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Individual Counseling is the Preferred Treatment for Depression in Breast Cancer Survivors

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Abstract

Objective—A substantial number of cancer patients experience depression. This study investigated treatment preferences for depression.

Methods—Breast cancer survivors (n=134) completed an anonymous survey asking preference and interest in three treatments for depression: individual counseling (IC), antidepressant medication (MED), or support groups (SG). Participants were recruited from a surgical oncology office and asked to complete the survey as they waited for their appointment. Preference was compared using Wilcoxon Signed Ranks tests.

Results—Over 50% ranked IC as first choice of treatment. Preference for IC was significantly higher than preference for MED and SG. Preference between MED and SG did not differ.

Conclusion—Survivors preferred counseling for treatment of depression. Cancer centers should be prepared to provide preferred treatment methods, particularly as screening, and therefore management, of psychosocial distress is to be required.

Keywords

depression; cancer; oncology; treatment preference; psychotherapy

Introduction

In cancer patients, 30–40% experience depressive symptoms, anxiety or significant distress (Zabora, BrintzenhofeSzoc, Curbow, Hooker, & Piantadosi, 2001) and 15% meet criteria for Major Depressive Disorder [MDD; (Mitchell et al., 2011)]. Depression is related to negative sequelae for cancer patients and most importantly, increased mortality (Pinquart & Duberstein, 2010). Depressive symptoms have also been associated with increased physical

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symptoms and decreased treatment adherence in breast cancer patients (Bower et al., 2000; Fann et al., 2008). Given these effects of depression for people with cancer as well as the high prevalence, treatment of depression should be a priority recommendation by health care providers.

Standard treatments for depression among psychiatric patients point to the efficacy of pharmacotherapy, cognitive behavior therapy or the combination (American Psychiatric Association, 2010; Imel, Malterer, McKay, & Wampold, 2008). While both medication or counseling have been shown to be effective in the short-term, and counseling is more effective in preventing relapse of depression (Dobson et al., 2008). Unlike in psychiatric samples, there have been relatively few clinical trials on the treatment of depressive symptoms or major depressive disorders in cancer patients. Reviews of the effects for pharmacotherapy support the use of a few medications (Ng, Boks, Zainal, & de Wit, 2011). In general, psychological interventions are efficacious in alleviating general distress in cancer patients, with the larger effect sizes found when patients have higher levels of distress or depressive symptoms (Brothers, Yang, Strunk, & Andersen, 2011; Schneider et al., 2010). Trials with patients with elevated symptoms (Hart et al., 2012) or major depressive disorder (Brothers et al., 2011) are emerging and show significant symptom improvement and high rates of depression remission. Thus, while effective treatments for depression in cancer patients are being developed, little is known about the treatment preferences of patients and few studies (described below) have examined preference in people with cancer.

Matching patient preference to actual treatment for depression can improve outcomes. In primary care patients, matching patient preferences for depression treatments has resulted in increased adherence and better depression outcomes than when preferences are not matched (Lin et al., 2005; van Schaik et al., 2004). Strength of preference may also moderate the relationship of treatment preference to outcomes (Raue, Schulberg, Heo, Klimstra, & Bruce, 2009). Only two studies have examined cancer patients' preferences for treatment of depression. One study in the United Kingdom (Hodges et al., 2009) of cancer patients with mood disorders found the majority (71%) of patients ranked counseling as preferred; interestingly, their doctors ranked a combination counseling and antidepressant medication treatment as preferred. The second study conducted in Japan (Okuyama et al., 2007) with lung cancer patients used vignettes of hypothetical patients to determine what patients would recommend for treatment. While counseling was more highly rated than antidepressants (51% rated counseling helpful vs. 33% for antidepressants), counseling followed higher ratings for physical activity (85%), "getting out more" (80%), and "reading about the problem" (64%).

In combination, neither study provides clarification regarding level of interest in various treatments and these studies only used dichotomous (yes/no) measures of treatment preference. To address this gap, we conducted a cross-sectional survey of breast cancer survivors to identify their preferences for depression treatments. Disease and demographic data were also collected to determine if these variables were related to treatment choice.

Methods

Participants and Procedures

The study was conducted following approval from the institutional review board. Women were eligible if they had been diagnosed with breast cancer at any point. Women arriving for a surgical follow-up, chemotherapy, or radiation therapy appointment at a breast oncology center of a Comprehensive Cancer Center were given a description of the research study and a copy of the survey. Individuals were instructed to complete the survey if interested while waiting for their appointment and return all materials to a drop box in the waiting area. As this survey was anonymous and identifying information was not obtained, women were provided with a description of the study and possible benefits and risks (similar to a consent form) but written informed consent was waived. The description of the study also provided women with contact information for the study office. Clinic records indicate that 200 to 300 women attend these clinics in a month and a total of 134 women completed the survey in July of 2011.

The average participant was middle age (mean age=57.3, SD=11.0), 5.0 years since diagnosis (SD=6.3), and had undergone surgery (87%), chemotherapy (52%), and/or radiotherapy (52%). The complete range of disease stage was sampled (Stage I=22%, Stage II=22%, Stage III=12%, Stage IV=19%, don't know=25%, and 25% also reported recurrence). Approximately half the participants were still in treatment (48%). When self rating their health, the mean score was 3.51 (SD=1.01, median=3.00) on a 1–5 scale (1=Poor to 5=Excellent).

Survey Measure

The survey instructed participants to consider the following scenario: “Imagine that you are feeling depressed, down or sad, and the feelings had lasted for at least one month and were getting in the way of the things you normally enjoyed doing. Regardless of how you feel now, imagine feeling depressed and rate how interested you would be in receiving the treatments or services listed below.”

Four options were listed: “Meeting with a counselor for individual counseling,” “Taking anti-depressant medication,” “Attending a breast cancer support group,” or “No treatment.” An “Other” option was also provided with a prompt to provide a description. Women rated each option on a 5 point scale, ranging from 0 = *No interest* to 4 = *Extremely interested*. For those options rated greater than 0, participants next ranked the treatments in order of preference.

Analytic Strategy

Analyses were conducted in two parts. The first summarized and compared interest in the treatment options. As the distributions of the treatment preference variables were found to be non-normal, nonparametric Wilcoxon Signed Ranks tests were used to compare interest in the treatment options. For the second set, demographic and disease variables relationship to treatment choice were studied. These variables were previous surgical, radiation or chemotherapy treatment, current adjuvant treatment, recurrence, and metastatic disease at

diagnosis and Mann-Whitney-U tests were used to compare level of interest. For age, time since diagnosis and self-rated health, Spearman's rho tested for covariation of interest in counseling, antidepressant medication and support groups. Also, Mann-Whitney-U tests and χ^2 were conducted to determine whether age and disease variables were associated with preference for no treatment to understand this choice.

Results

Regarding the primary question, among women who would prefer some treatment, individual counseling had the highest mean (mean=2.49, between "Some Interest" and "Very Interested," SD=1.20) and median (3.00) interest level. Of women who preferred some form of treatment, 51.4% were very or extremely interested in individual counseling. Support groups had the second highest interest level (mean=2.04, "Some Interest"; SD=1.35), a 1 point lower median (2.00) and 38.1% very or extremely interested in a support group. Antidepressant medication was rated the lowest (mean=1.68, between "Little Interest" and "Some Interest"; SD=1.43) with the median being equivalent to that for support groups (2.00) and 25.7% very or extremely interested. See Figure 1 for mean interest in each treatment option. Considering these data, interest in individual counseling was significantly higher than either support groups ($p=.001$) or antidepressant medication ($p<.001$), while support groups and antidepressant medication did not differ ($p=.08$). When asked to specify which treatment would be the first choice, individual counseling was the first choice for 52.4% of participants interested in treatment, with antidepressant medication ranked as the first choice by 20%, and support groups ranked first by 19.0%. When comparing interest in counseling to interest in antidepressant medication, 45.2% reported higher levels of interest in counseling than antidepressant medication and 41.8% reported equal interest in counseling and antidepressant medication.

Interest for each of the treatments were not related to demographic or disease factors with one exception. Interest in individual counseling was positively related to self-rated health (Spearman's $\rho=.28$, $p<.01$; all other Spearman ρ and Mann-Whitney-U test $ps>.08$). Women with higher self-rated health reported more interest in counseling than women with lower self-rated health. A subset (22%) of the sample reported they would not be interested in treatment. The χ^2 and Mann-Whitney-U tests comparing women preferring no treatment to those who preferred some treatment did not reveal any demographic or disease variable to be related to this choice (all $ps>.44$).

Discussion

When responding to a possible scenario of having current depressive symptoms and given a choice of pharmacotherapy or psychosocial treatments, women with breast cancer reported higher levels of interest in individual counseling than antidepressants or support groups. Also, for more than half (53%), individual counseling was the first choice treatment. Ratings for other treatments were significantly lower. Women with higher self-rated health reported higher interest in individual therapy, but in all other cases, treatment choices or a preference for no treatment did not covary with demographic or disease or treatment variables. This seems to suggest that interest in treatments cannot be inferred from disease severity.

A sizeable minority preferred no treatment for depressive symptoms, interestingly. The 22% found here is lower than reported in a previous cancer sample (56% would want to cope with depression alone) but comparable to healthy controls (22%) (Okuyama et al., 2007). Cooper-Patrick and colleagues (Cooper-Patrick et al., 1997) sought to understand patients' negative attitudes towards depression treatments. There, concerns unique to counseling were the frequency of appointments, the negative impact of discussing painful experiences, and discomfort in talking about personal problems. Cooper-Patrick (1997) reported that concerns unique to pharmacotherapy were those about side effects, addiction potential, and dependency on medication to function. Lastly, concerns common to both treatments were questions of effectiveness, and length of time needed to complete treatment. If oncologists were aware of such concerns, it might facilitate tailoring of their treatment recommendations to patients and addressing concerns from the beginning (Giese-Davis et al., 2011).

These data are consistent with data from the UK in which cancer patients reported depression should be treated with "talk therapy" (Hodges et al., 2009). However, the UK study showed, while counseling was preferred by patients, doctors recommended a combination of pharmacotherapy and counseling (Hodges et al., 2009). Comparison with the data from Japan, showing counseling and activities recommended in counseling (e.g. exercise, psychoeducation) as highly rated, more so than medication, further support preference for behavioral treatments for depression in cancer patients (Okuyama et al., 2007). When viewed together, counseling appears highly preferred in cancer patients despite the differences in culture and health care systems in these countries.

The data are relevant to the larger context of cancer care for patients with co-morbid psychopathology. Three issues are salient: 1) screening and identification; 2) availability of any comprehensive care for patients with psychopathology; and, 3) the availability of patient preferred treatment options. Several guidelines on the clinical care of cancer patients with co-morbid distress have highlighted the importance of screening and identification. The Commission on Cancer (CoC) of the American College of Surgeons (Commission on Cancer, 2012) released new accreditation standards for hospital cancer programs and in it screening of all cancer patients for psychosocial distress was mandated by 2015. The American Society of Clinical Oncology (ASCO) has also released guidelines for screening for depression and anxiety to occur at periodic times across the cancer care trajectory (Andersen et al., 2014). In addition to screening, the ASCO guidelines recommend that health care facilities need appropriate resources or networks of referral sources in place to adequately address the patients' report of distress on screening measures. Salene, follow the treatment pathways of the ASCO paper which details levels of treatment. The availability of screening or treatment is dependent, of course, on the fiscal resources of the institutions for such efforts, though with the CoC mandate, institutions having/needing accreditation will be obligated to conduct at least screening. Treatment resources might include information provision by a nurse or navigator, support or educational groups and counselors, preferably stationed in the cancer center, with experience working with those with cancer. The use of empirically supported psychological interventions is also recommended by the ASCO guidelines. Multiple reviews have attested that screening and feedback of results alone do not improve depression or health outcomes (Gilbody, House, & Sheldon, 2005; Meijer et al., 2011; O'Connor, Whitlock, Beil, & Gaynes, 2009; Pignone et al., 2002). The greatest barrier

to relief of patients' depression is treatment being unavailable or treatment received which is insufficient, rather than inadequate identification of patients' depressive symptoms (O'Connor et al., 2009). There is strong 'Level I' evidence (i.e., evidence from systematic reviews of all relevant randomized trials) for the efficacy of psychological interventions or pharmacotherapy for the management of depression (National Institute for Health Care Excellence, 2009). However, a point of departure from research on treatment preferences in cancer patients is the description of "optimal management" of clinical depression being "combined pharmacological and non-pharmacological interventions rather than one or the other on their own (pg. 7)" (Howell et al., 2010) found in several guidelines (National Breast Cancer Center and National Cancer Control Initiative, 2003; National Comprehensive Cancer Network, 2013).

Should a facility have services that include more than a single choice, patient preference, the third issue outlined above, is an important variable for consideration. Some treatment guidelines from the beginning discuss the importance of patient choice (e.g., "Treatment and care should take into account patients' needs and preferences. People with depression should have the opportunity to make informed decisions about their care and treatment, in partnership with their practitioners (pg. 7)" (National Institute for Health Care Excellence, 2009). The American Psychiatric Association (APA) guidelines highlight the importance of considering preference, frequently citing preference as a primary or secondary factor in determining treatment (2010). The current study further highlights the need to consider patient preference in the treatment of co-morbid depression in women with cancer.

These results should be considered within the limitations of the study. First, only women with breast cancer were surveyed. Male cancer patients may have different preferences for treatment of depression as men tend to have different preferences than women in primary care samples (Dwight-Johnson, Sherbourne, Liao, & Wells, 2000). Second, the sample was not specifically screened for depression and differences between women who were currently depressed could not be compared to women who were not currently depressed. Lastly, we did not offer a combination treatment option ('counseling and medication'), although women were able to indicate interest in multiple treatments. We would predict that preferences for this would be lower than those for either treatment, but these data do not reveal the preference for this currently recommended possibility. These characteristics limit the generalizability of the findings.

The results suggest future research directions. Research on the effects of matching treatment preference on depressive symptoms in cancer patients is needed. Preferences for treatment of depression should also be examined in different cancer populations. Clinically, referrals for individual counseling should be available for women with breast cancer who are experiencing depression.

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References

- Andersen BL, DeRubeis RJ, Berman BS, Gruman J, Champion VL, Massie MJ, Rowland JH. Screening, assessment, and care of anxiety and depressive symptoms in adults with cancer: an american society of clinical oncology guideline adaptation. *Journal of Clinical Oncology*. 2014; 32(15):1605–1619.10.1200/JCO.2013.52.4611 [PubMed: 24733793]
- American Psychiatric Association. *Treatment of Patients With Major Depressive Disorder: Practice Guidelines*. Arlington, VA: American Psychiatric Association; 2010.
- Bower JE, Ganz PA, Desmond KA, Rowland JH, Meyerowitz BE, Belin TR. Fatigue in breast cancer survivors: Occurrence, correlates, and impact on quality of life. *Journal of Clinical Oncology*. 2000; 18(4):743–753. [PubMed: 10673515]
- Brothers BM, Yang HC, Strunk DR, Andersen BL. Cancer patients with major depressive disorder: testing a biobehavioral/cognitive behavior intervention. *Journal of Consulting and Clinical Psychology*. 2011; 79(2):253–260.10.1037/a0022566 [PubMed: 21341891]
- Commission on Cancer. A. C. o. Surgeons. *Cancer Program Standards 2012: Ensuring Patient-Centered Care*. 2012.
- Cooper-Patrick L, Powe N, Jenckes M, Gonzales J, Levine D, Ford D. Identification of patient attitudes and preferences regarding treatment of depression. *Journal of General Internal Medicine*. 1997; 12:431–438. [PubMed: 9229282]
- Dobson KS, Hollon SD, Dimidjian S, Schmalting KB, Kohlenberg RJ, Gallop RJ, Jacobson NS. Randomized trial of behavioral activation, cognitive therapy, and antidepressant medication in the prevention of relapse and recurrence in major depression. *Journal of Consulting and Clinical Psychology*. 2008; 76(3):468–477.10.1037/0022-006X.76.3.468 [PubMed: 18540740]
- Dwight-Johnson M, Sherbourne CD, Liao D, Wells KB. Treatment preferences among depressed primary care patients. *Journal of General Internal Medicine*. 2000; 15(8):527–534. [PubMed: 10940143]
- National Institute for Health Care Excellence. *Depression in adults: The treatment and management of depression in adults*. Manchester, UK: National Institute for Health and Care Excellence; 2009.
- Fann JR, Thomas-Rich AM, Katon WJ, Cowley D, Pepping M, McGregor BA, Gralow J. Major depression after breast cancer: a review of epidemiology and treatment. *General Hospital Psychiatry*. 2008; 30(2):112–126. S0163-8343(07)00220-4 [pii]. 10.1016/j.genhosppsych.2007.10.008 [PubMed: 18291293]
- Giese-Davis J, Collie K, Rancourt KM, Neri E, Kraemer HC, Spiegel D. Decrease in depression symptoms is associated with longer survival in patients with metastatic breast cancer: a secondary analysis. *Journal of Clinical Oncology*. 2011; 29(4):413–420.10.1200/JCO.2010.28.4455 [PubMed: 21149651]
- Gilbody S, House AO, Sheldon TA. Screening and case finding instruments for depression. *Cochrane Database Systematic Reviews*. 2005; (4):CD002792.10.1002/14651858.CD002792.pub2
- Hart SL, Hoyt MA, Diefenbach M, Anderson DR, Kilbourn KM, Craft LL, Stanton AL. Meta-analysis of efficacy of interventions for elevated depressive symptoms in adults diagnosed with cancer. *Journal of the National Cancer Institute*. 2012; 104(13):990–1004.10.1093/jnci/djs256 [PubMed: 22767203]
- Hodges L, Butcher I, Kleiboer A, McHugh G, Murray G, Walker J, Sharpe M. Patient and general practitioner preferences for the treatment of depression in patients with cancer: how, who, and where? *Journal of Psychosomatic Research*. 2009; 67(5):399–402. S0022-3999(09)00092-0 [pii]. 10.1016/j.jpsychores.2009.03.008 [PubMed: 19837202]
- Howell, D.; Keller-Olaman, S.; Oliver, T.; Hack, T.; Broadfield, L.; Biggs, K., et al. *A Pan-Canadian Practice Guideline: Screening, Assessment and Care of Psychosocial Distress (Depression, Anxiety) in Adults with Cancer*. Toronto: Canadian Partnership Against Cancer (Cancer Journey Action Group) and the Canadian Association of Psychosocial Oncology; 2010.
- Imel ZE, Malterer MB, McKay KM, Wampold BE. A meta-analysis of psychotherapy and medication in unipolar depression and dysthymia. *Journal of Affective Disorders*. 2008; 110(3):197–206.10.1016/j.jad.2008.03.018 [PubMed: 18456340]

- National Breast Cancer Center and National Cancer Control Initiative. Clinical practice guidelines for the psychosocial care of adults with cancer. Camperdown, Australia: Department of Health and Ageing; 2003.
- Lin P, Campbell DG, Chaney EF, Liu CF, Heagerty P, Felker BL, Hedrick SC. The influence of patient preference on depression treatment in primary care. *Annals of Behavioral Medicine*. 2005; 30(2):164–173.10.1207/s15324796abm3002_9 [PubMed: 16173913]
- Meijer A, Roseman M, Milette K, Coyne JC, Stefanek ME, Ziegelstein RC, Thombs BD. Depression screening and patient outcomes in cancer: a systematic review. *PLoS One*. 2011; 6(11):e27181.10.1371/journal.pone.0027181 [PubMed: 22110613]
- Mitchell AJ, Chan M, Bhatti H, Halton M, Grassi L, Johansen C, Meader N. Prevalence of depression, anxiety, and adjustment disorder in oncological, haematological, and palliative-care settings: a meta-analysis of 94 interview-based studies. *The Lancet Oncology*. 2011; 12(2):160–174. [PubMed: 21251875]
- National Comprehensive Cancer Network. NCCN Clinical Practice Guidelines in Oncology: Distress Management. National Comprehensive Cancer Network; 2013.
- Ng CG, Boks MP, Zainal NZ, de Wit NJ. The prevalence and pharmacotherapy of depression in cancer patients. *Journal of Affective Disorders*. 2011; 131(1–3):1–7.10.1016/j.jad.2010.07.034 [PubMed: 20732716]
- O'Connor EA, Whitlock EP, Beil TL, Gaynes BN. Screening for depression in adult patients in primary care settings: a systematic evidence review. *Annals of Internal Medicine*. 2009; 151(11): 793–803.10.1059/0003-4819-151-11-200912010-00007 [PubMed: 19949145]
- Okuyama T, Nakane Y, Endo C, Seto T, Kato M, Seki N, Hosaka T. Mental health literacy in Japanese cancer patients: ability to recognize depression and preferences of treatments-comparison with Japanese lay public. *Psychooncology*. 2007; 16(9):834–842.10.1002/pon.1119 [PubMed: 17120276]
- Pignone MP, Gaynes BN, Rushton JL, Burchell CM, Orleans CT, Mulrow CD, Lohr KN. Screening for depression in adults: a summary of the evidence for the U.S. Preventive Services Task Force. *Annals of Internal Medicine*. 2002; 136(10):765–776. [PubMed: 12020146]
- Pinquart M, Duberstein PR. Depression and cancer mortality: a meta-analysis. *Psychological Medicine*. 2010;1–14.
- Raue PJ, Schulberg HC, Heo M, Klimstra S, Bruce ML. Patients' depression treatment preferences and initiation, adherence, and outcome: a randomized primary care study. *Psychiatric Services*. 2009; 60(3):337–343.10.1176/appi.ps.60.3.337 [PubMed: 19252046]
- Schneider S, Moyer A, Knapp-Oliver S, Sohl S, Cannella D, Targhetta V. Pre-intervention distress moderates the efficacy of psychosocial treatment for cancer patients: a meta-analysis. *Journal of Behavioral Medicine*. 2010; 33(1):1–14.10.1007/s10865-009-9227-2 [PubMed: 19784868]
- van Schaik DJ, Klijn AF, van Hout HP, van Marwijk HW, Beekman AT, de Haan M, van Dyck R. Patients' preferences in the treatment of depressive disorder in primary care. *General Hospital Psychiatry*. 2004; 26(3):184–189. S0163834303001518 [pii]. 10.1016/j.genhosppsych. 2003.12.001 [PubMed: 15121346]
- Zabora J, BrintzenhofeSzoc K, Curbow B, Hooker C, Piantadosi S. The prevalence of psychological distress by cancer site. *Psychooncology*. 2001; 10(1):19–28. [PubMed: 11180574]

Figure 1.
Mean level of interest by treatment type for participants who preferred any treatment.