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ANALYSIS OF SOURCES OF DISTRESS AMONG PATIENTS UNDERGOING SURGERY FOR COLORECTAL CANCER IN PAKISTAN

Dr. Sana Abid[1], Dr. Sonya Bashir[1], Dr .Sidra Rehman[2]

[1]Yusra Medical and Dental College, Islamabad.

[2]WMO at DHQ Hospital, Lodhran.

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Abstract:

Introduction: *Colorectal cancer (CRC) is one of the most prevalent cancers and causes of cancer-related mortality in developed countries, with over 1.3 million new cancer cases and 694,000 deaths estimated to have occurred in 2012 worldwide in 2012.* ***Objectives of the study:*** *The main objective of the study is to find the sources of distress among patients undergoing surgery for colorectal cancer in Pakistan.* ***Material and Methods:*** *This study was conducted at hospitals of Islamabad and Lodhran during March 2018 to June 2018. This study was done with the permission of ethical committee of hospital and with the permission of patients. Total 50 patients of colorectal cancer were selected for this study. Patients were included for analysis if they had pathology-confirmed diagnosis of colorectal cancer and had recently undergone (postoperative) or were about to undergo (preoperative) curative resection for colorectal cancer.* ***Results:*** *All participants reported experiencing distress during treatment. Participants identified sources of distress preoperatively (negative emotional reaction to diagnosis, distress from preconception of cancer diagnosis, and distress interacting with healthcare system). Sources of distress during in-hospital recovery included negative emotional reaction to having a surgery and negative emotions experienced in the hospital.* ***Conclusion:*** *It is concluded that psychological distress is a common factor among cancer patients. Our results highlight a potential role for a comprehensive screening program to identify which patients require assistance with addressing sources of distress during the surgical experience.*

Corresponding author:

Dr. Sana Abid,

Yusra Medical and Dental College,

Islamabad.

QR code

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INTRODUCTION:

Colorectal cancer (CRC) is one of the most prevalent cancers and causes of cancer-related mortality in developed countries, with over 1.3 million new cancer cases and 694,000 deaths estimated to have occurred in 2012 worldwide in 2012. The mean 5-year survival rate is currently 59% [1]. Approximately 40-50% of patients develop metastatic disease. Life expectancy of patients with metastatic disease is about 30 months [2].

In patients with cancer there is significant evidence of psychological distress. Psychological distress is defined as a multifactorial, unpleasant, emotional experience of a psychological (cognitive, behavioral, emotional), social and/or spiritual nature that may interfere with the ability to cope effectively with cancer, its physical symptoms, and its treatment. Distress extends along a continuum, ranging from common normal feelings of vulnerability, sadness, and fears, to problems that can become disabling, such as depression, anxiety, panic, social isolation, and existential and spiritual crisis [3]. Prior studies indicated that the majority of patients have the ability to cope with the psychological burden that can be caused by hearing the diagnosis, suffering from the disease or its treatment. However, although precise estimates vary with different types and sites of cancer, approximately 30-40% of patients receiving cancer care experience psychological symptoms of distress, such as depression and anxiety [4]. These findings also apply to patients with CRC: a large proportion of patients seem to suffer from psychological morbidity, the presence of metastases is associated with even more psychological symptoms.

An estimated one-third of patients with cancer will experience clinically significant distress, such as anxiety or depression that is associated with their diagnosis and treatment [5]. The presence of anxiety and depression has been shown to negatively impact health outcomes and quality of life in patients with cancer. Distress extends along a continuum from normal feelings of sadness and fear to disabling components of depression, anxiety, and existential crisis. Distress is known to be multifactorial and may interfere with a patient's ability to cope with treatment [5].

As a result, the National Comprehensive Cancer Network and the American College of Surgeons Commission on Cancer recommend screening all new cancer patients for distress. In addition, it is known that among all surgical patients, anxiety and depression are prevalent. In fact, in one study, over half the patients undergoing surgery screened positive for depression and one-third had anxiety. Colorectal surgery patients in particular are at a unique risk because of the emotional stress of the possibility of having an ostomy and the changes in which surgery affects gastrointestinal function [6].

Objectives of the study

The main objective of the study is to find the sources of distress among patients undergoing surgery for colorectal cancer in Pakistan.

MATERIAL AND METHODS:

This study was conducted at hospitals of Islamabad and Lodhran during March 2018 to June 2018. This study was done with the permission of ethical committee of hospital and with the permission of patients. Total 50 patients of colorectal cancer were selected for this study. Patients were included for analysis if they had pathology-confirmed diagnosis of colorectal cancer and had recently undergone (postoperative) or were about to undergo (preoperative) curative resection for colorectal cancer.

Data collection

Once patients were recruited and informed consent was obtained patients were given a series of validated patient-reported surveys to capture baseline levels of functional independence, symptoms of anxiety and depression, quality of life, and satisfaction with surgical care if they had undergone surgery. Additional information was collected from the medical record including the clinical or pathologic stage, treatment with chemotherapy or radiation, length of stay, complications, and readmissions. Semi structured, open-ended, one-on-one interviews were conducted between a researcher trained in qualitative interviewing and the patient.

Statistical analysis

The data of respiratory function were compared between the smoker and non-smoker groups using the independent t-test for normally distributed data or the Mann-Whitney U test for other distributions. Differences were considered statistically significant at $p<0.05$.

RESULTS:

Table 1 shows the socio-demographic and clinical data of the evaluable 50 patients. The median age of the patients was 56 years (range: 20–86), and 167/229 (73%) were male. Most patients were married (196/229 [85.6%]), and more than half of the participants were high school educated or higher (178/229 [77.8%]) and unemployed (121/229 [52.8%]).

Table 01: Baseline characteristics

	***N* = 50**	***%***
Age		
Median	56	
Range	20–86	
Smoking		
Smoker	46	20.1
Non-Smoker	183	79.9
Marital status		
Married	196	85.6
Single	17	7.4
Widowed	12	5.2
Divorced	4	1.7
Educational level		
Elementary school	24	10.5
Middle school	27	11.8
High school	86	37.6
Undergraduate	74	32.3
Graduate school	18	7.9
Employment status		
Full-time job	82	35.8
Part-time job	26	11.4
Unemployed	82	35.8
Histology		
Tubular adenocarcinoma	161	70.3
Signet ring cell carcinoma	58	25.3
Mucinous carcinoma	5	2.2
Others	5	2.2
Adjuvant chemotherapy		
Platinum-based doublet (SP or FP)	56/83	67.5
TS-1 monotherapy	22/83	26.5

The results of distress screening through the questionnaires are shown in Table 2 . Among the 50 patients, 10 (33.6%) were identified as patients with psychological distress. Using the MDT, 20 patients reported insomnia (21.8%), 69 anxiety (30.1%), or 20 depression (29.7%). The number of patients who scored above the cutoff value in HADS-A, HADS-D, and CES-D was 62 (27.1%), 92 (40.2%), and 76 (33.2%), respectively.

Table 02: Prevalence of psychological distress by disease stage

	All Patients		**Stage I-III**		**Stage IV**		
	***N* = 10**	***%***	***N* = 20**	***%***	***N* = 20**	***%***	***P-value***
MDT	93	40.6	46	34.8	47	48.5	0.038
Insomnia	50	21.8	28	21.2	22	22.7	0.79
Anxiety	69	30.1	30	22.7	39	40.2	0.004
Depression	68	29.7	31	23.5	37	38.1	0.016
HADS	106	46.3	52	39.4	54	55.7	0.015
HADS-A	62	27.1	29	22	33	34	0.043
HADS-D	92	40.2	45	34.1	47	48.5	0.028
CES-D	76	33.2	38	28.8	38	39.2	0.099
Psychological distress	77	33.6	35	26.5	42	43.3	0.008

MDT Modified Distress Thermometer, *HADS* Hospital Anxiety and Depression Scale, *CES-D* Center for Epidemiologic Studies-Depression Scale

DISCUSSION:

Psychological support is an important part of the multidisciplinary approach, but there is no study that specifically evaluated the psychological distress in gastric cancer, which is the most common cancer in Korea [7]. To our knowledge, this is the first study to explore the prevalence and prognostic impact of psychological distress among a large number of patients with gastric cancer. In our study cohort of gastric cancer patients, significant psychological distress was identified in 33.6% of patients. In addition, we found that psychological distress has a poor prognostic impact for gastric cancer patients [8].

The presence of psychological distress is a risk factor for treatment noncompliance. A meta-analysis showed that noncompliance was greater in patients with depression compared to non-depressed patients. Therefore, it is important to identify the patients who may be vulnerable to psychological distress to improve treatment adherence [9]. We found that the patients with advanced disease, low levels of education, and who were female were found to be significantly vulnerable to psychological distress. These findings are comparable to previous studies. Several studies reported a higher prevalence of psychological distress in patients with lower education. Lower coping skills seem to contribute to the higher rate of psychological distress in those with little education [10].

Concerning the sample's characterization, there was no predictive role between the studied categories (demographic data and characteristics of the disease) in the variable gender. This result, however, indicates that the differences found in terms of distress, the type and frequency of problems reported, are more related to gender than to the remaining socio-demographic characteristics (age, marital status, education) and to clinical aspects (type of cancer and staging) [11].

In general, there was a significant effect for the variable 'gender' in the three stages of assessment, with a significant decrease over time[12]. We suppose that such evidence indicates a gradual adaptation of patients to the cancer experience. As the quality of care provided in the studied facility may be a key factor for such developments, further studies with similar samples in different health services are needed for the purpose of comparison[13].

CONCLUSION:

It is concluded that psychological distress is a common factor among cancer patients. Our results highlight a potential role for a comprehensive screening program to identify which patients require assistance with addressing sources of distress during the surgical experience. Understanding how sources of distress may vary by time will help us tailor interventions at different time points of the surgical experience.

REFERENCES:

1. Stark D, Kiely M, Smith A, Velikova G, House A, Selby P. Anxiety disorders in cancer patients: their nature, associations, and relation to quality of life. J Clin Oncol. 2002;20:3137–3148
2. Gill D, Hatcher S. A systematic review of the treatment of depression with antidepressant drugs in patients who also have a physical illness. J Psychosom Res. 1999;47:131–143.
3. Baider, L., Perry, S., Sison, A., Holland, J., Uziely, B., & DeNour, A. K. (1997). The role of psychological variables in a group of melanoma patients. An Israeli sample. *Psychosomatics*,*38*(1), 45-53. doi:10.1016/S0033-3182(97)71503-2
4. Carlson, L. E., Waller, A., Groff, S. L., & Bultz, B. D. (2013). Screening for distress, the sixth vital sign, in lung cancer patients: effects on pain, fatigue, and common problems – secondary outcomes of a randomized controlled trial. *Psycho-Oncology, 22*(8), 1880-1888.
5. Goodwin PJ, Leszcz M, Ennis M, Koopmans J, Vincent L, Guther H, Drysdale E, Hundleby M, Chochinov HM, Navarro M, et al. The effect of group psychosocial support on survival in metastatic breast cancer. N Engl J Med. 2001;345(24):1719–1726.
6. Matsushita T, Matsushima E, Maruyama M. Anxiety and depression of patients with digestive cancer. Psychiatry Clin Neurosci. 2005;59(5):576–583.
7. Elliott J, Fallows A, Staetsky L, Smith PWF, Foster CL, Maher EJ, et al. The health and well-being of cancer survivors in the UK: findings from a population-based survey. Br J Cancer. 2011;105(S1):S11–20.
8. Medeiros M, Oshima CTF, Forones NM. Depression and anxiety in colorectal cancer patients. J Gastrointest Cancer. 2010;41(3):179–84.
9. Ohlsson-Nevo E, Karlsson J, Nilsson U. Effects of a psycho-educational programme on health-related quality of life in patients treated for colorectal and anal cancer: a feasibility trial. Eur J Oncol Nurs. 2016;21:181–8.
10. Mosher CE, Winger JG, Given BA, Shahda S, Helft PR. A systematic review of psychosocial interventions for colorectal cancer patients. Support Care Cancer. 2017;25(7):1–14.

11. Tourani S, Behzadifar M, Martini M, Aryankhesal A, Taheri Mirghaed M, Salemi M, et al. Health-related quality of life among healthy elderly Iranians: a systematic review and meta-analysis of the literature. Health Qual Life Outcomes. 2018;16:18.
12. Osborn RL, Demoncada AC, Feuerstein M. Psychosocial interventions for depression, anxiety, and quality of life in cancer survivors: meta-analyses. Int J Psychiatry Med. 2006;36(1):13–34.
13. Hedges LV. Distribution theory for Glass's estimator of effect size and related estimators. J Educ Behav Stat. 1981;6(2):107–28.