Quality of Life Assessment for Patients with Colorectal Cancer

Dr. Wafaa M. AlAttar / Assistant Professor[*]

الخلاصة:

دراسة وصفية تقييم نوعية حياة المرضى المصابين بسرطان القولون والمستقيم. أجريت الدراسة في مستشفى بغداد التعليمي ومستشفى اليرموك التعليمي ومستشفى الاشعاع والطب النووي للفترة من ١/تموز/ ٢٠٠٤ ولغاية الاول من ايلول/٢٠٠٤. اختبرت العينة بالطريقة العشوائية العمدية من (٥٠) مريض مشخص بسرطان القولون والمستقيم وهم تحت العلاج الكيمياوي.

ولتحقيق اهداف البحث اعدت استمارة استبيانية تكونت من ثلاثة اجزاء وتشمل:

١- معلومات عامة تتعلق بالخصائص الشخصية.

٢- معلومات عامة تتعلق بالخصائص السريرية.

٣- واستمارة خاصة لتقييم نوعية حياة المرضى المصابين بسرطان القولون والمستقيم والمكونة من (٣٠) فقرة.

تم اختيار صدق الاستمارة وثباتها وتم تحليل البيانات باستخدام التكرار والنسبة المئوية والمتوسط الحسابي ومربع كاي.

اشارات نتائج الدراسة إلى ان نوعية الحياة لهؤلاء المرضى قد تأثرت من خلال (١٠) فقرات فقط عندهم اضطرابات في المشي والحركة وكذلك يشعرون بالالم والتعب والضعف وغيرها. لذلك اوصت الدراسة اعداد وتنفيذ برنامج تثقيفي لهؤلاء المرضى المصابين بسرطان القولون والمستقيم والذين هم تحت العلاج الكيمياوي.

Abstract

A descriptive study to assess the quality of life (QOL) for patients with colorectal cancer. The study was conducted from Baghdad Teaching Hospital, Al-Yarmouk Teaching Hospital and Radiation Hospital and Nuclear medicine for the period from 1st July/2004 to 1st September/2004. The sample selected by purposive random of (50) patients diagnosed with colorectal cancer and all of them who were under chemotherapy treatment.

A questionnaire was prepared for the purpose of the study and comprised of three parts including:
  1- Socio-demographical characteristics.
  2- Clinical characteristics.
  3- and QOL assessment for patients with colorectal cancer, consist of (30) items.

The questionnaire was tested for its validity and reliability. Data were analyzed by using frequency, percentage, mean of score and Chi-square.

The results of the study indicated that the QOL for patients were greatly effected during (10) items such as they have trouble in walking and mobility and also they feel pain, tired and weakness… etc.

Therefore was recommended education program to be developed and implemented of patients with colorectal cancer who were under chemotherapy treatment.

Introduction

Colorectal cancer is a malignant tumor arising from epithelial tissues of the colon or rectum [1]. Colorectal cancer continues to be the most common cancer of gastrointestinal tract and the second most common cause if cancer death in the United States[2,3]. In 1998, there were approximately 131,600 new cases of colorectal cancer in the United States[3]. In Iraq, according to the Iraq Cancer Registry Center colorectal cancer accounts for 4.5% of all malignant tumors registered during the period, from (1998-2000) and show rise in both sexes[4]. The 5-year survival rate for early, localized colorectal cancers is 91% and 63% for cancer spread to adjacent organs and lymph nodes[3,5]. The assessment of QOL is being used more frequently as an endpoint for clinical trials in colorectal cancer.

[*] University of Baghdad /College of Nursing

The European Organization for Research and Treatment of Cancer (EORTC) demands that new study proposals contain information about the intention to assess QOL and/or cost effectiveness[5]. The clinical benefit can be defined as an improvement in a patient's disease-related symptoms and performance status and certainly translate into an improved QOL for the patient. Also the clinical benefit assessment has already been used successfully to demonstrate the clinical benefit from a treatment with chemotherapy[6,7] . Therefore the present study aims that to assess the QOL for patients with colorectal cancer and find out relation between QOL level and some variables of socio-demographic characteristics.

Methodology

Descriptive design was carried out to assess the QOL for patient with colorectal cancer.

The sample selected by purposive random of (50) patients, diagnosed with colorectal cancer and who were under chemotherapy treatment. Data collected by interview from Baghdad Teaching Hospital, Al-Yarmouk Teaching Hospital and Radiation Hospital and Nuclear medicine for the period from 1st July/2004 to 1st September/2004. A questionnaire consists of three parts including:

1- Socio-demographical characteristics.

2- Clinical characteristics.

3- and QOL assessment for patients with colorectal cancer, consisted of (30) items.

The questionnaire is developed by investigator from the stander of (EORTC-QOL-30 questionnaire)[5].

These items are measured on 3 levels of likert rating scale, always (3), sometimes (2), never (1). The cut-off point was (2) of all items.

The time average required to complete the questionnaire about 15-25min. The reliability of the questionnaire was determined by using person correlation coefficient (0.87) and the validity was response through penal of expert. The statistical data analysis that used was frequency, percentage, mean of score and Chi-square.

The QOL level was also assessed on early stated scale on each item and the cumulative score was obtained and presented as (68-90) for good QOL as (45-67) for accept QOL and (0-44) for bad QOL.

Results

Table(1) Distribution of the study sample according to sociodemographic characteristic

	sociodemographic characteristic	F	%
1-	Gender Male Female	 37 13	 74 26
	Total	50	100
2-	Age/year 20-29 30-39 40-49 50-59 60 and above	 5 6 9 9 21	 10 12 18 18 42
	Total Mean age 52.1	50	100
3-	Marital status		

	Single	3	6
	Married	46	92
	Widowed	1	2
	Total	50	100
4-	Level of education		
	No read and write	15	30
	Read and write	2	4
	Primary school	10	20
	Intermediate school	8	16
	Secondary school	7	14
	Institute and college	8	16
	Total	50	100
5-	Previous occupational status		
	Governmental employ	9	18
	Self employ	29	58
	Housewife	9	18
	Student	2	4
	Retired	1	2
	Total	50	100
6-	Employment status		
	Unemployed	32	64
	Employed	18	36
	Total	50	100

This table indicated that the majority of the study sample were male (74%) while the remaining (26%) were female and (42%) of the patients were (60 and above) years old the mean of age was (52.1), related to their level of education (30%) was no read and write, in regard to the subject marital status the majority of the sample were married (92%). With previous occupational status the highest (58%) were self employ. The table also shows that (32%) were unemployed in regard to the employment status.

Table (2) Distribution of the study sample according to clinical characteristic

	Clinical characteristic	F	%
1-	Duration of illness		
	Less than one year	40	80
	More than one year	10	20
	Total	50	100
2-	Number of previous admission to hospital		
	No admission	10	20
	1-3	27	54
	4-6	7	14
	7 and above	6	12
	Total	50	100

Table (2) shows that, the majority of duration of illness (80%) were less than one year, while the remaining (20%) were more than one year. With regard to number of previous admission to the hospital (54%) have (4-6) admission to hospital.

Table (3) Mean of score of QOL items for patient with colorectal cancer

	QOL items	always		sometimes		Never		Mean of score
		F	%	F	%	F	%	
1.	Do you have any trouble doing strenuous activities like carrying a heavy shopping bag?	22	44	22	44	6	12	2.32
2.	Do you have any trouble taking along walk?	25	50	20	40	5	10	2.40
3.	Do you have any trouble taking a short walk outside of the house?	10	20	31	62	9	18	2.01
4.	Do you have to stay in a bed or a chair for most of the day?	12	24	19	38	19	38	1.86
5.	Do you need help with eating, dressing, washing or using the toilet?	11	22	11	22	28	56	1.66
6.	Do you have limited in doing either your work or other daily activities?	14	28	17	34	19	38	1.90
7.	Do you have limited in pursuing your hobbies or other leisure time activities?	8	16	28	36	14	28	1.88
8.	Do you have short of breath?	3	6	27	34	20	40	1.66
9.	Do you have pain?	14	28	30	60	6	12	2.16
10.	Did you need to rest?	19	38	21	42	16	32	2.18
11.	Do you have trouble sleeping?	12	24	21	42	17	34	1.90
12.	Have you felt weakness?	18	36	17	34	15	30	2.06
13.	Have you lacked appetite?	15	30	27	54	8	16	2.14
14.	Have you felt nauseated?	10	20	19	38	21	42	1.78
15.	Have you vomited?	15	30	16	32	19	38	1.92
16.	Have you constipation?	11	22	8	16	31	62	1.6
17.	Have you diarrhea?	6	12	11	22	33	66	1.46
18.	Have you felt tired?	19		26	52	5	10	2.28
19.	Did pain interfere with your daily activities?	22	44	25	50	3	6	2.38

No.	Item							M.S.
20.	Have you had difficulty concentrating on things, like reading a newspaper or watching TV?	8	16	26	32	17	34	1.86
21.	Do you feel tense?	13	26	22	44	15	30	1.96
22.	Do you worry?	13	26	19	38	18	36	1.9
23.	Do you feel irritable?	12	24	19	38	19	38	1.86
24.	Do you feel depressed?	12	24	21	42	17	34	1.90
25.	Have you had difficulty remembering things?	5	10	25	50	20	40	1.70
26.	Have you bleeding?	9	18	23	46	18	36	1.82
27.	Have you felt afraid from death?	3	6	22	44	25	50	1.56
28.	Has your physical condition or medical treatment interfered with your family life?	16	32	12	24	19	38	1.82
29.	Has your physical condition or medical treatment interfered with your social activities?	14	28	11	22	24	48	1.76
30.	Has your physical condition or medical treatment caused you financial difficulties?	26	32	2	4	22	44	2.08

Table (3) indicated that the mean of score on items (1,2,3,9,10,12,13,18,19,28) were above cut-off point 2.

Table (4) Descending order of the identified QOL items for colorectal cancer

Item No.	M.S.	Decreasing order No.
2-	2.40	1
1-	2.32	2
19-	2.38	3
18-	2.28	4
10-	2.18	5
9-	2.16	6
13-	2.14	7
30-	2.08	8

| 12- | 2.06 | 9 |
| 3- | 2.01 | 10 |

It appears from the table that (10) items identified of patients related QOL items whose mean ranged from (2.40-2.01).

Table (5) Association between the gender of the sample and QOL level

QOL level / Gender	Good		Accept		Bad		Total	
	F	%	F	%	F	%	F	%
Male	1	2	19	38	17	34	37	74
Female	0	0	5	10	8	16	13	26
Total	1	2	24	48	25	50	50	100

X^2obs: 0.892 $\quad$ X^2crit : 5.991 $\quad$ df: 2 $\quad$ P > 0.05

This table reveals that there was no significant differences between gender and QOL level (P>0.05) and the highest percentage (38%) were accept level for male.

Table (6) Association between the age of the sample and the QOL level

QOL level / Age (year)	Good		Accept		Bad		Total	
	F	%	F	%	F	%	F	%
20-29	0	0	2	4	3	6	5	10
30-39	1	2	4	8	4	8	9	18
40-49	0	0	5	10	4	8	9	18
50-59	0	0	3	6	3	6	6	12
60 and above	1	2	3	6	17	34	21	42
Total	2	4	17	34	31	62	50	100

X^2obs: 5.974 $\quad$ X^2crit : 15.507 $\quad$ df: 8 $\quad$ P > 0.05

Table (6) indicated that there was no significant differences between the age of the sample and QOL level and the highest percentage (34%) were bad level in old age (60 and above).

Table (7) Association between the marital status and QOL level

QOL level / Marital status	Good		Accept		Bad		Total	
	F	%	F	%	F	%	F	%
Single	0	0	0	0	3	6	3	6
Married	1	2	39	78	6	12	46	92
Widowed	0	0	0	0	1	2	1	2
Total	1	2	39	78	10	20	50	100

X^2obs: 14.191 $\quad$ X^2crit : 9.488 $\quad$ df: 4 $\quad$ P < 0.05

In this table, there was significant differences between marital status and QOL level at (P<0.05). The highest percentage (78%) were accept level for married sample.

Table (8) Association between the level of education and QOL level

QOL level / Level of education	Good		Accept		Bad		Total	
	F	%	F	%	F	%	F	%
No read & write	0	0	14	28	1	2	15	30
Read & write	0	0	2	4	0	0	2	4
Primary school	1	2	6	12	3	6	10	20

Intermediate school	0	0	5	10	3	6	8	16
Secondary school	0	0	3	6	4	8	7	14
Institute & college	0	0	5	10	3	6	8	16
Total	1	2	35	70	14	28	50	100

X^2obs: 21.714 X^2crit : 18.307   df: 10   P < 0.05

This table shows that there was significant differences between level of education and QOL level. The highest percentage (28%) with accept level for read and write.

Discussion

The findings of the present study showed that the majority of the sample were male (74%) (table 1). In Iraq in a study done the period (1999-2000) colorectal cancer accounts of (2.5%) in men and 1.8 in female of all malignant tumors.

In men USA, colorectal cancer is the third most common cancer after the lung & prostate cancer.[1]

Regarding their age the study indicated that the higher presented (60 & above) years was (42%) with mean of age (52.1) year (table 1). Cancer of the colon and rectum may occur at any age but is most prevalent over the age of 50 years[3] .

This study revealed that (30%) of the sample were no read and write and (92%) were married and regard to previous occupational status (58%) were self employ & (32%) were unemployed regard to the employment status (table 1).

The study indicated that ten items of QOL were identified for colorectal cancer whose mean ranged from (2.40-2.01) the highest item were following trouble taking along walk, trouble doing strenuous activities like carriage a heavy shopping bag, pain interfere with daily activities, feel tired, need to rest, have pain, lack appetite, physical condition or medical treatment cause financial difficulties, feel weakness and trouble taking a short walk outside of the house (table 4).

Most patients with colorectal cancer presented weakness and lethargy, in old & young patient[5]

Vague abdominal discomfort or crampy-colicky abdominal pain may be presented[3] . Other study found that significant improvement regarding assessment of walking, balance, activities of daily living (ADL), QOL mobility & emotional status [8]

The result found that there were no significant difference between QOL level and their age and gender (table 5&6).

All ages suffer from physical problems but most commonly incidence of colorectal cancer is highest in elderly.[8]

There were a significant difference between QOL level and level of education. The highest number of the sample were low education and related to accept QOL (table 8). This result not agree with other study which stated that high education were factors significantly related to a good QOL[9].

Also found that statistically significant at level (P<0.05) between QOL level and marital status and the highest of the sample were married and related to accept QOL (table 7).

Recommendations

1- To encourage the establishment of society of center for cancer patient to take after their personal and social problems and rehabilitation program for better QOL.

2- In service continuing education could be structured and oriented toward oncology nurse to up data them with most current information regarding such issues.

3- Farther study is necessary in order to demonstrated more clearly the differences of QOL for patient with colorectal cancer who had stomy and for patients under chemotherapy.

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