

THE ROLE OF SOCIAL SUPPORT IN SUICIDAL IDEATION AMONG A SAMPLE OF PUERTO RICAN LATINA PATIENTS WITH BREAST CANCER

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ABSTRACT

Objective. This quantitative, cross-sectional, and correlational study explores the relationship between perceived social support, specifically examining support from family, friends, and partners, and the severity of suicidal ideation in a sample of 129 adult Latina women diagnosed with breast cancer in Puerto Rico. **Methods.** The Multidimensional Scale of Perceived Social Support (MSPSS) and the Frequency of Suicidal Ideation Inventory (FSII) were utilized to measure perceived social support and suicidal ideation, respectively. According to the literature, female breast cancer survivors have a higher risk of depression, anxiety, and suicidal ideation compared to those without a history of oncology, highlighting the necessity of assessing these variables concurrently. **Results.** Spearman correlation analysis revealed a significant negative relationship between overall perceived social support and suicidal ideation ($r = -.241, p = .006$). Partner support showed the strongest correlation ($r = -.259, p = .003$), followed by friend support ($r = -.218, p = .013$), while family support did not achieve statistical significance ($r = -.164, p = .063$). Additionally, a moderate and significant correlation was found between educational level and annual income ($\rho = 0.614, p < 0.001$), indicating a significant association between educational attainment and annual income within the sample. These results highlight the vital role of social support, especially from partners, in possibly reducing suicidal ideation. **Conclusions.** This study sheds light on important aspects of cancer care that should be taken into consideration when developing culturally sensitive interventions that incorporate social support into psycho-oncological care for Latina breast cancer survivors in Puerto Rico.

Keywords: suicidal ideation, social support, Latina women, breast cancer survivors, mental health in oncology

RESUMEN

Objetivo. Este estudio cuantitativo, transversal y correlacional analizó la relación entre el apoyo social percibido (familia, amigos, pareja) y la gravedad de las ideas suicidas en 129 mujeres adultas latinas diagnosticadas con cáncer de mama en Puerto Rico. **Métodos.** Se utilizaron la Escala Multidimensional de Apoyo Social Percibido (MSPSS) y el Inventario de Frecuencia de Ideas Suicidas (FSII). **Resultados.** El análisis de correlación de Spearman reveló una relación negativa significativa entre el apoyo social percibido global y las ideas suicidas ($r = -.241, p = .006$). El apoyo de la pareja mostró la correlación más fuerte ($r = -0.259, p = 0.003$), seguido del apoyo de los amigos ($r = -0.218, p = 0.013$), mientras que el apoyo familiar no fue estadísticamente significativo ($r = -0.164, p = 0.063$). Además, se encontró una correlación moderada significativa entre el nivel educativo y los ingresos anuales ($\rho = 0.614, p < 0.001$). Estos resultados destacan el papel fundamental del apoyo social, especialmente de la pareja, para mitigar la ideación suicida. **Conclusiones.** Este estudio resalta aspectos clave para el desarrollo de intervenciones culturalmente sensibles que incorporen el apoyo social en la atención psicooncológica de sobrevivientes latinas de cáncer de mama en Puerto Rico.

Palabras clave: ideas suicidas, apoyo social, mujeres latinas, sobrevivientes de cáncer de mama, salud mental en oncología

INTRODUCTION

Breast cancer remains one of the leading causes of death among women worldwide (Lei et al., 2021). According to statistics from the Centers for Disease Control and Prevention (CDC; 2021), in Puerto Rico in 2021, breast cancer was the most frequently diagnosed type of cancer and the leading cause of cancer-related death. On the other hand, in 2024, approximately 310,720 new cases of invasive breast cancer were anticipated to be diagnosed in the United States (American Cancer Society, 2024). The five-year relative survival rate for women with nonmetastatic invasive breast cancer is 91% in the United States, reflecting significant progress in diagnosing and treating the disease (National Breast Cancer Foundation, 2024). These figures highlight the importance of advancing treatments and addressing psychosocial factors that may affect survival. Despite declining mortality rates, breast cancer survivors still face significant mental health challenges (Carreira et al., 2018). Social support is recognized as a crucial element in reducing psychological distress and enhancing the quality of life for female cancer survivors (Zhou et al., 2022). Studies have shown that higher levels of social support are associated with a significant decrease in psychological distress, particularly in young and middle-aged women coping with the emotional sequelae of the cancer care continuum (American Psychological Association, 2023). This factor not only improves emotional well-being but also serves as a buffer against situations that could heighten psychological vulnerability, such as suicidal ideation. In this context, interventions designed to strengthen social support networks during and after treatment could be key to improving the mental health and quality of life of breast cancer survivors (Zhou et al., 2020).

Suicide remains a significant public health concern among Latinos in the United States, with Puerto Ricans being one of the most severely affected subgroups (CDC, 2023). In an integrative review guided by Leininger's cultural care theory, researchers examined 24 studies published within the last decade to analyze the cultural factors influencing suicidal thoughts and behaviors among Puerto Ricans (Estrada et al., 2018). While this review highlighted critical culturally specific factors affecting suicidal ideation, such as stigma, family

dynamics, and religiosity the existing body of literature has predominantly focused on children and adolescent populations (Duarte-Vélez et al., 2018; Estrada et al., 2018). Because suicidal risk factors shift drastically across different life stages and developmental periods, there is an urgent need to examine how these cultural variables manifest in adult populations, particularly among adult women facing life-threatening medical diagnoses such as breast cancer, where the intersection of oncological stress and cultural expectations remains understudied (Gaitanidis et al., 2018; Zhou et al., 2020). Identifying these nuances is essential for developing suicide prevention and psycho-oncological healthcare strategies that are culturally tailored for adult Puerto Ricans and other Latino subgroups.

The risk of suicide among breast cancer survivors is higher than that in the general population, especially in young women and those without social support networks (Gaitanidis et al., 2018; Zhou et al., 2020). The presence of factors such as being single (including unmarried, divorced or widowed), having certain types of cancer (e.g., head and neck cancer, lung cancer, or pancreatic cancer), and a lack of access to radiotherapy services has been associated with an increased risk of suicide among cancer patients (Aizer et al., 2013; Zaorsky et al., 2019; Wang et al., 2021). Chronic diseases present not only a physical challenge but also an emotional and psychological burden for those who suffer from them, significantly increasing the risk of suicidal ideation and suicide attempts (Orlando Health, 2016; Stubbs et al., 2016). Studies have shown that conditions like cancer, osteoarthritis, and respiratory diseases are associated with higher rates of emotional distress and psychological vulnerability (American Cancer Society, n.d.; Instituto Nacional de la Salud Mental, n.d.). This highlights the importance of addressing not only physical health, but also the psychological and emotional needs of patients. Interventions that integrate emotional support, effective communication, and suicide prevention programs are critical to improving quality of life and reducing risk in this vulnerable population. The literature has identified that a lack of social support and communication difficulties are associated with an increased risk of suicidal behavior in emerging adults (Martínez-Rives et al., 2025). A previous

study showed that breast cancer patients living in rural areas who have experienced trauma, displayed symptoms of PTSD, or had poor communication at the time of diagnosis are at a higher risk of suicidal thoughts (Kazlauskienė et al., 2022). These findings emphasize the importance of considering broader psychosocial stressors when examining mental health outcomes in this population.

In Puerto Rico, the sociocultural and economic context significantly influences the perception and impact of social support (Lafarga Previdi & Vélez Vega et al., 2020). Factors such as close family networks, religious beliefs, and stigma surrounding mental health are key determinants in how Puerto Rican women perceive social support (Falcón, Todorova, & Tucker et al., 2009; Estrada et al., 2018). A study in Puerto Rico revealed that cancer patients deeply value social support, particularly that provided by family members and health professionals. However, perceptions of this support vary by gender and perceived health status (Castro et al., 2017). This dynamic underscores the need to explore whether the patterns observed in other contexts regarding the relationship between social support and suicidal ideation are replicated in Puerto Rico.

Even though Puerto Rico has resources and suicide prevention programs, such as the Puerto Rico Department of Health's Commission for Suicide Prevention, gaps persist in accessing mental health services for breast cancer survivors, especially in rural areas (Castro et al., 2015). Furthermore, there is a critical scarcity of evidence-based psychological interventions in Puerto Rico that simultaneously address patient-partner communication, multidimensional social support networks, and oncological suicide prevention. Currently, existing initiatives function as separate administrative or crisis response efforts, leaving a clear gap in comprehensive, culturally tailored clinical protocols that integrate these three axes into the standard psycho-oncological care of breast cancer survivors. These challenges reinforce the urgent need to develop culturally tailored approaches that integrate social support as an essential, structured component in the mental health management of breast cancer survivors.

The importance of this study lies in its focus on Latina women, who, due to sociocultural factors

such as acculturation, systemic barriers, and economic inequalities, may experience more complex forms of social support and face unique challenges in suicidal ideation processes compared to other demographic groups (Buitron et al., 2023). However, the perception and impact of this support may vary considerably across specific cultural contexts (Klonsky, May, & Saffer et al., 2016), such as Puerto Rico, indicating the need to investigate these dynamics within the Latino population. For this reason, this study aims to examine the relationship between perceived social support and suicidal ideation among Latina breast cancer survivors in Puerto Rico. By examining how social support affects mental health in this specific group, this study will establish a foundation for future research to evaluate the need for psychosocial interventions tailored to the cultural and contextual nuances of Puerto Rico.

METHODS

The present secondary analyses correspond to preliminary data from a cross-sectional auxiliary design study. Participants were recruited through referrals from the main study. The main study is titled "The Role of Emotional Regulation and Interpersonal Support in Grief, Depression, and Markers of Inflammation in Hispanic Women With Breast Cancer," which aimed to investigate non-death-related losses due to the BC diagnosis concerning grief and to determine the potential role of emotional regulation and social support as protective factors against systemic inflammation up-regulation, and depression symptoms in Latina BC patients (Peña-Vargas et al., 2025).

The main study recruited patients from the Puerto Rico Biobank, oncology clinics, imaging centers, and support groups in Puerto Rico. The first contact with each participant was made via telephone to confirm eligibility, explain the study, review the consent form, and answer any questions. If the individual was eligible and consented to participate, the investigator would schedule an interview to be conducted either by telephone or face-to-face. The Institutional Review Board (IRB) and the Ponce Research Institute Ethics Committee approved all study procedures (2205101801). To be eligible, all participants had to be adult Puerto Rican Latina women (aged 21 years or older) who had been diagnosed with stage 0-4 breast cancer

within the past four years. Through this recruitment process, a total of 129 Latina women with breast cancer were recruited.

Through a methodological design, we explored the hypothesis that a higher level of social support is inversely related to the presence of suicidal ideation in this specific group, offering direct implications for the design of targeted psychosocial interventions. For these secondary analyses, we pulled data from the following instruments:

Multidimensional Scale of Perceived Social Support - Spanish version (MSPSS)

The Multidimensional Scale of Perceived Social Support (MSPSS) is a 12-item self-report tool designed to assess perceptions of social support across three distinct subscales representing specific support sources: family (4 items), friends (4 items), and a significant other or partner (4 items). Responses are scored on a 7-point Likert scale ranging from 1 (very strongly disagree) to 7 (very strongly agree), where higher scores indicate greater perceived social support. While internal consistency coefficients were not recalculated for the current secondary analyses due to the use of previously collected de-identified data, the Spanish version of the MSPSS has demonstrated robust psychometric properties in prior oncological populations, with Cronbach’s alpha coefficients ranging from .85 to .92 for the global scale and its respective subscales (Calderón et al., 2021).

Frequency of Suicidal Ideation Inventory (FSII) - Spanish version

The Frequency of Suicidal Ideation Inventory (FSII) is a 5-item psychometric tool used to assess the frequency of suicidal thoughts over the past year. Participants respond using a 5-point Likert scale ranging from 1 (never) to 5 (almost every day), with higher cumulative scores indicating a greater frequency and severity of suicidal ideation. While internal consistency coefficients were not recalculated for the current secondary analyses due to the use of previously collected de-identified data, the Spanish validation of the FSII has demonstrated excellent psychometric performance, with a reported Cronbach’s alpha of .91 in Spanish-speaking clinical and community populations (Sánchez-Álvarez et al., 2020).

Data Analysis

Statistical analyses were performed using SPSS software (v. 28). First, descriptive statistics, including means, standard deviations (SD), and frequencies, were calculated to summarize the sociodemographic characteristics of the sample. Second, because the scores from the psychological instruments violated the assumption of normal distribution and utilized ordinal Likert scales, a non-parametric Spearman rank correlation analysis was executed to examine the strength and direction of the relationships between overall perceived social support, its specific subscales (family, friends, partner), and the frequency of suicidal ideation. Statistical significance was set a priori at $p < .05$.

RESULTS

The research sample consisted of 129 participants with a mean age of 55.37 years. In terms of annual income, 44.2% reported earnings below \$12,000, with the majority indicating earnings below \$35,000. In terms of educational level, 89.9% of participants had completed high school or a higher level of education. In terms of marital status, 55.1% were married or in a civil partnership. Furthermore, 60.9% of participants reported not having sufficient income to meet their needs and expenses, as shown in Table 1.

Table 1

Sociodemographic Characteristics of the Sample

Sociodemographic characteristics	Mean	SD
Age (years)	55.37	11.56
	<i>n</i>	<i>%</i>
Marital status		
Single	28	21.7
Married or Consensual Union	71	55.1
Divorced or Separated	18	14.0
Widow	12	9.3
Academic Level (High School or more)		
Yes	116	89.9
No	13	10.1
Employment		
Full time or part time	45	34.9
Retired	24	18.6
Unemployed	32	24.8
Disabled	14	10.9
Other	14	10.9

	<i>n</i>	%
Annual income		
≤\$12,000	57	44.2
\$12,001 - \$35,000	51	39.6
\$35,000 - \$100,000	18	14.0
\$100,001 - \$250,000 a year	1	0.8
Enough income to cover all expenses and needs		
Yes	51	39.1
No	78	60.9

The findings of this Spearman correlation analysis reveal significant relationships between levels of personal and social support (PSS) and lower levels of suicidal ideation ($r = -.241, p = .006$). The sample of 129 participants reflects considerable diversity in terms of personal experiences and social backgrounds. Importantly, these results come from subscales of the PSS, which assess perceived support from different sources, such as partners, friends, and family (Habibi Asgarabad et al., 2024;

Lyons et al., 1988). Each subscale measures how participants perceive the emotional and practical support they receive from these specific sources (Habibi Asgarabad et al., 2024).

Greater partner support was found to be significantly associated with decreased suicidal ideation ($r = -.259, p = .003$). Support from friends also showed a negative correlation, although a milder one ($r = -.218, p = .013$). Family support, although less pronounced, showed a similar trend that did not reach statistical significance ($r = -.164, p = .063$). Additionally, a moderate and significant correlation was found between educational level and annual income ($\rho = 0.614, p < 0.001$), indicating a significant association between educational attainment and annual income within the sample. These results highlight the vital role of social support, especially from partners, in possibly reducing suicidal ideation.

Table 2

Correlation of Suicide ideation with PSS, PSS family, PSS friends and PSS- couple

Variable	1	2	3	4	5
1. Suicidal Ideation	—				
2. Total Perceived Social Support	-.248**	—			
3. Family Support	-.162	.640**	—		
4. Friend Support	-.213*	.907**	.356**	—	
5. Partner Support	-.282**	.562**	.480**	.389**	—

Note. *N* = 129. Values represent Pearson correlation coefficients (*r*). $p < .05$. $p < .01$.

DISCUSSION

The findings of this study highlight the importance of social support in reducing suicidal ideation among Latina breast cancer survivors. The significantly negative correlation found between perceived social support and suicidal ideation supports the hypothesis that greater social support is inversely related to the presence of suicidal ideation in this specific group. This result is consistent with previous research identifying social support as a vital buffer against psychological distress in populations affected by chronic illness (Beverly et al., 2020).

Our results show that partner support exhibited the strongest correlation with a decrease in suicidal ideation ($r = -.259, p = .003$), suggesting that within the cultural and social context of Latina women, the figure of the partner may play a

particularly significant role in their emotional and mental well-being during and after cancer treatment (Barden et al., 2017). These findings align with previous research, which suggests that partner support may moderate psychological vulnerability and heighten emotional resilience in critical health scenarios (Yuan et al., 2012; Kleine et al., 2019). Conversely, support from friends displayed a milder protective association ($r = -.218, p = .013$), whereas family support did not achieve statistical significance ($r = -.164, p = .063$).

This non-significant trend for family support presents an intriguing paradox when examined through the cultural lens of *familismo*, a core cultural value among Puerto Ricans that emphasizes deep family interconnectedness and mutual reliance (Estrada et al., 2018). Within psycho-oncology, this divergence can be understood through

specific developmental and diagnostic variables. Given that the mean age of our sample was 55.37 years, these adult women occupy a developmental stage where the partner frequently functions as the primary caregiver and immediate source of daily operational and emotional support, overshadowing broader family dynamics. Furthermore, a breast cancer diagnosis carries unique cultural stigmas and psychological distress; adult patients often engage in “protective buffering”, intentionally hiding their severe emotional distress and suicidal thoughts from extended family members to avoid causing collective worry or functioning as a perceived burden. Additionally, extended family caregivers frequently experience significant caregiving burden, which may inadvertently diminish the perceived quality or availability of the emotional support they provide (Anterriotti et al., 2020). Therefore, while extended family systems remain culturally valued, the immediate partner appears to be the most critical psychological anchor against suicidal ideation for adult Puerto Rican women navigating breast cancer recovery.

Therefore, emphasizing strengthening spousal relationships could be a key strategy in psychosocial interventions designed for this demographic. Past research has examined the role of one such process, informal partner support, in women's psychological response to breast cancer (Pistrang & Barker, 1995; Debnaar et al., 2023). The findings of this research suggest that partners play an important role in the adjustment of breast cancer patients and that interventions directed at partners may effectively reduce psychological distress (Pistrang & Barker, 1995; Kleine et al., 2019).

On the other hand, research by Langer et al. (2022) focuses on how effective communication between partners impacts psychological adjustment and relationship quality in the context of cancer. This reinforces the idea that partner support is not only significant for emotional and mental well-being but also acts as an essential pillar for resilience and emotion management at critical times, such as during and after cancer treatment. However, Shin and Gyeong (2022) discovered that supportive interactions with friends distinctly enhance positive emotions, while partner support has a broader effect, including both heightened positive emotions and diminished negative

emotions. This supports that the observed moderate correlation ($r = 0.389$) reflects a relationship in which both types of support interact but have differential effects.

Furthermore, Anterriotti et al. (2020) highlighted that, although family support is valued, it is not always sufficient to mitigate the emotional and physical burden family caregivers face due to the demands of caregiving. They noted that caregivers often require additional support, such as instrumental or emotional resources from other external sources, to effectively address their needs. This suggests that family support, although relevant, may not have a direct or significant impact on psychological well-being.

However, several methodological limitations must be considered when interpreting the results of this study. The small sample size, combined with a non-probability convenience sampling method and a geographic concentration of participants in Puerto Rico, may limit the generalizability of the results to the broader population of Latina women navigating breast cancer recovery. Geographically restricted samples obtained through convenience criteria may not adequately capture the heterogeneity of cultural, socioeconomic, and healthcare experiences across the broader Latina population, thus reducing external validity (Chan et al., 2013). In addition, the cross-sectional design of the study does not allow us to establish causality or temporal sequences between the specific sources of social support and the reduction of suicidal ideation. Furthermore, data collection relied on self-report questionnaires, which might introduce social desirability bias regarding sensitive psychological distress. For future research, exploring how interventions that foster social support can be culturally tailored using longitudinal designs would be beneficial. Notwithstanding these limitations, the results of this study shed light on important aspects of cancer care that should be taken into consideration when developing culturally sensitive interventions, such as the value of different types of sources of social support and how they could potentially contribute to improving a crucial aspect of mental health, like suicidal ideation. This information serves as a valuable stepping block for key factors to incorporate into psycho-oncological

contextualized care for Latina breast cancer patients.

Conclusions

This study highlighted the significant inverse relationship between perceived social support and suicidal ideation in Latina breast cancer survivors. The results emphasize the importance of partner support, which was most strongly associated with reductions in suicidal ideation, suggesting that interventions designed to strengthen these relationships may be especially beneficial in improving the mental health of these women. The research supports the potential role of social support as an important factor associated with lower suicidal ideation among breast cancer survivors. It also highlights the importance of considering cultural and social specificities when designing and implementing support programs for this population, ensuring they are inclusive, accessible, and effective. It is imperative to continue the investigation concerning the distinct interactions between the underlying mechanisms of social support and mental health. This is particularly significant in relation to the serious issue of suicidal ideation during various stages of breast cancer treatment and recovery.

Financing: This study was funded by the National Institute on Minorities and Health Disparities of 272 the National Institute of Health. The funding number of this administrative supplement is 2733U54MD007579-37S2.

Conflict of Interests: The authors have no affiliation with any organization with a direct or indirect 288 financial interest in the subject matter discussed in the manuscript submitted.

Approval of the Institutional Board for the Protection of Human Subjects in Research: This project was revised and approved by the Ponce Health 275 Sciences University-Ponce Research Institute Review Board (2205101801). It complies with the 276 United States 45 Code of Federal Regulations part 46 (45 CFR 46) related to the Common Rule and 277 human subject regulation.

Informed Consent: Prior to the administration of the instruments, written informed consent was obtained from all participants. Through this process, they were notified of the voluntary nature of

their participation, and the management of any associated risks and benefits.

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