Psychological distress among male patients and male spouses: what do oncologists need to know?

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Background: The aim of the current study was to strengthen the knowledge of oncologists concerning psychological distress and social support among married and unmarried male cancer patients and healthy male spouses of female cancer patients.

Patients and methods: Three groups of men were recruited from three major cancer centers in Israel: 185 married colon and rectal cancer patients, 54 single (unmarried) colon and rectal cancer patients, and 153 male spouses of female cancer patients. Participants were evaluated on four standardized instruments measuring psychological distress, coping, and social support.

Results: About 42.6% of the participants reported on a clinical level of psychological distress, with the highest rates (61.1%) among the single (unmarried) patients. Distress was negatively correlated to Karnofsky score and coping variables among all study groups. Distress was significantly and negatively correlated to social support variables among the spouses and married patients but not among the single patient groups.

Conclusions: Social support received by male cancer patients from friends and family may be mediated by spouse support. As a result, single male patients are at higher risk for psychological distress. Male spouses were also found to have high rates of distress. These two groups need special attention by oncologists.

Key words: colon cancer, men, psychological distress, social support

introduction

Only 11 articles were found in a search addressing the subjects of “men,” “adjustment,” and “cancer” (http://www.ncbi.nlm.nih.gov/pubmed/). In contrast, there were 186 articles related to “women,” “adjustment,” and “cancer.” When substituting “psychological adjustment” for “male distress,” only one article was found. Most of these articles deal with the special case of men with prostate cancer and the physiological outcomes of treatment [1, 2].

The paucity of references on the subject of men’s psychological adjustment to cancer may be a result of the apparently lower rates of depression and distress among men in the general population and specifically among male cancer patients and caregivers. Rates of depression are known to be significantly higher among women than among men. According to the Diagnostic and Statistical Manual of Mental Disorders (DSM-IV-TR), the lifetime risk for major depressive disorders in adults in community samples has varied from 5% to 9% for women and from 2% to 3% for men [3]. Various explanations for this phenomenon have been suggested from biological, psychological, and sociological perspectives, such as the tendency of men not to report distress symptoms or to show distress in their external behavior. No single variable has yet been found to explain these differences [4, 5].

Cancer diagnosis is highly associated with depression and psychological distress. Mitchell [6] reported on a prevalence of up to 39% of distress among these patients. Sydney et al. [7] reported that prevalence of major depressive disorder ranges between 10% and 25% among patients with cancer and from 6% to 32% in patients after receiving palliative care. Rabkin et al. [8] described that a significant minority of terminally ill cancer patients met the criteria for major depression. Depression was also found to be associated with survival among cancer patients [9]. Moreover, Dalton et al. [5] confirmed an increased risk for depression in cancer patients after diagnosis. Lower rates of depression and distress were found among male cancer patients in comparison with female patients. Hagedoorn et al.’s [10] recent meta-analysis reported higher distress among women (both patients and caregivers) coping with cancer than among men. In a study of prevalence of depression among cancer patients in Jordan, Mhaidat et al. [11] found depression rates of 19.7% among male cancer patients and 32.2 among...
female cancer patients. In one of the few studies that intended, a priori, to compare distress among female and male cancer patients, men reported lower distress [12].

Social support is another important factor influencing both patients and caregivers in their adjustment to cancer [6, 13, 14]. The role it plays appears to be consistent during different stages of the illness [15, 16].

The literature on support proposes that there are gender differences in relation to the ability of men and women to give and accept social support [12]. Men generally describe giving less emotional support but also suffering less distress whether in the role of patient or spouse. The literature indicates differences in the ability of men and women in Western cultures to confront the chronicity of illness with the help of social support [17]. In the patient role, many men value the affection and compassionate support from their partners as intimate caregivers. Nevertheless, the need to preserve their sense of autonomy leads men from Western cultures to avoid or refuse offers of emotional support since this might imply subjective constraints on their own manliness [18, 19].

In light of the paucity of knowledge relating to men’s psychological adjustment to cancer survival, the current evidence-based study appraised the psychological reaction of men (both as patients and spouses) to cancer to understand the implications for physicians in the field. The study focused on psychological distress, coping, and social support among men diagnosed with colon and rectal cancer and male spouses of female cancer patients.

Colon and rectal cancer are two of the most common cancers in the Western world. They account for 13% of newly diagnosed patients (second in women and third in men) in Europe, and it is estimated to account for 11.9% of cancer deaths (second to lung cancer in men and second to breast cancer in women) [20]. Freedman et al. [21] presented a comprehensive survey of colorectal cancer in four Middle Eastern countries. In Israel, colorectal cancer is the second most common cancer, affecting both men and women equally. Each year, there are 3200 new cases and 800 incidences of mortality, with the risk of dying from metastatic disease slightly higher in men (1:1.07) [22]. According to the 2008 survey of the Israeli National Cancer Registry [23], the colon age-standardized rates (ASR per 100,000) were 29.17 for men and 22.58 for women among the Israeli Jewish population, and 20.77 for men and 19.03 for women among the Israeli Arab population. The prevalence of rectal cancer among the Israeli Jewish population was 15.64 for men and 12.78 for women, and 5.09 for men and 5.28 for women among the Israeli Arab population [23, 24].

Interestingly, a lower prevalence of depression is reported in patients diagnosed with cancer such as colon (13%–25%) in contrast to other cancer types (for detailed data, see Massie [25]). The high prevalence of these types of cancer and the coinciding lower prevalence of depression among the patients begs the study concerning men’s psychological adjustment to cancer and to social support.

**patients and methods**

**patient selection**
The cross-sectional study was based on a sample of male colorectal cancer patients in remission (at least 24 months after treatment and without any disease activity) and male spouses of women diagnosed with colorectal cancer. Participants comprised 392 male cancer patients and male spouses of cancer patients and were divided into three groups: (i) 185 married male patients, (ii) 54 single male patients (all divorced or widowed for at least 5 years at time of study), and (iii) 153 male spouses of female cancer patients.

The cross-sectional sample was obtained from a larger ongoing longitudinal study [26] on the effects of gender, age, and marital status on psychological distress, coping, and social support in patients diagnosed with colorectal cancer and their partners 2–6 years following treatment. Patients and spouses were recruited during a routine medical evaluation from three major oncology centers in Israel. The study received approval from the medical ethical review committees of all three institutions.

**data collection**
From June 2006 until September 2007, the medical staff in charge of the colorectal clinics of the three oncology centers referred a total of 1244 patients for participation in the study. Of those referrals, only 27% of patients refused to participate, and a cohort of 392 (32%) participants satisfied the inclusion criteria: men diagnosed with colorectal cancer living with a spouse, unmarried male cancer patients who were living without a partner for at least 5 years, or male spouses of women with colorectal cancer. Those refusing were similar in sociodemographic and medical backgrounds to the experimental sample.

**inclusion criteria**
TNM (tumor–node–metastasis) stages I–III male colorectal cancer patients at least 24 months following treatment before the study were eligible to participate. The male spouses who were married to female cancer patients satisfied the same medical criteria as the male cancer patients. All participants had to be able to read and speak Hebrew and be able to cognitively understand and answer the questionnaires. Patients and spouses with any other chronic illness, metastatic cancer, familial adenomatous polyposis, or hereditary nonpolyposis colon cancer were ineligible. Patients had to be in remission and without active disease at the time of the study.

**measurements**
Patients were interviewed by psychologists using a structured interview schedule. Each participant was required to give a written informed consent before the study.

**sociodemographic and medical variables**
The sociodemographic interview gathered wide-ranging information on age, education, marital status, living arrangements, country of birth, religiosity, working now and before, financial status, hobbies, and volunteer work.

Medical information relating mainly to the colorectal cancer diagnosis by histology, type of surgical procedures, tumor size, lymph node involvement, staging, time since diagnosis, treatment, and Karnofsky index was obtained by reviewing each participant’s medical record with the treating physician. The data were also described by categorizing patients according to cancer stage and prognostic factors (primary tumor, nodal involvement, distant metastasis). Dukes’ classification was used to identify the four stages (stage I = superficial tumors without muscular involvement; stage II = invasion through the serosa; stage III = invasion and involvement of regional lymph nodes; stage IV = distant metastasis).

**standardized instruments**
The Brief Symptom Inventory [27] is a 53-item assessment tool used extensively to assess global psychological distress [determined by the individual’s score on a grand severity index (GSI)]. The Cronbach’s alpha in this study was 0.96 for patients and 0.97 for male spouses.
The Impact of Event Scale [28] is a 15-item self-report scale that assesses the two most common categories of responses to stressful events: intrusion and avoidance. The Cronbach’s alpha for intrusion was 0.93 for male patients and 0.96 for male spouses. The Cronbach’s alpha for avoidance was 0.89 for male patients and 0.96 for male spouses.

Mental Adjustment to Cancer (MAC) [29, 30], consisting of 40 items, assesses the ability to cope with cancer and provides information on four major coping styles. The internal reliability as measured by the Cronbach’s alpha was 0.84 for fighting spirit, 0.82 for hopelessness/helplessness, 0.54 for anxious preoccupation, and 0.65 for fatalistic acceptance.

Cancer Perceived Agents of Social Support (CPASS) [31] is a 12-item multiple-choice and 5-item open-question instrument assessing patient’s sources of support. The items relate to the patient’s perception of emotional, cognitive, and instrumental support by spouse, family, friends, and religious or spiritual beliefs. Cronbach’s alpha values for the current research were found to be satisfactory: spouse support, 0.86 for patients and 0.84 for male spouses; family support, 0.86 for patients and 0.85 for male spouses; friends, 0.85 for patients and 0.89 for male spouses; and beliefs, 0.96 for patients and 0.96 for male spouses. The CPASS is used extensively in Israel with oncology patients.

**statistical analysis**

Continuous background variables (medical and sociodemographic) were compared between the study groups by means of one-way analysis of variance (ANOVA), taking into account the unbalanced nature of the study groups. Categorical background variables were compared between the study groups by means of chi-square tests. Variables that were significantly different between the groups (confounding variables) were used as covariates in subsequent analyses.

Psychological distress, coping, and social support were compared among the groups by means of one-way ANOVAs. Before the univariate ANOVAs, an overall multivariate analysis of variance was carried out including all relevant variables.

In the last stage of the analysis, the Pearson correlations were computed between the background variables and social support variables, and levels of social distress and coping variables within each group separately.

**results**

**sample characteristics**

Table 1 presents the participants’ sociodemographic and medical data by marital status. The mean age for the total sample was 65.96 years [standard deviation (SD) = 10.27], with significant differences among the groups. Mean education for the men was 12.96 years (SD = 3.40). Approximately 30%–47% of the men were working (paid jobs) at the time of the study. There were no significant differences among the three groups in education and working status. Some of the medical data (Karnofsky score, stage, time from diagnosis) were not available for 10 patients from the married group. The mean Karnofsky score for the two patient groups was 94.72 (SD = 8.26), and the mean time from diagnosis was 5.89 years (SD = 2.63). Both time from diagnosis and the Karnofsky scores were significantly higher for the married participants in comparison with the single patients. Eighteen percent of the patients were at stages 0–I, 60% at stage II, 22% at stage III, and no patients at stage IV. Significantly more unmarried than married patients were at stages I and II, and significantly more married than unmarried patients were at stage III.

Based on the significant differences in background variables among the three study groups, age was entered as a covariate for subsequent analyses. Time from diagnosis and Karnofsky scores were entered as covariates in comparison between the two patient groups. Since both Karnofsky score and stage reflect the medical condition of the patient, and since there were no patients at stage IV, only the Karnofsky score was used in the analyses with the other covariates.

**distress and coping**

Table 2 presents the means and standard errors of the psychological distress and coping variables. A significant difference was found among the three groups for the distress variables (total distress, depression, anxiety, intrusion, and avoidance), with the highest scores for the single male group. Bonferroni pair-wise post hoc comparisons yielded a significant difference between the group of single men and the two other groups but not between the group of married patients and the male spouses. Another separate comparison between the two patient groups—using age, time from diagnosis, and Karnofsky score as covariates—yielded significant differences between the groups for all the distress variables (except anxiety), with higher scores for the single male patients. We also computed the percentage of men who reported levels of total psychological distress (GSI) higher than the cut-off point for psychopathology (GSI ≥ 63). This calculation yielded a total of

<table>
<thead>
<tr>
<th>Table 1. Sociodemographic background</th>
</tr>
</thead>
<tbody>
<tr>
<td>Married patients</td>
</tr>
<tr>
<td>Age, mean (SD)</td>
</tr>
<tr>
<td>Education, mean (SD)</td>
</tr>
<tr>
<td>Time from diagnosis, mean (SD)</td>
</tr>
<tr>
<td>Karnofsky*, mean (SD)</td>
</tr>
<tr>
<td>Stage*, frequency (%)</td>
</tr>
<tr>
<td>0–I</td>
</tr>
<tr>
<td>II</td>
</tr>
<tr>
<td>III</td>
</tr>
<tr>
<td>Working, frequency (%)</td>
</tr>
</tbody>
</table>

*Ten patients had no medical data.

SD, standard deviation.
Table 2. Means and standard errors (in parentheses) of distress and coping variables by group

<table>
<thead>
<tr>
<th></th>
<th>Married patients (group 1)</th>
<th>Single patients (group 2)</th>
<th>Spouses (group 3)</th>
<th>F(2,388)</th>
<th>P value</th>
<th>Post hoc groups</th>
<th>P value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Total distress (BSI)</td>
<td>58.59 (0.92)</td>
<td>67.20 (1.73)</td>
<td>61.16 (1.02)</td>
<td>9.85</td>
<td>&lt;0.0001</td>
<td>1 versus 2, P &lt;0.0001; 1 versus 3, n.s.; 3 versus 2, P &lt;0.0001</td>
<td></td>
</tr>
<tr>
<td>Depression (BSI)</td>
<td>55.14 (0.82)</td>
<td>66.01 (1.53)</td>
<td>58.17 (0.90)</td>
<td>19.82</td>
<td>&lt;0.0001</td>
<td>1 versus 2, P &lt;0.0001; 1 versus 3, P &lt;0.032; 3 versus 2, P &lt;0.0001</td>
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</tr>
<tr>
<td>Anxiety (BSI)</td>
<td>58.42 (0.92)</td>
<td>65.91 (1.73)</td>
<td>59.43 (1.02)</td>
<td>7.41</td>
<td>&lt;0.0007</td>
<td>1 versus 2, P &lt;0.0001; 1 versus 3, n.s.; 3 versus 2, P &lt;0.013</td>
<td></td>
</tr>
<tr>
<td>Intrusion (IES)</td>
<td>7.14 (0.75)</td>
<td>16.42 (1.40)</td>
<td>8.75 (0.83)</td>
<td>17.28</td>
<td>&lt;0.0001</td>
<td>1 versus 2, P &lt;0.0001; 1 versus 3, n.s.; 3 versus 2, P &lt;0.0001</td>
<td></td>
</tr>
<tr>
<td>Avoidance (IES)</td>
<td>10.68 (0.85)</td>
<td>20.10 (1.60)</td>
<td>9.59 (0.95)</td>
<td>16.69</td>
<td>&lt;0.0001</td>
<td>1 versus 2, P &lt;0.0001; 1 versus 3, n.s.; 3 versus 2, P &lt;0.0001</td>
<td></td>
</tr>
<tr>
<td>Fighting spirit (MAC)</td>
<td>45.77 (0.63)</td>
<td>40.34 (1.36)</td>
<td>11.80 (0.32)</td>
<td>14.28</td>
<td>&lt;0.0002</td>
<td>1 versus 2, P &lt;0.0001; 1 versus 3, n.s.; 3 versus 2, P &lt;0.0001</td>
<td></td>
</tr>
<tr>
<td>Helplessness (MAC)</td>
<td>10.19 (0.29)</td>
<td>12.95 (0.63)</td>
<td>14.28 (0.32)</td>
<td>0.91</td>
<td>&lt;0.3400</td>
<td>1 versus 2, P &lt;0.0001; 1 versus 3, n.s.; 3 versus 2, P &lt;0.0001</td>
<td></td>
</tr>
<tr>
<td>Anxious preoccupation (MAC)</td>
<td>20.03 (0.32)</td>
<td>20.80 (0.69)</td>
<td>0.36</td>
<td>&lt;0.5503</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Fatalism (MAC)</td>
<td>18.31 (0.35)</td>
<td>18.83 (0.75)</td>
<td>0.36</td>
<td>&lt;0.5503</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Degrees of freedom for the coping variables (MAC) was 1208. Means of distress variables (BSI, IES) were corrected for age; means of coping variables (MAC) were corrected for age, time from diagnosis, and Karnofsky score. Multivariate analysis of variance (MANOVA) over all distress variables: \( F(10, 770) = 7.58, P < 0.0001 \); MANOVA over all coping variables: \( F(4, 205) = 5.07, P < 0.001 \).

BSI, Brief Symptoms Inventory; IES, Impact of Events Scale; MAC, Mental Adjustment to Cancer; n.s., nonsignificant.

42.6% for the whole sample [95% confidence interval (CI) 38% to 48%], 34.1% (95% CI 27% to 41%) among the married patients, 61.1% (95% CI 48% to 75%) among the single patients, and 46.4% (95% CI 38% to 58%) among the spouses (see Figure 1). The difference among the three groups was significant \( \chi^2(2) = 13.99, P < 0.001 \). In a post hoc analysis, we found a significant difference between the single and married \( P < 0.0001 \) and single and spouse \( P < 0.025 \) but not between the spouse and married groups \( P < 0.05 \).

The coping variables (MAC) were compared only between the patient groups. Married men reported significantly higher fighting spirit and significantly lower levels of helplessness than single patients, with no significant differences in anxious preoccupation and fatalism.

**social support**

The male sample reported high levels of support around the absolute midpoint of the scale (Table 3). There was a tendency toward lower reports on support between the spouse groups, but the only significant difference between the groups was in the levels of friends’ support. The highest levels of friends’ support were reported by single men and the lowest by male spouses. Bonferroni pair-wise post hoc comparisons yielded a significant difference between each pair of two groups in this variable. A separate comparison between the two patient groups—with age, time from diagnosis, and Karnofsky score as covariates—yielded no significant difference between these groups in any of the support variables.

**correlations**

Table 4 presents the Pearson correlation between total level of distress (GSI), depression, and anxiety and the other study variables. Sociodemographic variables had almost no correlation to the distress variables. The Karnofsky score was found to have a significant negative correlation to the distress variable, and this effect was higher in the single men group \( r = -0.30 \) than in the married patient group \( r = -0.16 \). All the coping variables except one were significantly correlated to the levels of distress among each of the two patient groups (the only exception was a nonsignificant correlation between fatalism, anxiety, and depression in the married patient group). Levels of support had a significant high correlation to distress among the spouses and married patients but not among the single patient groups. The significant correlations in the single patient group were a negative correlation between friends’ support and anxiety and a positive correlation between spiritual/religious beliefs and depression.
**Discussion**

The aim of the current study was to broaden our understanding of psychological distress among male cancer patients and male spouses. The main finding revealed that men (both cancer patients and spouses) report significant distress (42.6% of the men reported on clinical levels of distress). This unexpected finding could be explained by several variables. We included specifically unmarried cancer patients as one of the study groups, accounting for high levels of distress (61.1%), and a group of male spouses (a group that is usually overlooked) that also measured a high prevalence of clinical distress (46.4%).

Considering only the group of married men, the lower limit for the CI with the prevalence of clinical distress being 27% is similar to that reported by Massie [25] on prevalence of depression (13%–25%) among colon cancer patients.

In examining the two patient groups (married and unmarried), we found that the level of psychological distress of the men is highly correlated with their ability to pragmatically carry out physical and instrumental tasks (Karnofsky score). Male identity may be reinforced through the ability to carry out activities expected by the social milieu. Therefore, the impairment in a male patient’s capacity to function as subjectively expected may result in significantly high levels of distress. This tendency may be more prevalent within the cultural environment of a Middle Eastern country such as Israel, where men try to live up to the social expectations of being a “stoic hero” and thus be more psychologically distressed when perceiving that their physical functions are more restricted [32].

Illness stage was found to be related to general distress only among unmarried patients. As indicated by Keller and Henrich [12], the married patients are provided with appropriate care by their spouses, and thus, their psychological state is less affected by the illness than that of the unmarried patients. In the current study, the unmarried patients reported not only more intense levels of psychological distress but also lower levels of fighting spirit and higher levels of helplessness than married patients. In contrast, the married patients and even the male spouses presented greater levels of support from their wives. This result is consistent with the outcome studies on marriage being a protective factor that promotes psychological well-being particularly in men [33].

While unmarried men in this group indicated social support from the family as much as married patients and even greater levels of support from friends, there was no positive correlation between the total psychological distress levels in this group and the levels of social support from friends and family. In contrast, a significant negative correlation between the total psychological distress and social support from various agents.

**Table 3.** Means and standard errors (in parentheses) of social support by group

<table>
<thead>
<tr>
<th></th>
<th>Married patients</th>
<th>Single patients</th>
<th>Spouses</th>
<th>F(2, 389)* (P) value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Spouse support♀</td>
<td>4.35 (0.06)</td>
<td>4.25 (0.07)</td>
<td>1.00</td>
<td>(&lt;0.0177)</td>
</tr>
<tr>
<td>Family support</td>
<td>3.98 (0.07)</td>
<td>3.94 (0.13)</td>
<td>0.38 (0.06)</td>
<td>0.62 (&lt;0.5358)</td>
</tr>
<tr>
<td>Friends’ support</td>
<td>3.19 (0.08)</td>
<td>3.39 (0.15)</td>
<td>2.81 (0.09)</td>
<td>7.55 (&lt;0.0006)</td>
</tr>
<tr>
<td>Belief</td>
<td>2.42 (0.11)</td>
<td>2.47 (0.21)</td>
<td>2.25 (0.12)</td>
<td>0.71 (&lt;0.4938)</td>
</tr>
</tbody>
</table>

Means were corrected for age; multivariate analysis of variance over all support variables except spouse support: \(F(6, 774) = 3.28, P < 0.003\). Post hoc analyses for friends support: married versus single, nonsignificant; married versus spouses, \(P < 0.008\); spouses versus singles, \(P < 0.09\).

*Degrees of freedom for spouse support 1335.

♀The support received by the healthy men spouse from the women patients.

**Table 4.** Pearson correlation between levels of psychological distress and other study variables (separately within each study group)

<table>
<thead>
<tr>
<th></th>
<th>Married patients</th>
<th>Single patients</th>
<th>Spouses</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Total distress</td>
<td>Anxiety</td>
<td>Depression</td>
<td>Total distress</td>
</tr>
<tr>
<td>Age</td>
<td>n.s.</td>
<td>n.s.</td>
<td>-0.16*</td>
<td>n.s.</td>
</tr>
<tr>
<td>Education</td>
<td>n.s.</td>
<td>n.s.</td>
<td>n.s.</td>
<td>n.s.</td>
</tr>
<tr>
<td>Working status</td>
<td>0.15*</td>
<td>n.s.</td>
<td>n.s.</td>
<td>n.s.</td>
</tr>
<tr>
<td>Time from diagnosis</td>
<td>n.s.</td>
<td>n.s.</td>
<td>n.s.</td>
<td>n.s.</td>
</tr>
<tr>
<td>Karnofsky</td>
<td>-0.20**</td>
<td>-0.20**</td>
<td>-0.16*</td>
<td>-0.43**</td>
</tr>
<tr>
<td>Stage</td>
<td>n.s.</td>
<td>n.s.</td>
<td>n.s.</td>
<td>n.s.</td>
</tr>
<tr>
<td>Intrusion (IES)</td>
<td>0.40**</td>
<td>0.36**</td>
<td>0.41*</td>
<td>0.68**</td>
</tr>
<tr>
<td>Avoidance (IES)</td>
<td>0.50**</td>
<td>0.30**</td>
<td>0.31**</td>
<td>0.67**</td>
</tr>
<tr>
<td>Fighting spirit (MAC)</td>
<td>-0.21**</td>
<td>-0.15*</td>
<td>-0.13</td>
<td>-0.59**</td>
</tr>
<tr>
<td>Helplessness (MAC)</td>
<td>0.32**</td>
<td>0.36**</td>
<td>0.26*</td>
<td>0.70**</td>
</tr>
<tr>
<td>Anxious preoccupation(MAC)</td>
<td>0.33**</td>
<td>0.30**</td>
<td>0.33**</td>
<td>0.46**</td>
</tr>
<tr>
<td>Fatalism (MAC)</td>
<td>0.17*</td>
<td>n.s.</td>
<td>n.s.</td>
<td>0.59**</td>
</tr>
<tr>
<td>Partner support (CAPSS)</td>
<td>-0.22**</td>
<td>-0.20**</td>
<td>-0.20**</td>
<td>-0.20**</td>
</tr>
<tr>
<td>Family support (CAPSS)</td>
<td>-0.31**</td>
<td>-0.31**</td>
<td>-0.26**</td>
<td>0.06</td>
</tr>
<tr>
<td>Friends’ support (CAPSS)</td>
<td>-0.29**</td>
<td>-0.28**</td>
<td>-0.22**</td>
<td>-0.24</td>
</tr>
<tr>
<td>Belief (CAPSS)</td>
<td>n.s.</td>
<td>n.s.</td>
<td>n.s.</td>
<td>n.s.</td>
</tr>
</tbody>
</table>

*\(P < 0.05\), **\(P < 0.01\).

IES, Impact of Events Scale; MAC, Mental Adjustment to Cancer; CAPSS, Cancer Perceived Agents of Social Support; n.s., nonsignificant.
was clearly described in the other two groups (male spouses and male patients).

The finding that family and friends’ support may be mediated by spousal support is particularly relevant in Israeli society, which is based on moral and religious familial norms of behavior and strong family traditions [34]. Although unmarried patients discern the existence of friends and family support, they may undermine or even reject this support out of a need to maintain their self-sufficiency and self-identity.

Spiritual-religious support is positively correlated to depression only in the group of unmarried patients. There is no clear explanation for these findings. It could be assumed that the belief in God as an external power may come at the expense of the belief in one’s ability to control his/her own life, leading to higher levels of psychological distress [35].

While male cancer patients are routinely seen by oncologists and much less frequently by psycho-oncologists, male spouses are often overlooked. Furthermore, the spouse group reported on psychological distress levels at least as high as (and even higher) levels of distress of the married cancer patients [13]. The men in this group measured the lowest levels of friends and family support (with a significant difference from the other groups on friends’ support). Family and friends apparently do not consider that male spouses need as much support as sick persons, which may sustain and even intensify their levels of psychological distress.

limitations
There are a number of limitations and caveats to be considered in interpreting the current study. The cross-sectional nature of the analysis does not allow for a resolution of the causal sequence of the factors of social support, coping, and psychological distress, nor for an examination of reciprocal causality. The study included a sample of only Israeli male colorectal cancer patients; and, thus, the impact of the single diagnosis and gender, and of the cultural specificity, does not allow for broad generalizations. This calls for a further pursuit of thought and evidence-based outcomes.

conclusions
The outcomes of this study are relevant for clinical understanding and psychological awareness among oncologists, notwithstanding some of the aforementioned limitations. There are several points to consider while treating male patients and male spouses. Oncologists should be aware that men do not easily discuss their emotional needs and anxieties. During the medical interview, physicians should not only attend to the physical-practical side but also be attentive to the emotional, affective, and psychological attributes of their male patients and caregiver spouses.

Oncologists need to be mindful that single men are at high psychological risk, although they tend to have friends’ support, and that the support they describe is not necessarily connected to the distress they subjectively experience. Furthermore, oncologists should consider the ability of patients to benefit from the support they receive—emotional, spiritual, and instrumental—and debate, in open and empathic dialogue, what support could be most appropriate for these single men [36]. In so doing, physicians will be able to broaden their understanding of the male patient condition and to assess, in an effective and compassionate way, his hidden emotional distress. The outcome of pursuing a better quality of life for male patients and spouses is vital and immeasurably noble.

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references


