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Anxiety, depression, traumatic stress and quality of life in colorectal cancer after different treatments: A study with Portuguese patients and their partners

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A B S T R A C T

Purpose: This study examines the impact of different modes of treatment on depression, anxiety, traumatic stress and quality of life in colorectal cancer patients and their partners.
Methods: The sample was comprised of 114 oncology patients and 67 partners. All patients were diagnosed with colorectal cancer. Participants were recruited from an Oncology Hospital in the North of Portugal and had been submitted to three modes of treatment: surgery, surgery plus chemotherapy or surgery followed by radiotherapy.
Results: The results showed that patients who received only surgery, as treatment, had lower levels of depression, anxiety and traumatic stress symptoms when compared with patients who received surgery and chemotherapy or surgery plus radiotherapy. Partners of surgical patients presented lower levels of state anxiety and traumatic stress symptoms when compared with the other two groups. Patients with more depression had partners also more depressed. No relationship was found between anxiety and traumatic stress symptoms in patients and partners. Patients who received a diagnosis longer than 12 months had more traumatic stress, intrusion and hypervigilance. Patients with illness recurrence showed more traumatic symptoms. Anxiety and depression were the main predictors of patient's quality of life. Traumatic stress was a predictor of symptom distress - pain/bowel pattern.
Conclusion: This study highlights the importance of providing psychological interventions for cancer patients and their partners. Chemotherapy patients and those diagnosed over a year, as well as their partners, are more at risk.

Introduction

Colorectal cancer is the second leading cause of cancer mortality in Western countries. Both sexes are equally affected by this disease, however there is a higher incidence in people over fifty years. In Portugal, according to the National Oncology Register (Pontes, 2005), the incidence of colon and rectum cancer is 33,4% for females and 42,8% for males.

Many studies have linked colorectal cancer to economic conditions, geographical location and diet (Imbembo and Lefour, 1993; Belcher, 1996). Cancer often requires invasive treatments that may affect body image, sexuality, physical and psychological well-being (McCray, 2000; Wagner and Cella, 2004) and, consequently, quality of life. The treatment of choice for colon and rectum cancer is surgery (Ganzl, 1996; Santos, 1999; Murphy, 2000). Surgery, radiation therapy and chemotherapy are used to cure, prolong life and to palliate symptoms in cancer patients. The hematological malignancies and lympho-prolifaretive disorders are treated with chemotherapy while in solid tumors, chemotherapy is used either as adjuvant or neoadjuvant (Pandey et al., 2006). Chemotherapy and radiation treatments have an impact on patient's quality of life due to treatments' secondary effects (Couvreur, 2001; Hann et al., 1998; Smith and Tchekmedyian, 2002) that can cause short and long-term adverse effects resulting in health deterioration (Yost et al., 2008).

Chronic illness not only affects the patient but also the couple (Pereira and Lopes, 2002; Figueiredo et al., 2001; Santos, 1999). Weihs and Reiss (1996) reported that insecure couple relationships are more vulnerable to the effects of cancer when compared to safe relationships that serve as a shield from the destructive impact of cancer. Patient and partner go through a mourning process when faced with cancer (Maden, 2006; Lopes, 1997). Some studies document psychological morbidity and post-traumatic stress in both cancer patients and their partners. Depression in patients is

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14–24% higher than in the general population (Potash and Breibart, 2002). In fact, 29%–43% of cancer survivors with 14 different types of cancer diagnosis have subclinical or clinical depression (Zabora et al., 2001) and about 20%–25% experience major depressive disorder. Patients with depression associated to cancer are at risk for poorer health outcomes than those with cancer alone (Zabora et al., 2001).

Maguire (1994) believes that anxiety and depressive symptoms in partners are a result of the uncertainties related to cancer prognosis and the possibility of death. For Bishop (1994) and Weitzner et al. (1999), the impact of cancer in partners is associated to stress and depression, with a magnitude equal or greater than in patients. In fact, 25% of partners, often suffer the same or higher levels of emotional distress as cancer survivors (Badger et al., 2007). Blanchard et al. (1997) reported that the percentage of partners who present mood disturbances and psychological deterioration ranges from 20 to 30% compared to cancer patients.

Cancer has certain features that may contribute to the development of post-traumatic stress disorder (PTSD). In fact, the diagnosis, treatments with adverse side effects, follow-up exams and the possibility of relapse, require the patient and partner to be continually exposed to memories of the life threatening nature of the disease and its symptoms (Passik and Grummon, 1998; Potash and Breibart, 2002). Cancer is associated with a threat to physical integrity and its sudden, unpredictable, often irreversible features are associated to a loss of an healthy identity, significant factors that may contribute to post-traumatic stress disorder (Andrykowski and Cordova, 1998; Perez and Galdón, 2002). PTSD symptoms can arise at various stages of the disease including diagnosis (Roth and Breitbart, 2001).

Different types of treatment have a different impact on patients. Surgical treatments are often associated with mutilation, particularly if important organs are involved like the intestinal organ (Gaecia et al., 1996; Santos, 1999). The possible loss of autonomy, often associated with the feeling of burden, disrupts patient's quality of life (Santos, 1995; Demetri, 2001; Hurter and Bush, 2007). Several studies have assessed the impact of different treatments on patient's quality of life (Schmidt et al., 2005; Pollack et al., 2006). Patients going through radiotherapy reported having more pain than non-radiated patients. Those patients who received chemotherapy presented problems on cognitive function, pain and appetite loss that were associated to type of protocol received (Nicolussi and Sawada, 2009).

In light of the above considerations, this paper assesses the influence of treatment (i.e. surgery; surgery and chemotherapy; surgery and radiotherapy) in patients with colorectal cancer and their partners, on quality of life, depression, anxiety and traumatic stress symptoms. The authors hypothesized that there would be differences among the three groups, in both patients and partners, expecting the group that received only surgery to have lower levels of psychological morbidity in all three measures when compared to other treatment modalities. The authors also predict a positive relationship between psychological morbidity (depression, anxiety and traumatic stress symptoms) in patients and partners regardless of patients' treatment. Finally, the authors were interested in finding out the best predictors of self reported quality of life in patients.

Methodology

Sample

141 patients (62% males and 38% females) and 67 partners (39% males and 61% females) participated in the study. All patients were diagnosed with colorectal cancer. Participants were recruited from a central Oncology Hospital in the North of Portugal. Patients were divided in three groups: Group A included 35 patients who received only surgical treatment and 19 partners; group B consisted of 41 patients who received treatment of surgery followed by chemotherapy and 26 partners; group C included 38 patients who received surgery followed by radiotherapy and 22 partners.

42% of patients and 28% of partners had finished primary school, 22% of patients and 6% of partners had finished high school. Only 18% of patients and 22% of partners had more than 9 years of schooling. Only 9% of patients were active.

48% of patients had received a cancer diagnosis longer than a year and 29% received treatment for cancer recurrence.

Procedure

During the period of 12 months, after receiving the list of patients who underwent chemotherapy, radiotherapy or surgery, one of the authors invited patients and partners to participate in the study when they visited, during that year, the physician for their regular hospital follow-up appointments. Patients and partners, who agreed to participate, completed questionnaires in separate rooms after filling the informed consent. Due to the fact that some patients had no partners, there was a significant difference in the number of partners and patients in the study. In addition, partners with cancer were excluded from the study.

Instruments

Patients

Anxiety and depression were assessed by the Hospital Anxiety and Depression Scale (HADS), (Zigmond & Snaith, 1983). The scale has 14 items. Reliability for the adapted version (Pereira and Figueiredo, 2008) is 0.94. The anxiety subscale has an alpha of .91 and the depression subscale an alpha of 0.88. Cut off scores for clinical depression in cancer patients has been set at 5, clinical anxiety at 7 and psychological morbidity (total scale) at 13 (Singer et al., 2009). Higher scores indicate higher morbidity.

Quality of life was assessed with the Quality of Life Scale- Cancer (QOL-CA2), (Padilla et al., 1983). QOL-CA has 30 items and five subscales: Existential Well-Being, Physical Functional Well-Being, Symptoms Distress-Nutrition, Attitude of Worry and Symptom Distress-Pain/Bowel Pattern. Reliability for the Portuguese version (Pereira and Figueiredo, 2005) was 0.94 for the total scale and the alpha ranged from 0.80 to 0.90 for subscales except for the subscale "attitude of worry" that had an alpha of 0.66 but due to the fact that has only three items, it is considered acceptable (Nunnally, 1978). High scores indicate less quality of life.

Partners

Due to the fact that HADS was not adapted in non-clinical Portuguese samples, depression was assessed with the Beck Depression Inventory (BDI), (Beck et al., 1961). The scale includes 20 items. Reliability for the Portuguese adapted version (McIntyre and McIntyre, 1995a) is 0.89. In the Portuguese version, cut off scores have been set by Gouveia (1990) at: 0 to 9 (absence of depression), 10 to 30 (moderately depressed) and above 30 (severely depressed). Higher scores indicate more depression.

Anxiety was evaluated with the State Trait Anxiety Inventory (STAI), (Spielberger et al., 1983). The scale has 40 items, 20 for state anxiety and 20 for trait anxiety. The Portuguese Version (McIntyre and McIntyre, 1995b) showed an alpha of 0.79 for Trait Anxiety and 0.94 for State Anxiety. A mean score above 35.2, for active adults, is