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Spiritual Well-Being, Depression, and Quality of Life among Latina Breast Cancer Survivors

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Abstract

This study explores the relationship between spiritual well-being (SWB) (meaning/peace & faith), depression, and quality of life (QOL). Cancer survivors often use their spirituality as a way of coping. Among a sample of 97 Latina breast cancer survivors (LBCS) SWB was assessed with the Functional Assessment of Chronic Illness Therapy - Spiritual Well-being Scale (FACIT-Sp), QOL was measured using the Functional Assessment of Cancer Therapy: General (FACT-G), and depression was measured with the Patient Health Questionnaire (PHQ-9). Study findings revealed

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Olga Garduño-Ortega obtained a B.A. degree from Barnard College of Columbia University in Psychology and Art History. At Barnard College, Ms. Garduño-Ortega was involved in studies on social, cognitive, and personality psychology research. As a professional, Ms. Garduño-Ortega has been an accomplished researcher, with a strong background in psycho-oncology, public health and rehabilitation research. She has focused her efforts on identifying and addressing health disparities in community-based and clinical settings. Her research experience has been defined by the successful formulation and implementation of recruitment strategies, collaboration efforts, data collection, and partnership development. As a first-generation Latina immigrant and first-generation college student, Ms. Garduño-Ortega is passionate about reducing barriers to education and high-quality healthcare in underserved and immigrant communities.

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Conflict of Interest

The authors indicate no conflicts of interest. Olga Garduño-Ortega declares she has no conflicts of interest. Dr. Jennifer Morales-Cruz declares she has no conflicts of interest. Dr. Migda Hunter-Hernandez declares she has no conflicts of interest. Dr. Francesca Gany declares she has no conflicts of interest. Dr. Rosario Costas-Muñiz declares she has no conflicts of interest.

Ethical approval: All procedures performed in this study involving human participants were in accordance with the ethical standards of the institutional and/or national research committee and with the 1964 Helsinki declaration and its later amendments or comparable ethical standards.

Informed consent: All participants received a mailed study package with an informed consent cover letter and a survey. The letter stated that by completing and mailing back the survey, individuals were consenting to participate in the study. The institutional review board approved this process.

that SWB, specifically the meaning/peace factor, is the main predictor of an increase in QOL and a reduction in depression among LBCS.

Keywords

Latinas; spiritual well-being; depression; breast cancer survivors; quality of life

Background

Latino/as comprise 18.3% of the total U.S population making this population the most rapidly growing minority group in the U.S. (Bureau (2019). Breast cancer is the most common type of cancer among Latinas, with an estimated 24,000 cases diagnosed in 2018 (Society, 2018). The five-year breast cancer survivorship rate for Latinas is 83.3% (DeSantis, Siegel, Bandi, & Jemal, 2011), hence Latinas account for a large part of the growing breast cancer survivor population (Graves et al., 2012). Physical, social and psychological effects accompany survivorship, as well as cultural factors although limited research explores the effect of Latina culture on survivorship.

Differences in cancer patients' quality of life (QOL) and health related QOL outcomes have been associated with race and ethnicity (Graves et al., 2012; Janz et al., 2009; Miller, Ashing, Modeste, Herring, & Sealy, 2015; B. Yanez, Thompson, & Stanton, 2011). Breast cancer survivors report poor QOL and Latinas show the poorest QOL outcomes (K. T. Ashing-Giwa, Padilla, Bohorquez, Tejero, & Garcia, 2006; Harris et al., 2010). A systematic literature review compared the QOL of Latina breast cancer patients and survivors to that of other ethnic/racial groups. Latinas are at higher risk of poor mental, physical, and social QOL after a breast cancer diagnosis than non-Latinas Whites and Blacks (B. Yanez et al., 2011). Many factors are associated with the risk for poorer QOL in Latinas. These include, but are not limited to, lack of familiarity with the US medical system, high levels of depression and anxiety at presentation, being younger of age, low income and education, race-based discrimination, migration-associated adaptation processes, language barriers, and absence of social and family support (Alegría et al., 2002; Crane et al., 2019; Betina Yanez, McGinty, Buitrago, Ramirez, & Penedo, 2016).

The most significant difference in QOL of Latinas compared to Blacks and non-Latina Whites is in mental health (B. Yanez et al., 2011). Cancer survivors experience high levels of psychological distress and other symptoms, such as, fear, uncertainty, and depression. In breast cancer survivors, depression rates range from 35% to 45% (Dwight-Johnson, Ell, & Lee, 2005; Lyons, Jacobson, & Prescott, 2002). Depression is more prevalent in Latina breast cancer survivors (LBCS) than in the general Latino population (Alegría et al., 2002). LBCS reported poor physical and social well-being which contributed to more depressive symptoms (K. Ashing-Giwa, Tejero, Kim, Padilla, & Hellemann, 2007). Studies report that between 35% (K. Ashing-Giwa et al., 2007) and 45.6% of LBCS report depressive symptoms (Aguado Loi et al., 2013).

Numerous studies reveal that individuals tend to turn to spirituality to cope with cancer (K. T. Ashing-Giwa et al., 2006; Canada et al., 2012; B. Yanez et al., 2011). Spirituality and

religiosity have been linked to fewer depressive symptoms, leading to improved well-being during both cancer treatment and survivorship (Bredle, Salsman, Debb, Arnold, & Cella, 2011; Nelson, Rosenfeld, Breitbart, & Galietta, 2002; Visser, Garssen, & Vingerhoets, 2010). Studies suggest that faith and spirituality beliefs are frequently accessed during the recovery process, and help survivors adopt a positive outlook during rehabilitation and survivorship (K. T. Ashing-Giwa et al., 2006; Barden, Gutierrez, Gonzalez, & Ali, 2016; Coreil, Corvin, Nupp, Dyer, & Noble, 2012). A study examining the differences between non-Latina white and LBCS demonstrated that Latinas are more likely to receive spiritual counseling (R. Costas-Muñiz, Hunter-Hernández, Garduño-Ortega, Morales-Cruz, & Gany, 2017). Spiritual well-being (SWB) represents a crucial aspect of QOL maintenance and improvement in patients with chronic illnesses, such as cancer (K. T. Ashing-Giwa & Lim, 2010; Harris et al., 2010; Wyatt & Friedman, 1996). Previous research supports spirituality as a significant core and integral cultural value for the Latino population (K. T. Ashing-Giwa et al., 2006; Campesino & Schwartz, 2006; Hunter-Hernandez, Costas-Muñiz, & Gany, 2015). Improvement in spiritual well-being decreases symptoms of depression, particularly with the Latina population (Simonelli, Fowler, Maxwell, & Andersen, 2008; B. Yanez et al., 2011). For many Latinos/as, spirituality influences their adjustment to the cancer experience (Hunter-Hernandez et al., 2015). Spirituality and discerning its relationship to psychological outcomes provides a unique opportunity to understand the Latino cancer survivorship experience (Bredle et al., 2011; B. Yanez et al., 2011), specially for clinicians to discern how spirituality positively or negatively affects the adjustment to the survivorship experience of Latinas (Barden et al., 2016).

Spirituality is considered a construct with often complex notions and plural definitions. Various scales have been developed to measure spirituality; one of the most widely used scales to measure SWB is the Functional Assessment of Chronic Illness Therapy: Spiritual Well-being Scale (FACIT-Sp) (Bredle et al., 2011; Canada et al., 2012; Peterman, Fitchett, Brady, Hernandez, & Cella, 2002). The FACIT-Sp uses two factors to evaluate important aspects of spirituality: meaning/peace and faith. The meaning /peace factor assesses a sense of purpose and meaning, peace, and purpose in life, and the faith factor is comprised of items that measure the sense of strength and comfort and the role of faith (more closely related to religiosity) (Canada et al., 2012; Fitchett, Peterman, & Cella, 1996; Peterman et al., 2002). The literature has supported that overall spirituality was related to fewer depressive symptoms and better quality of life in individuals living with cancer or other illnesses, specifically the meaning/peace approach (Krupski et al., 2006; Nelson et al., 2002). In two longitudinal studies conducted with cancer patients and survivors, it was demonstrated that SWB is fluid and amenable to intervention (Betina Yanez et al., 2009). Results from both studies underscore the importance of achieving the meaning/peace approach for improved outcomes overtime.

For LBCS, religion and spirituality can be essential in their coping with the cancer experience (Visser et al., 2010). Also, spirituality plays a vital role during illness and survivorship in Latina women (Jurkowski, Kurlanska, & Ramos, 2010; Mickley & Soeken, 1993). Although a cancer diagnosis increased the feeling of vulnerability in LBCS it also reinforced their spirituality (K. T. Ashing-Giwa et al., 2006). Given the importance of the spirituality as a core value in the Latino population, it is crucial to understand the

impact of the different components of spirituality on the psychosocial adjustment of Latinas during survivorship. The purpose of this study is to explore the relationship between SWB (meaning/peace & faith), QOL, and depression in a sample of LBCS.

Methods

Procedures and Participants

Medical record review was conducted in an NCI-designated comprehensive cancer center that identified 409 eligible LBCS that received treatment between 2009–2014. A mailed questionnaire package was sent that contained an informed consent cover letter and a survey in both English and Spanish. The letter stated that by completing and mailing back the survey, individuals were consenting to participate in the study and instructed them to select their preferred language. No study compensation was provided. The institutional review board approved this process. Participants were adults LBCS (age 21 or older), in remission, with a breast cancer diagnosis (identified through their medical records), who had received cancer care in a comprehensive cancer center in New York City.

Measures

The questionnaire package included a demographic section, which had questions assessing age, education, religion, marital status, socioeconomic status, family composition, living situation, employment status, ethnicity, race, language preference, birthplace, and years living in the United States.

The questionnaire measured the SWB using the Functional Assessment of Cancer Therapy-Spiritual Well-Being Scale (FACIT-Sp). This self-reported scale is comprised of twelve items. The scale was designed to measure components of SWB (Brady, Peterman, Fitchett, Mo, & Cella, 1999; Peterman et al., 2002). The FACIT-Sp is comprised of two factors: 1) meaning/peace and 2) faith. The meaning/peace factor contains eight items and measures a sense of meaning and purpose in life. The faith factor includes four items and assesses the comfort and strength derived from faith related to spiritual beliefs (Brady et al., 1999; Peterman et al., 2002). The FACIT-Sp has strong internal reliability for the entire score (coefficient alpha = .87 for the total scale) and for each subscale (.81 for the meaning/peace factor and .88 for the faith factor). Numerous studies have confirmed the FACIT-Sp's external validity with Spanish-speaking cancer patients (Canada et al., 2012; Murphy et al., 2010).

The Functional Assessment of Cancer Therapy-General (FACT-G) was used to measure QOL. This frequently used scale is comprised of twenty-seven questions divided into four primary QOL domains: emotional, social, physical, and components of well-being. A total QOL score can be ascertained by adding the unique domains. The total score and the subscale scores have shown good internal consistency (Cronbach's alpha from 0.72 to 0.85). This instrument's translation has been validated in various languages, including Spanish, and is suitable for use with cancer patients (Cella et al., 1993; Webster, Cella, & Yost, 2003).

Depression severity symptoms were assessed using the Patient Health Questionnaire (PHQ-9). This measure is a clinical and a self-administered screening tool comprised of

nine items (Kroenke, Spitzer, & Williams, 2001). The PHQ-9 scores range from 0 to 27, with each item is scored from 0 (not at all) to 3 (nearly every day). A PHQ-9 score of 10 or greater suggests a major depressive disorder (MDD). The reliability coefficient was acceptable with .81 for the total scale (.68 for the somatic symptoms, and .67 for non-somatic symptoms). The Spanish translation of this measure has been validated and is widely used with Spanish-speaking Latinos (Wulsin, Somoza, & Heck, 2002), including in breast cancer patients and low income Latinas (Kroenke et al., 2001; Lowe, Kroenke, Herzoga, & Grafe, 2004).

Analysis

Statistical analyses were completed using the SPSS19 software package. Descriptive statistics were utilized for sample characterization. T-test, chi-squares and Pearson r correlations were used to evaluate associations between the demographic characteristics, spiritual well-being factors, quality of life and depression outcomes. Multivariate regression models were evaluated to examine the association between SWB, meaning/peace and faith with QOL and depression. Models were adjusted for demographic (age, education, marital status) covariates. A two-sided p value of less than .05 was considered statistically significant.

Results

The package was mailed to 409 LBCS, 97 completed and mailed the package back, for a response rate of 23%. Table 1 shows the means and standard deviations of the demographics of the participants (N=97). The mean age of the patients was 60. Most women (57%) were married or partnered, and a third had a high school degree (30%). One third of LBCS reported Spanish as their preferred language for the receipt of medical care (32%). The most common regions of birth were the US (30%), Puerto Rico (22%) and South America (Argentina, Colombia, Ecuador, Peru, Uruguay, 22%). Seventy-eight percent of the survivors had been diagnosed with cancer at least three years prior (Mean=50.5 months, SD=19.9).

Medical factors and sociodemographic associated with total depression levels were being non-married: single, separated or divorced ($t=2.04$, $p=.04$) and having lower spiritual well-being ($r=-.56$, $p<.001$), faith ($r=-.29$, $p=.004$), meaning/peace ($r=-.63$, $p<.001$), and quality of life ($r=-.60$, $p<.001$). Overall, higher quality of life was associated with being married or partnered ($t=-4.27$, $p<.001$) and having higher spiritual well-being ($r=.59$, $p<.001$), faith ($r=.30$, $p=.004$), and meaning/peace ($r=.67$, $p<.001$).

In multivariate regression models (see Table 2) controlling for age, education, marital status, and time since diagnosis spiritual well-being significantly predicted higher QOL ($\beta=.77$, $p<.001$) and lower depression level scores ($\beta=-.26$, $p<.001$). Further, in models including the meaning/peace and faith sub-scales (see Table 3), the meaning/peace factor showed a stronger relationship with QOL ($\beta = 1.43$, $p<.001$) and depression level scores ($\beta = -.56$, $p<.001$). Faith had no relationship with QOL and a moderate relationship with depression level ($\beta = .20$, $p=.04$), when it was controlled by meaning/peace factor.

Conclusions

This study evaluated the relationship between adjustment and spiritual well-being of LBCS during the survivorship phase. Survivors often experience symptoms of depression and poor quality of life and this is particularly salient in Latino populations (Jurkowski et al., 2010; Mickley & Soeken, 1993). Spirituality is a helpful coping resource for many Latinos/as during the treatment and long-term survivorship phases (Jurkowski et al., 2010; Mickley & Soeken, 1993). In our study, spiritual well-being was measured with two factors: meaning/peace and faith related to spiritual beliefs, and our analyses suggest that SWB is related to QOL and depression in LBCS. In addition, only meaning/peace significantly showed better improvement of QOL and reduction of depression symptoms when controlling for the faith factor. Moreover, the multivariate analysis reveals that the faith factor has no relationship with QOL and a moderate relationship with depression, as meaning/peace was the main predictive factor. Previous literature has shown the importance of faith and religiosity in the Latino community, but these findings reveal that meaning/peace is a key and more critical component of QOL in LBCS. Our findings are congruent with previous literature conducted on patients with cancer and other illnesses that found the meaning/peace approach was more predictive of psychological adjustment than faith (Krupski et al., 2006; Nelson et al., 2002). Although religiosity is seen as major component in the Latino population, faith would have been expected as a more salient component for the adjustment of Latinas, our findings are consistent with the literature.

Spirituality has varied definitions and different studies imply that spirituality and religion are either the same, entirely separate or are overlapping concepts. Spirituality is often expressed in religious and non-religious terms; however, people who consider themselves as spiritual are not necessarily part of any specific religion (Nelson et al., 2002; Schreiber & Brockopp, 2012). Considering that spirituality is a core cultural value for a large part of the Latino/a population (Janz et al., 2009) and our findings, it is imperative to address and strongly encourage finding and maintaining meaning and peace (sense of meaning and purpose in life, and peace) during survivorship in the Latino population. The role of meaning and the search for meaning has been extensively explored with non-Hispanic populations. One study revealed that meaning in one's life (fulfillment, satisfaction, sense of peace or harmony with life or offering a spiritual presence) is potentially beneficial in decreasing depressive symptoms among cancer survivors (Simonelli et al., 2008). Furthermore, patients who report spiritual-well being (hope and meaning in life) are better equipped to cope with the process of terminal cancer and discover meaning in the experience (Lin & Bauer-Wu, 2003).

The study results indicate the importance of implementing a meaning/peace approach (sense of purpose and meaning in life, and peace) during Latinas' survivorship phase. Nelson and colleagues (Nelson et al., 2002) reported similar findings, although they examined the impact of spirituality and religiosity on depressive symptoms in predominantly non-Latino white patients with terminal cancer and AIDS. They found that meaning/peace was a crucial factor, more critical than faith. Using the FACIT-Sp scale, our findings suggest a strong negative relationship between the meaning/peace factor and depression symptoms and a non-significant association with the faith factor. Similar findings resulted in two longitudinal studies conducted by Yanez and colleagues (Betina Yanez et al., 2009) spiritual well-being

changes were documented over the course of 6 months, and increases in the meaning/peace approach demonstrated better psychological adjustment.

This study suggests that implementing a meaning/peace approach may positively impact the QOL and depression outcomes among LBCS. One of the main limitations to determine the impact of meaning/peace on psychological adjustment is inherent to the heterogeneity of the Latino population in terms of education, access to insurance, income, English proficiency, and acculturation. In particular, we got a low response rate with only 97 completed assessments from the questionnaire package of 409 we mailed to eligible LBCS (23%). Our sample might not be representative of the Latino population at large as patients with low literacy levels were excluded due to the chosen recruitment methodology. Given that this was an anonymous survey, in the study screening phase the study team ensured that patients had no evidence of disease. In order to maintain patient responses anonymous linking the response to the medical record was not possible. LBCS were not asked to self-report stage at diagnosis because previous research demonstrates that Latinos cancer patient self-report is not always accurate and many Latino patients are unaware of their accurate diagnosis (Costas-Muniz et al., 2013). Our patients received care at a large comprehensive cancer center in New York City, where patients have high levels of insurance coverage and education. In this patient sample, a high percentage were born in the U.S. and chose English as their preferred language for health care. Further research is necessary to determine the impact of the meaning/peace approach at different stages of the survivorship process, including samples with varying levels of acculturation and receiving treatment at community clinics. The inclusion of survivors of different types of cancer and stages, as well as a healthy control group would provide stronger evidence to determine the impact of the meaning/peace approach.

These results have potential implications for clinical interventions. There is a need for interventions that address the spiritual, meaning, and meaning-making needs of LBCS to improve the adjustment during survivorship. Our results reveal that the meaning/peace factor was a stronger correlate of higher quality of life and lower depression symptoms than the faith factor. This finding highlights the potential benefit of incorporating a meaning/peace approach in psychotherapy interventions to contribute to positive effects (Visser et al., 2010) as SWB has been documented as a fluid domain that is amenable to intervention (Betina Yanez et al., 2009). Psychotherapy interventions such as Meaning-Centered Psychotherapy (W. Breitbart et al., 2018; William Breitbart et al., 2012; William Breitbart et al., 2010a) and other existential-based therapies like Dignity Therapy (Chochinov et al., 2005; Martínez et al., 2017), supportive-expressive therapy (D. Kissane & Li, 2008), and family grief therapy (D. W. Kissane et al., 2006; Masterson, Schuler, & Kissane, 2013) have been developed to address the meaning-making needs and to encourage a sense of dignity and purpose in life at the end of life. These interventions aimed at improving psychological adjustment have proven effective in predominantly non-Latino whites. Meaning Centered Psychotherapy has been shown to increase spiritual well-being and a sense of meaning and purpose in life in advanced cancer patients (William Breitbart et al., 2010b). Due to the positive impact on the psychological adjustment of palliative cancer patients, Meaning Centered Psychotherapy is being culturally and linguistically adapted for Latino cancer patients with advanced disease (R. Costas-Muñiz, Garduño-Ortega, et al., 2017; Costas-

Muñiz R, Under Review). This intervention can be further adapted for the needs of LBCS. Our study does not provide an intervention approach, yet demonstrates important coping dimensions (meaning and spiritual-based) that can be utilized to develop culturally sensitive interventions with LBCS. However, barriers exist in conducting these interventions for palliative and LBCS. Common barriers identified in conducting psychotherapy with palliative patients, include difficulty finding patients that have the time, flexibility, and stamina to complete a structured intervention and lack of understanding intervention's existential based terminology (Polacek, Reisch, Saracino, Pessin, & Breitbart, 2019). LBCS have poorer mental health outcomes than non-Latino whites, however they are less likely to receive psychotherapy (R. Costas-Muñiz, Hunter-Hernández, et al., 2017). Common barriers reported by LBCS are that they are more likely to report a lack of counselors that speak their language, understand their cultural values or background, and to report that mental health services are too expensive (R. Costas-Muñiz, Garduño-Ortega, O., Hunter-Hernández, M., Morales, J., Castro-Figueroa, EM., Gany, F., Under Review). In a qualitative study conducted with LBCS, faith and spirituality were found both helpful and stressful, it was noted that interventions grounded in spiritual healing while allowing discussions about spiritual struggles is most beneficial with this patient population (Barden et al., 2016). Given the importance of meaning and peace to the psychosocial adjustment of LBCS, it is critical to begin adapting and testing these interventions for LBCS while being mindful to address the common barriers to psychosocial service use of Latinas. Leaving unmet the spiritual and psychological needs of LBCS negatively impacts the patient's quality of life, therefore it is crucial for health professionals to understand the influence of spirituality (Barden et al., 2016), specifically the meaning/peace approach. Meaning-making needs should be addressed in clinical settings. Health professionals can play an essential part, by identifying patient's needs and referring patients and families to programs for help.

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Table 1.

Latina Breast Cancer Survivors' Characteristics (n =97)

	No. (%) or Mean (SD) of Participants
Age	60.38 (11.40)
Marital Status	
Married or partnered	55 (57.3)
Single	8 (8.3)
Separated	3 (3.1)
Divorced	20 (20.8)
Widowed	10 (10.4)
Education	
12th grade/high school graduate	29 (30.0)
Some college or Associate's degree	21 (21.1)
College Graduate	20 (21.1)
Post college/Graduate school	25 (26.3)
Birth Place	
US	29 (30.2)
Puerto Rico	21 (21.9)
Caribbean	16 (16.7)
Central America	7 (7.3)
South America	21 (21.9)
Europe	2 (2.1)
Preferred language	
English	34 (35.1)
Both equally	32 (33.0)
Spanish	31 (32.0)
Time since diagnosis	
0–11 months	5 (5.8)
1–2 years	14 (16.3)
3–5 years	52 (60.5)
6 years or more	15 (17.4)

Note. Percentages may not equal 100% due to rounding

Frequencies might not be based on a total of 97 participants due to missing data

SD: Standard deviation

Table 2.

Multivariate Regression Analyses Predicting Quality of Life and Depression

	Quality of life					Depression				
	F	R ²	Beta	SE	p	F	R ²	Beta	SE	P
	7.92	.40			.001	5.39	.30			.001
Demographic/Medical										
Age			-.21	.14	.14			-.10	.05	.05
Education			.05	1.30	.97			-.74	.45	.10
Marital Status ^a			7.75	3.35	.02			-1.44	1.17	.22
US born			-2.30	3.18	.47			-.60	1.11	.59
Time since Diagnosis ^b			5.58	3.54	.12			-.75	1.22	.54
Spiritual well-being			.77	.16	.001			-.26	.06	.001

^aMarital Status: 0=Single, Separated, Divorced or Widowed, 1= Married or living with partner

^bTime since diagnosis: 0=Less than two years, 1= two years or more

Table 3.

Multivariate Regression Analyses Predicting Quality of Life and Depression

	Quality of life					Depression				
	F	R ²	Beta	SE	p	F	R ²	Beta	SE	P
	9.38	.49			.001	8.65	.46			.001
Demographic/Medical										
Age			-.14	.13	.32			-.14	.05	.01
Education			-.74	1.42	.55			-.44	.40	.28
Marital Status ^a			7.47	3.24	.02			-1.42	1.08	.29
US born			.04	3.06	.99			-1.61	1.02	.12
Time since Diagnosis ^b			5.68	3.31	.09			-.62	1.09	.57
Faith			-.44	.37	.25			.20	.13	.04
Meaning/Peace			1.43	.25	.001			-.56	.09	.001

^aMarital Status: 0=Single, Separated, Divorced or Widowed, 1= Married or living with partner

^bTime since diagnosis: 0=Less than two years, 1= two years or more