.7	2.25
Sleep	1 4	1		40.0	9	15.0	27	45.0	1.95
S	 your sleep affected, because of your disease has become attendant with nightmares 		22	36.7	23	38.3	15	25.0	2.12
	1 6	1 you need rest ofter doing normal works		11.7	27	45.0	26	43.3	1.68
Rest	1 7	you need rest after taking a walk outside the house	13	21.7	16	26.7	31	51.7	1.70
R£	1 8	you need rest after between work times	10	16.7	20	33.3	30	50.0	1.67
	1 9	you need rest after doing exercises	12	20.0	18	30.0	30	50.0	1.70

Table (3) Descriptive statistics of QOL physical domain items for patient after colorectal cancer (n=60)

M.S.= mean of score

Table (3) indicated that the mean of score on items (5, 10, 11, 12, 14, 16, 17, 18, 19) were under cut-off point 2.

T :t	Physical	Good		Accept		Bad			
List	problems Marital status	F	%	F	%	F	%	Total	
1	Single	1	1.67	0	0	2	3.33	3	
2	Married	16	26.67	23	38.34	12	20	51	
3	Widowed	0	0	4	6.66	2	3.33	6	
	Total	17	28.34	27	45	16	26.66	60	
Obs. X^2 =5.95 DF = 4 P \leq 0.05 Crit. X^2 =9.49									

 Table (4) Association between the gender of patients and physical problems level

This table reveals that there were no significant differences between gender and physical problems domains at (P 0.05) and the highest percentage (23.34%) were accept level for men.

Physical		Good		Accept		Bad			
List	problems Age (years)	F	%	F	%	F	%	Total	
1	20-29	2	3.34	1	1.66	1	1.66	4	
2	30-39	3	5	4	6.67	2	3.34	9	
3	40-49	5	8.33	5	8.33	5	8.33	15	
4	50-59	4	6.67	7	11.66	5	8.33	16	
5	60 and above	3	5	10	16.66	3	5	16	
	Total 17 28.34 27 45 16 26.66 60								
	Obs. X^2 =4.18 DF = 8 P \leq 0.05 Crit. X^2 =15.51								

Table (5) shows that there were no significant differences between the age of patients and QOL concerning physical problems level at (P 0.05). The highest percentages (16.16%) were accepting level in old age 60 and above.

Liet	PhysicalListproblems		Good		Accept		ad	Total	
List	Gender	F	%	F	%	F	%	Total	
1	Male	11	18.34	14	23.34	8	13.33	33	
2	Female	6	10	13	21.66	8	13.33	27	
Total 1		17	28.34	27	45	16	26.66	60	
	Obs. X^2 =0.91 DF = 2 P \leq 0.05 Crit. X^2 =5.99								

 Table (6) Association between the marital status of patients and physical problems

 level

Table (6) indicated that there were no significant differences between marital status and QOL concerning physical problems at (P 0.05). The highest percentages (38.34%) were accepting level for married patients.

DISCUSSION:

The finding of the present study indicates that the majority of sample consisted mostly of male (55%) (Table 1). This finding comes along with study done in Iraq by Al-Attar in 2005 that found that (74%) of study sample were male⁽¹¹⁾. Regarding to patients age, most of them (50%) were between 40-60 years age. That result agrees with that incidence increases with age. More than 90 percent of people with colorectal cancer are diagnosed after age $50^{(12)}$. This study revealed that (85%) of the sample were married, this finding comes along with Al-Attar, 2005 that found that (92%) of study sample were married⁽¹¹⁾. The study indicates that nine items of physical problems domains were under cut-off point 2, regarding to fatigue and rest items, refers that patients have problems with (feeling tired when they do a work that need for effort, standing for a while, and when arising up stairs, also they need to have rest after doing normal works, going outside home, between work times, and after doing exercises (Table 3). The most prevalent concerns reported 1 year after diagnosis and treatment with colorectal cancer were fear of recurrence (68%), fatigue (67%), and sleep difficulties (48%)⁽¹³⁾. Long-term adult survivors had more physical limitations in sustained activities such as shopping, sports, and social events than individuals without cancer (53% vs. 21%)⁽¹⁴⁾. This study revealed that, there are no significant relationship between gender of the sample and QOL concerning physical problems at (P 0.05). This result agreed with (Arndt et al., 2004) they indicted no relevant differences between patients with colon and rectal cancer with respect to physical problems. Finally, stratification by sex revealed neither differences between male and female colorectal cancer patients nor sex-specific differences in the pattern of major limitations when cancer patients were compared with population controls⁽⁶⁾. Table 5, shows that there were no significant differences between the age of patients and QOL concerning physical problems level at (P 0.05). With respect to symptoms, most age-specific comparisons showed a similar pattern (data not shown). In particular, differences

regarding fatigue, insomnia, diarrhea, and financial difficulties were highest among youngest age groups and decreased with older age⁽⁶⁾.

Table 6, indicated that there were no significant relationship between marital status and QOL concerning physical problems at (P 0.05). In a study done by Pereira et al., 2012 they found statistically significant differences were observed in relation to the average scores of patients in the physical (p=0.022) domain when related to the marital status of the patients⁽¹⁵⁾.

The study concludes that colorectal cancer are most common in married than in unmarried, half patients age are between 40 and 60 years old, have a relatively low level of education, many are unemployed and they reside in the urban areas in Mosul.

RECOMMENDATIONS:

The study recommends to preparation of an education program for patients with colorectal cancer and to raise awareness and education among families of patients to provide a better life for their patients. Also further study is necessary in order to demonstrated more clearly the differences of QOL for patient with colorectal cancer who had.

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