

Psychological Problems of Patients with Colorectal Cancer

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المستخلص:

الهدف: تقييم المشاكل النفسية لمرضى سرطان القولون والمستقيم ومعرفة العلاقة بين بعض المتغيرات الديموغرافية مثل (الجنس، العمر، الحالة الزوجية، المستوى التعليمي) والمشاكل النفسية لهؤلاء المرضى.

المنهجية: دراسة وصفية استعمل فيها أسلوب التقييم تم استخدامه في الدراسة الحالية للفترة من 1 تموز 2011 إلى 25 كانون الأول 2011 لدراسة المشاكل النفسية لمرضى سرطان القولون والمستقيم. عينة عمدية قصديه (غير احتمالية) اختيرت في الدراسة وقد تكونت من (60) مريض في مستشفى الاورام والطب الذري في الموصل. تم جمع بيانات الدراسة عن طريق مقابلة المرضى الراقدين والمراجعين في المستشفى المذكور. تكونت استمارة التقييم من جزأين شملت المعلومات الديموغرافية والسريرية المرضى والجزء الآخر تعلق بتقييم المشاكل النفسية لمرضى سرطان القولون والمستقيم. تم إجراء المصادقية والثبات لأداة التقييم من خلال الدراسة الاستطلاعية وعرض الأداة على مجموعة من الخبراء. تم تحليل البيانات من خلال أسلوب الإحصاء الوصفي (التكرار والنسب المئوية) والإحصاء الاستنتاجي (المتوسط الحسابي) والانحدار المنطقي.

النتائج: وبشكل عام كشفت النتائج ان نوعية الحياة لمرضى سرطان القولون والمستقيم الذين يعانون من المشاكل النفسية كانت مقبولة، و هناك علاقة معنوية بين المشاكل النفسية لهؤلاء المرضى وواحد من الخصائص الديموغرافية وهو مكان الإقامة للمرضى.

التوصيات: أوصت الدراسة بإعداد برنامج تثقيفي للمرضى المصابين بسرطان القولون والمستقيم وزيادة الوعي والتثقيف بين عوائل المرضى لتوفير حياة افضل لمرضاهم.

Abstract:

Objective: Assessment the psychological problems in patients with colorectal cancer, and to find out the relationship between socio-demographic characteristics such as (age, sex, marital status, educational level, and occupation) and psychological problems for those patients.

Methodology: A descriptive design is employed through the present study from 1st July 2011 to 25th December 2011 in order to study the quality of life in colorectal cancer patients with psychological problems.

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 questioner consist of two parts contains demographic characteristic, the other part concerning about assessment the psychological problems for patients with 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), inferential statistical (mean of score), and logistic regression.

Results: The Overall results revealed that the quality of life in colorectal cancer patients with psychological problems was acceptable, and there is significant correlation between the psychological problems related for these patients and one demographic characteristic that was region (residency) of patients.

Recommendations: The study recommended 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 psychological life for their patients.

Key words: quality of Life, psychological 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 fourth 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⁽⁹⁾. Some patients may also experience unwanted psychological or social effects of adjuvant chemotherapy:

- Prolongation of the 'patient' status
- Feelings of anxiety or depression

- Loss of earnings
- Strains on family relationships⁽¹⁰⁾.

The patient anticipating surgery for colorectal cancer has many concerns, needs, and fears. The patient undergoing a colostomy may find the anticipated changes in body image and lifestyle profoundly disturbing. Because the stoma is located on the abdomen, the patient may think that everyone will be aware of the ostomy⁽¹¹⁾.

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⁽¹²⁾.

Methodology:

A descriptive cross-sectional design is employed through the present study from 1st July 2011 to 25th December 2011 in order to study the quality of life in colorectal cancer patients with psychological problems.

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 the quality of life in colorectal cancer patients with psychological problems: It is consisted of (23) 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 (13) experts. Data were analyzed through the application of descriptive statistical (frequencies and percentages) and inferential statistical (mean of score), and logistic regression.

Results:**Table 1.** Frequencies and percentages of Socio-demographical characteristics (n=60)

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

F. = frequency; %= percent.

Table (1) Described 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. And overall educational level tends to be low. With regard to occupational status of sample, most of them were retired (41%) and (30%) of them were house wives. (33.3%) were employed before their surgically treatment and even a higher portion did not return to their occupation (66.7%) after their treatment. (35%) of the sample resident in the rural area in Mosul. And only (20%) reported that the monthly income was sufficient.

Table 2. Descriptive statistics of QOL psychological domain items for patient after colorectal cancer (n=60)

Sub Domains	Psychological Problem Items	always		sometime		never		M.S	SD
		F	%	F	%	F	%		
Positive feelings	1. Tumors like other disease can be curable	29	48.3	23	38.3	8	13.3	2.35	0.71
	2. I feel that life still beautiful	3	5.0	49	81.7	8	13.3	1.92	0.42
	3. I feel that I still useful for my family and society	43	71.7	10	16.7	7	11.7	2.60	0.69
	4. Illness made me feels about suffering of other patients	12	20.0	45	75.0	3	5.0	2.15	0.48
Negative feelings	5. I lost my role and my importance in the family	34	56.7	10	16.7	16	26.7	2.30	0.87
	6. I became hate myself because of the illness	23	38.3	27	45.0	10	16.7	2.22	0.72
	7. I feel tense and worry	10	16.7	36	60.0	14	23.3	1.93	0.63
	8. I feel that I need for crying	14	23.3	34	56.7	12	20.0	2.03	0.66
Self-Esteem	9. I feel that I still capable and competent for all works	13	21.7	28	46.7	19	31.7	1.90	0.73
	10. I still capable to doing daily works	23	38.3	30	50.0	7	11.7	2.27	0.66
	11. What I introduce to my family and my children's convincing for me	38	63.3	16	26.7	6	10.0	2.53	0.68
	12. My role is active in the society	39	65.0	12	20.0	9	15.0	2.50	0.75
Thinking	13. I thinks a lot about what happed to me	12	20.0	28	46.7	20	33.3	1.87	0.72
	14. I thinks a lot about (my future) my illness prognosis	22	36.7	25	41.7	13	21.7	2.15	0.76
	15. I thinks a lot about the future of my children's and my family	37	61.7	17	28.3	6	10.0	2.52	0.68
	16. I thinks a lot about the costs of my illness	26	43.3	16	26.7	18	30.0	2.13	0.85
Memory & concentration	17. I suffers from forgetting	45	75.0	4	6.7	11	18.3	2.57	0.79
	18. I can follow up others conversation obviously	56	93.3	2	3.3	2	3.3	2.90	0.40
	19. I remember previous events happened to me	58	96.7	2	3.3	0	0.0	2.97	0.18
Body Image	20. I hurt for being in this image	19	31.7	24	40.0	17	28.3	2.03	0.78
	21. I don't desire anyone to see my body	29	48.3	11	18.3	20	33.3	2.15	0.90
	22. My body image is not satisfy for others	25	41.7	21	35.0	14	23.3	2.18	0.79
	23. I feel that my body image hurt others	22	36.7	29	48.3	9	15.0	2.22	0.69

F.= frequency; %= percent; M=mean of score; SD= standard deviation

Table (2) indicated that the mean of score on items (2, 7, 9, 13) were under cut-off point 2.

Table 3. Logistic regression using 8 socio-demographic characteristics to estimate the determinants of Psychological problems

Demographic Variables*	OR	95.0% C.I. for OR		P
		Lower	Upper	
Gender	0.49	0.10	2.25	0.36
Age	1.52	0.40	5.76	0.53
Marital Status	0.18	0.01	2.03	0.16
Education	0.80	0.13	4.77	0.81
Occupation	0.79	0.14	4.45	0.79
Occupation after treatment	1.64	0.40	6.70	0.48
Region	0.25	0.06	1.03	0.05
Income/month	1.44	0.29	7.17	0.65

OR= Odds Ratio; CI= Confidence Interval.; p.= P. value; Significant at $p \leq 0.05$,

Table (3) Had shown that only Region [OR= 0.25 (95% CI: 0.06, 1.03)], were statistically significant determinants psychological QOL sub domain.

Discussion:

The finding of the present study indicates that the majority of sample consisted mostly of men (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 men⁽¹³⁾.

Regarding to patients age, most of them (50%) were between 40-60 years age. That result agrees with study done by National Cancer Institute that found that incidence increases with age, and 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⁽¹³⁾.

Most of the participants (63.3%) had obtained a low educational level (illiterate or finished primary school). This high percentage of low educational level by participants was in contrast to Iraq's current literacy level of 78.2%⁽¹⁴⁾. The lower educational level in this study sample could be none specific and can't be generalized to the population. This result is similar to that reported by Nicolussi and Sawada (2008) concerning the educational level were 59.1% had only concluded basic education, about 22.7% had finished high school, and 18.2% had graduated beyond high school education⁽¹⁵⁾.

The study indicates that four items of psychological domain of QOL were under cut-off point 2, regarding to positive feelings item, refers that patients have problems with (feeling that life still beautiful, Negative feelings item (I feel tense and worry), Self-Esteem item (I feel that I still capable and competent for all works), Thinking item (I thinks a lot about what happed to me) (Table 2).

These findings are in agree with study done by Ramsey et al. (2002) that found long term of colorectal cancer survivors reported higher overall QOL, but had higher rates of depression⁽¹⁶⁾. Zabora et al. (2001) reported that between 35 percent and 45 percent of all cancer patients experience significant emotional distress (including depression)⁽¹⁷⁾.

Logistic regression were tested the eight socio-demographic variables (gender, age, marital state, education level, occupation, occupation after disease, region, monthly income) evaluated the presence of statistically significant determinants and psychological QOL domain. Table 3 shows that only region (urban versus rural), was a statistically significant determinants psychological problems. Suggesting that patients living in rural areas were 75 times less likely to have low psychological QOL [OR = 0.25 (95% CI: 0.06, 1.03)].

That result is similar to study done by Momeni and Ghanbari (2011) they found that mean scores for specific quality of life were higher in urban patients than those who resided in rural areas ($p < 0.05$)⁽¹⁸⁾.

In this study the age was not statistically significant while in other study by Arndt et al. (2004) found that younger patients with colorectal cancer expressed psychosocial deficits. It has been hypothesized that younger cancer patients are a vulnerable group in terms of lower survival and more severe psychosocial effects⁽⁶⁾.

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 psychosocial life for their patients. Also farther study is necessary in order to demonstrated more clearly the differences of QOL for patient with colorectal cancer who had psychosocial problems.

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