Psychosocial Correlates of Cancer and Its Impact on the Patients Quality of Life

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Cancer has its negative impact on the patients, not only through the physical harm, but also through influencing the psychological and social life of the patients. The quality of life of cancer patients and the different variables affecting it were studied.

30 patients previously diagnosed as cancer patients were classified into male and female groups. The female group was further classified according to whether the cancer affects the female reproductive organs or other body organ. For these patients, psychiatric assessment was done including mental state examination and using clinical scales e.g. the sickness impact profile (SIP) and the structured clinical interview of DSMIII-R (SCID) to assess the quality of life and the predominant personality traits respectively.

Depressive and anxiety symptoms were frequently reported by patients. Higher impairment in the quality of life was found more among patients who were male, suffering from additional psychosocial stresses, and with advanced stage of malignancy. On the other hand, no significant correlation was found between either the age of patients or the duration of the disease and the quality of life.

The psychological and social disturbances resulting in cancer patients from the disease and the impairment of the quality of life add to the sufferings of patients and put obstacles to the process of management. The significance of this finding is that these variables may be reversible which may give way to the possibility of manipulating them so as to improve the quality of the lives of these patients. (Egypt.J.Psychiat., 1998, 21 :211 -225).

INTRODUCTION

The last few decades in this century have shown major advances in medicine whether in the field of diagnosis or treatment including surgical or pharmaceutical procedures. Physicians concern was focused on the disease and how to combat it. Werkman (1985) noted that the emphasis on the understanding and cure of diseases had resulted -in many instances- in neglect of the subjective inner experiences of the patients.

More recently and after a considerable success in controlling many serious diseases, doctors have broadened their scope of interests to include the psychological background of the patients which might influence the course of the disease, prognosis and outcome in different ways. Blumenfield and Thompson (1985) proposed that the psychological responses exhibited by a patient - as a reaction to physical illness - depend on several factors; first, the nature and severity of the physical illness itself, sec-

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ond, the characteristic personality style and coping patterns of the patient. Finally, the doctor and nurses responses to the patient will help modifying his psychological reaction to illness and hospitalization.

As regards patients suffering from life-threatening disease. Dr. Elizabeth Kubler-Ross proposed that they would experience 5 stages when faced with their impending death; denial, anger, bargaining, depression and acceptance.

Cancer, being known as one of the most vigorous diseases that may attack the human body, has attained a special concern from both physicians and patients. People used to perceive the word cancer as synonymous to death or at least impending death. Even doctors used to deal with the victims of cancer as dying people, and their management was directed -for long time- to palliative measures to reduce suffering during the rest of their life. However, after the marked development of the methods of early detection and management of cancer, the survival rate of patients has increased. As a result, physicians started to redirect their energy towards improving the quality of life of cancer survivors (Ferrel et al, 1997). Consequently, QOL assessment has been considered as an important end-point in clinical trials (Hietanen, 1996).

Ferrans (1996) reported that the quality of life (QOL) depends on the unique experience of life for each person. Individuals are the only proper judges of their QOL because people differ in what they value.

Recently, quality of life of cancer patients has been the target of many studies, which concentrated on the impact of the disease and its management on it. This study tries to through light on the significance of the socio-cultural factors - besides the clinical considerations affecting the quality of life of cancer patients.

SUBJECTS AND METHODS

This study was done in Mansourah University Hospital, which receives patients coming from villages and small towns around Mansourah city.

Sample:

Thirty patients who have been suffering from malignancy and revising the radiotherapy department in Mansoura University hospital for follow-up and maintenance therapy were selected for this study.

Selection criteria:

1.Patients who finished their basic therapeutic interventions (surgical, chemotherapy or radiotherapy) and were on maintenance therapy. That was to avoid the side effects of these procedures, which could interfere with the validity of the results.

2.Patients whose general condition allowed considerable cooperation.

3.Patients whose stage of malignancy were I, II or III, while stage IV patients were excluded due to the expected deterioration of their general condition.

4.Patients whose ages ranged between 20-50 years.

Design:

A. The thirty patients were classified into three groups matched for age and duration of illness (Table 1 and 2):

1. Group Ia: 12 Female patients with malignancy of breast and/or reproductive system.

2. Group Ib: 8 Female patients with malignancy elsewhere.

3. Group 2: 10 Male patients with different types of malignancy.

The following procedures were done for each patient:

1. Psychiatric interview by one or two consultant psychiatrists to evaluate the patients mental status.

2. Personality assessment using the Structured Clinical Interview of DSMIII-R (SCID).

3. Assessment of the QOL using Sickness Impact Profile SIP (Bergner et al., 1981)

Sickness Impact Profile (Sip):

It was conceived as a measurement of perceived health status that would provide a descriptive profile at the changes in a persons behavior due to sickness (Bergner et.al, 1976). Its conceptual development originated from the observation that the ultimate aim of most health care is to reduce sickness or modify its effect on everyday activities (Gilson et. al, 1979).

It consists of 12 categories; three of them reflect the physical dimension (ambulation, mobility and body care & movement), while the psychosocial dimension includes four categories (social interaction, alertness behavior, emotional behavior and communication). The remaining five categories are independent variables (sleep and rest, eating, work, home management, recreation and pastimes). Each category was rated on 0-2 pointed scale with higher figures for higher impairment.

RESULTS

The main psychiatric symptoms reported by patients of the three groups were shown in fig. (1). It is clear that depressed mood followed by anxiety, insomnia, and somatization represented the most frequent symptoms, while fears, obsessive doubts and guilt feelings were less reported. Patients with depressed mood were more in group 1a, followed by group 2 and then group 1b (50 %, 40 %, 12.5 % respectively). Only three patients were in need of psychiatric treatment and were diagnosed as adjustment disorder (with anxiety and/or depressive symptoms).

As shown in fig. (2), obsessive traits were the most frequently encountered personality features according to the assessment by SCID.They were found in 41.7 % among patients in group 1a compared to 12.5 % in group 1b and 30 % in group 2. Paranoid traits were more frequent among the male group (group 2), as it was recorded in 30 % compared to 16.7 % and 12.5 % in group 1a and 1b respectively. It was noticed that the patients with obsessive personality traits were the more likely to have psychiatric symptoms.

Any coexisting psycho-social stressors - rather than the disease itself - was looked for. In figure (3), patients reporting additional problems were more in group 1a (50%), less in group 2 (40 %), and least in group 1b (25 %). Also, the nature of these stressors was not the same for all groups e.g. 40 % of male patients (group 2) reported financial problems which - mostly - emerged as an effect of the disease, while they were reported by only 16.7 % of female patients in groups 1a and 12.5 % in group 1b. Female patients had - in addition - marital problems (25 %, and 12.5 % in group 1a and group 1b respectively).

The impairment in the quality of life of patients secondary to cancer was assessed by SIP. The degree of impairment of quality of life was significantly higher in male than female patients both in the physical dimension score (61.7 % and 31.7 % respectively) and the total score (56.3 % and 35.6 % respectively). On the other hand, no significant differ-

Table 1
Comparing age of patients (in years) in Between Different Groups

	group la	group lb	group 2
No of patients	12	8	10
Mean	34.75	29	39.6
SD	11.07	34.3	5.91
f	0.28(insig)		

Group la: female patients with female cancer types
Group 1b: female patients with other types of cancer
Grup 2: male patients with different types of cancer

Table 2
Comparing Duration of Illness (in months) In Between the Groups

	group la	group lb	group 2
No of patients	12	8	10
Mean	40.08	29	20.4
SD	44.03	34.3	42.8
f	0.28(insig)		

Group la: female patients with female cancer types
Group 1b: female patients with other types of cancer
Grup 2: male patients with different types of cancer

Table 3
Degree of Impairment of Quality of Life in Different Grups

SIP Dimensions	Physical Dimension Score (Impairment %)	Z	Psycho-social Dimension Score (Impairment %)	Z	Total Score (Impairment %)	Z
Females	31.7	4.24	31.9	1.02	35.6	2.9
Males	61.7	(Sig)	38.8	(Insig)	56.3	Sig)
Total	41.7		34		44.2	

Table 4
Comparison between the SIP Scores in the Two Female Groups

Group	Physical Dimension Score			Physical Dimension Score			Total Score		
	Mean	+/- SD	t	Mean	+/- SD	t	Mean	+/- SD	t
Group la	1.92	+/-1	0.07	3.13	+/-1.36	1.43	9.63	+/-4	1.66
groups 1b	1.88	+/1.64	(insig)	2.17	+/1.53	(insig)	7.83	+/3.49	(insig)

Table 5
Total SIP Scores in Relation to Stress

	No of patients	Patients with stress	Patients with stress
	No of patients	12	18
	Mean	12.08	8.33
	SD	3.4	3.69
	f	2.81 (sig.)	

Table 6
Correlation of SIP Total Score with Both Abe and Duration of Illness

No of patients		Age		SIP		Duration	
MEAN	+/-SD	39.13	+/-9	9.87	+/-4.6	33.2	+/-40.2
Correlation	Co (r)	0.204 (insig.)		0.474 (insig.)			

Table 7
Total Scores of SIP In Relation To Different Stages of Malignancy

	Stage I	Stage II	Stage III
Mean	5.5	10.94	11.83
+/-SD	2.81	3.7	4.26
f	5.88 (sig.)		

Fig. 1: Predominant Psychiatric Symptoms in the Different Groups

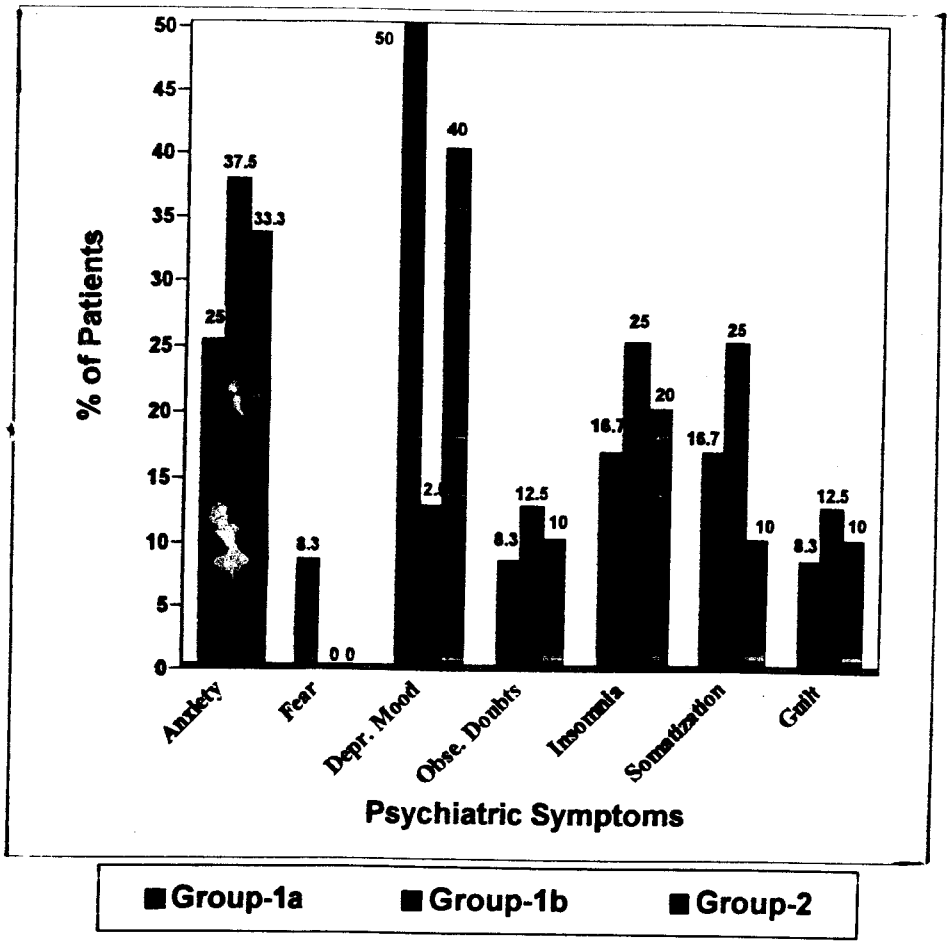


Fig. 2: Personality Traits in the Different Groups

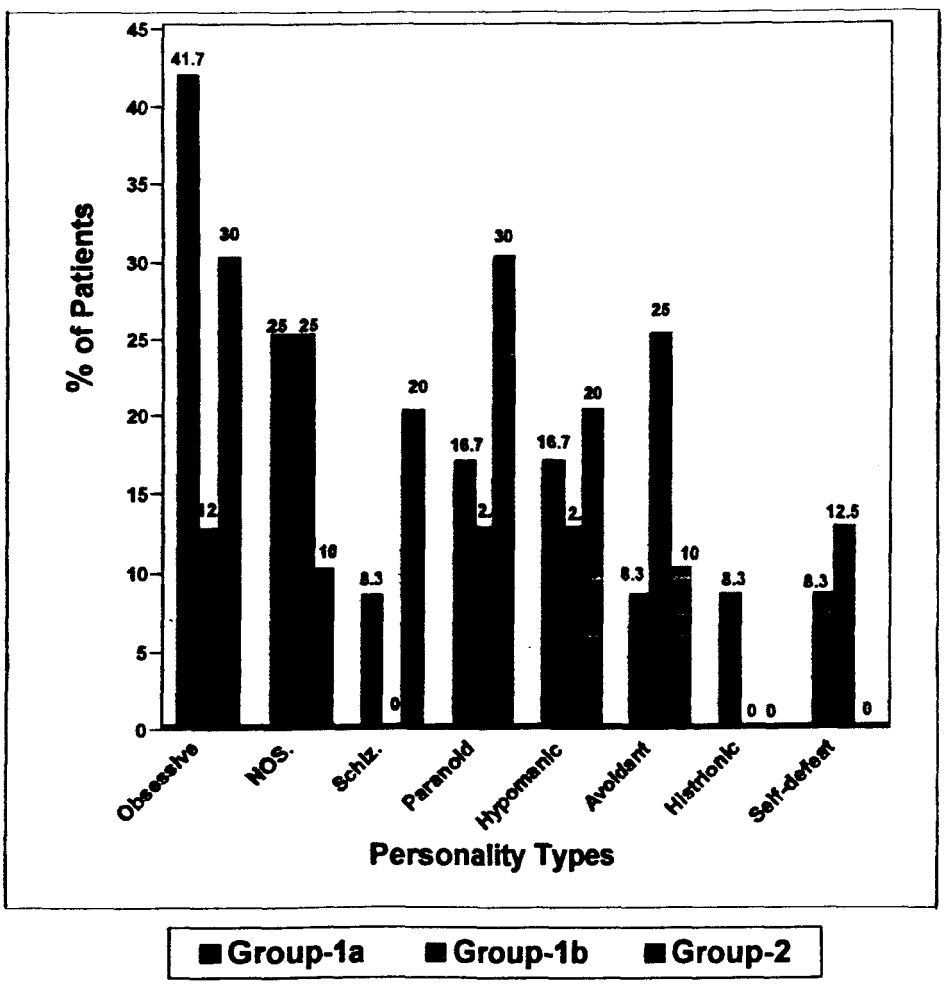
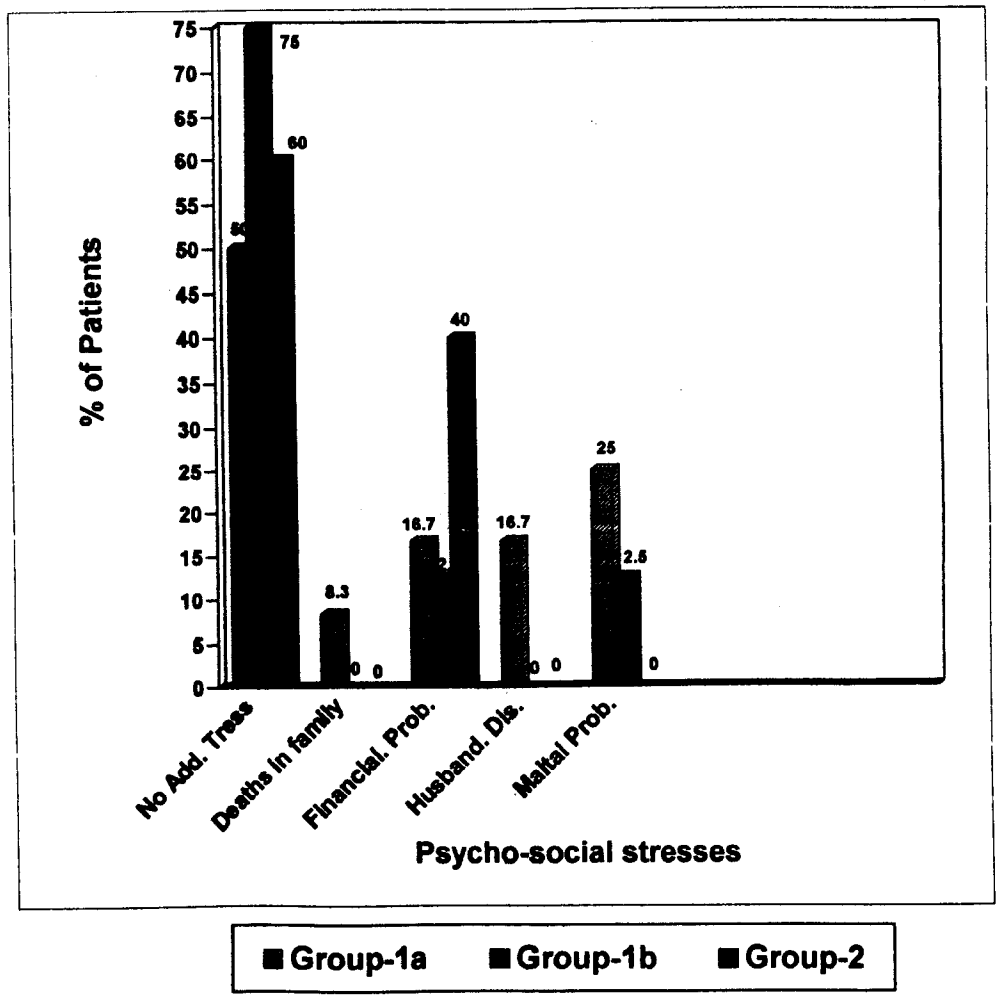


Fig. 3: Additional Psycho-social Stresses In The Different Groups



ence was found in between male and female patients on the psycho-social dimension (table 3).

In between the two female groups, no significant differences were found on all the SIP dimensions (table 4).

In table 5, patients with additional psycho-social stressors showed significantly higher impairment in their quality of life (12.08 +/- 3.4) than other patients (8.33 +/- 3.69).

No correlation was found between the total SIP score with both the age of patients and duration of illness (table 6). On the other hand, it increased significantly with the advance in the stage of the disease (table 7).

DISCUSSION

This study has been done through the cooperation of both the psychiatric and radiotherapy departments of Mansourah University Hospital. The aim was to define cancer patients who had marked psychological distresses superimposed on their physical disabilities and threats. This psychological impact - if present - may lead to over-perception of the physical and psycho-social sequalae of the disease, which might affect the patients life in many aspects.

The most prevalent psychiatric symptom, among the patients in this study, was depressed mood. The same has been reported by Marchioro et al., 1996; Bertolini et al., 1995; Grassi et al., 1996. Other symptoms e.g. anxiety, fears, somatization and sleep disturbances were also reported - to less extent - in our study as well as other studies (Dow et al., 1996 and Ferrell et al., 1996).

Blumenfield and Thampson (1985) explained that depression, which is a common reaction to serious illnesses, is the result of the loss or threatening loss of a body part, bodily function or body integrity which this disease may lead to. In case of a life-threatening disease such as cancer, the patient may experience - also- the loss of his intimate friends and relatives, the loss of his life and his wishes, which he would not verify.

Anxiety and fears reported by patients might result from perceiving their disease as a vague danger threatening their lives, and they may reflect deeper feelings such as fear of separation, fear of the unknown and fear of the strangers e.g. hospital staff (Blumenfield and Thampson, 1985).

Somatic complaints were - sometimes - difficult to be differentiated from the physical symptoms of the disease itself. Somatization was found in about 17 % of the whole sample in this study, while lower figures were reported by other studies in western societies. Probably cultural factors could explain this difference as - in our Arabic societies - social stigma about mental illness prohibit patients from directly expressing their depressive feelings, which would be manifested through somatization (Okasha, 1988).

Guilt feelings were encountered in 3 out of our 30 patients (10%). This figure - although low - needs to be explained being unusual in such cases. One explanation is based on the breakdown of the patients social role and exaggerated sense of responsibilities towards their families. The other explanation relates these feelings to the perception of the disease as some sort of punishment (Steinberg and Simons, 1985): In traditional and cultural beliefs dating back in history, disease was perceived as punishment from God or imposed on by evil forces of Devil.

Personality assessment by SCID revealed that obsessive traits were the

most frequent among patients. It is questionable if these were original personality traits or emerging manifestations of the disease. It must be noted that the patients with obsessive traits were the more likely to have psychiatric symptoms in our study. Steinberg and Simons (1985) considered these traits as defensive reactions against fears of loss of control.

Financial stressors were frequently reported by both male and female patients. These resulted from both the costs of treatment and the loss of physical activities (Mumford, 1985). Among females, marital problems were also encountered due to their inability to perform their role in the family as they used to and - also - due to pressure from the husbands relatives. Within the female group, those with female type of cancer (group 1a) had added marital problems due to the disturbance of their private inter-marital relations traced to possible disfigurement and altered feminine appearance.

It is worth to mention that quality of life scales reflect the individuals perception of their lives based on their judgment, which is a unique experience different from one person to another. This study showed that the degree of impairment in quality of life for the whole sample was 44.16 % which is considered low compared to what was previously reported (Ferrel et al., 1995). This relatively low degree of impairment was attributed to the rural nature of the culture to which most of the patients of this study belong. In such societies, there are multiple factors, which might help the patients to cope with, and accept such serious disease with its sequalae, and thus, improving their quality of life. First, the religious belief implicates the tendency to perceive and accept any stressful situations as a test of faith in and submission to God. On the other hand, facing such situations with feelings of anger and non-acceptance is sinful. Also, spiritual well-being gives the patient more support and courage when facing stresses and difficulties (Ferrel et al., 1997).

Second, the social support derived from the adherent social network in which these patients live have been frequently found to have positive effect on cancer patients (Razavi and Delvaux, 1995). Third, financial needs were pushing forces for some patients to tolerate their troubles and keep working as much as they could. Lastly, denial - a known defensive mechanism in face of dangerous situations like serious diseases - influences the quality of life of cancer patients by improving their sense of well-being, and even improve survival (Brock et al. 1992 and Greer,1992). Russel (1993) has explained that denial is a form of self-deception that protects the individual from threats to the self and involves exaggerated perceptions of control and self efficacy. In our study, denial was not - objectively - assessed, but its existence could be concluded from quality of life score analysis and from clinical impression during the psychiatric interview. Denial seems to protect integrity of the self-concept by distorting reality in a self-enhancing way, promoting a sense of mastery and control (Russel, 1993). However, confronting patients with the nature of their illness has been a controversial issue whether ethically wise or treatment wise. Fricchione et al. (1991) reported that the use of denial was associated with a higher degree of impaired global function. On the other hand, Connor (1992) attributed the decision of confronting the patient to the extent of available alternatives.

SIP assessing the quality of life - in this study- contains two sub-dimensions;

physical and social, which were scored independently besides the total score. There were no statistically significant differences in these different variables among the different groups. However, unexpectedly, males showed a higher degree of impairment on the physical dimension and the total SIP score than females; a finding which deserves to be explained. Probably, any threat to physical health and power - which is basically essential to the existence of manually working people like our patients - means to stop working with loss of the sources of earning. That could result in marked lowering of self-esteem with its negative impact on the quality of life. Mumford (1985) reported that men used to be identified by their occupation, which when lost, may lead to break-down of the self-identity.

Correlation between quality of life and duration of illness is - still - controversial. In this study, no significant correlation was found which was consistent with the findings of Giovagnoli et al. (1996) and Schumacher et al. (1996). The later authors have found that quality of life of patients with acute myeloid leukaemia was not going worse with duration, but rather it improved in some conditions. This improvement could be explained by the increased acceptance and adaptability of the patients to the disease, which may progress with time. Contradicting results were shown by other studies (Anderson, 1994 and Ganz et al., al., 1996). However, the patients of these studies had cancer of rapidly progressive nature.

The advanced staging of malignancy has been found to be associated with lower quality of life in our study as - well - as in those of Weitzner et al. (1997) and Bertolini et al. (1995). This was explained by the deterioration in physical health with subsequent loss of hope in cure and increased feeling of impending death.

Conclusion

Cancer patients are frequently suffering from psychological disturbances secondary to their physical illness, and its life threatening nature. These disturbances are usually in the form of depressive and anxiety symptoms, as well as augmentation of the obsessive or paranoid personality traits, which possibly acted as a defense against the threat of the disease.

2. Cancer leads in many patients - to the development of social troubles, which add to their sufferings. These troubles were usually financial secondary to both the resultant disabling and the cost of the treatment. Marital problems were also found especially among female patients.

3. Quality of life of cancer patients has been found to be affected by the physical condition of the patient as well as their psychosocial status. The following parameters were associated with high impairment in the quality of life:

a. Male sex especially on the physical dimension.

b. Additional psychosocial stresses.

c. Advanced stage of malignancy.

4. The classification of female patients according to the type of cancer; female-specific and nonspecific cancer did not yield significant correlation with the impairment in quality of life.

Limitations of the study and future recommendations:

This study has been done on a heterogeneous group of patients as regards the type and stage of malignancy, as well as their social background. This created some difficulty in the statistical analysis of the results. However, the clinical impressions gave rise to many

questions, which stimulate further studies in this field.

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المصاحبات النفسية والإجتماعية للسرطان وأثرها على "نوعية حياة" المرضى به

إن الأثر السلبى للسرطان على المرضى تعدى الضرر الجسدى إلى التأثير على الحياة النفسية والإجتماعية لهؤلاء المرضى وقد كان هدف هذا البحث هو دراسة "نوعية الحياة" الخاصة بهم وكذلك دراسة العوامل المختلفة التى قد توثر فيها.

اشتملت عينة البحث على ٣٠ مريضا سبق تشخيصهم بأنواع مختلفة من السرطان وقد تم تقسيمهم إلى مجموعة من الذكور ومجموعة من الإناث ثم تم تصنيف مجموعة الإناث إلى قسمين شمل القسم الأول حالات الإصابة بسرطان الأعضاء الأنثوية وشمل القسم الآخر حالات الاصابة بالأعضاء الأخرى وقد خضعت هذه المجموعات من المرضى للفحوص الطبنفسية التى تضمنت فحص الحالة العقلية بالإضافة إلى تطبيق قياسات "المقابلة الإكلينيكية المنظمة" المستخلصة من التصنيف الأمريكى (الإصدار الثالث المعدل) و "شكل التأثير المرضى" وذلك لتقويم "نوعية الحياة" وأهم سمات الشخصية البارزة عند هؤلاء المرضى.

وقد أشارت نتائج البحث إلى أن أعراض الاكتئاب والقلق كانت شائعة بين المرضى وأن الأثر السلبى للسرطان على"نوعية الحياة" كان أشد فى المرضى الذكور، والذين يعانون من ضغوط نفسية وإجتماعية إضافية وكذلك المصابين بمراحل متأخرة من المرض. ومن ناحية أخرى لم يكن هناك ارتباط ذو دلالة بين كل من عمر المرضى أو فترة المرض و "نوعية الحياة".

وخلص البحث إلى أن عوامل الاضطرابات النفسية والاجتماعية الناشئة عن المرض تضيف إلى معاناة المرضى وتضع عقبات فى طريق العلاج. وأهمية ذلك أن هذه العوامل مؤقتة يمكن التعامل معها لتحسين "نوعية الحياة" لهؤلاء المرضى.