

Psychological Distress and Help-Seeking Attitudes of Cancer Caregivers on Guam

Joanna Caasi Macaraeg and Seyda Türk Smith
University of Guam

Abstract

The present study explored factors contributing to the psychological distress and help-seeking attitudes of caregivers of cancer patients in Guam, U.S.A. For this purpose, 32 caregivers who accompany cancer patients at local, private clinics were administered tests measuring psychological distress, perceived social support, caregiver burden and attitudes toward seeking psychological help. Multiple regression analysis indicated that the combination of age, marital status, education, time since diagnosis, perceived social support, and caregiver burden significantly predicted caregivers' level of psychological distress ($R^2_{adj} = .523$, $F(6, 23) = 6.290$, $p = .001$). Results showed that caregivers who experienced more caregiver burden, who were married to or living with the patients and had recently learned about the patients' cancer diagnosis also reported more psychological distress. Additionally, female caregivers, with larger social networks, and lower levels of caregiver burden were associated with having more positive attitudes toward seeking psychological services. The present study is the first to address factors contributing to and elevating the psychological distress of caregivers in Guam, as well as variables affecting their attitudes toward seeking psychological help. Moreover, it supports the overlooked need for implementing psychological services for caregivers of cancer patients undergoing treatment on Guam.

Statement of the Problem

Cancer is a chronic disease involving long-term treatment and care that is implemented at both hospitals and homes. Cancer patients need care and assistance from their family members, friends, as well as medical personnel. These family members who offer their physical and emotional help are referred to as *informal caregivers*. Throughout their illness, it is estimated that 55 percent of cancer patients' care needs are provided by informal caregivers (Nijboer et al., 1998).

The burden associated with caregiving and the role of professional psychological help in alleviating such distress has not been researched in Guam cancer communities. Although there is no current data on the number of caregivers in Guam, the Guam Department of Public Health and Social Services (GDPHSS; 2009) reported that 1,580 Guam residents have been diagnosed with cancer and 720 people died of the disease during the years of 2003 and 2007. While numbers are relatively small compared to the United States, the percentage of patients diagnosed with cancer and mortality rates in Guam has increased over the past ten years resulting in cancer being the second leading cause of death in Guam. As cancer treatments take time and energy and continue for months, and even years, family members and friends, as informal caregivers, are often relied on for support. If there is at least one family caregiver helping a cancer patient, then there is at least as many caregivers as cancer patients on Guam. Given the increasing number of caregivers and the absence of research about their experiences in caregiving, it becomes imperative to study their psychological health as they continue in their demanding roles. The present study addresses this need and explores the factors contributing to psychological distress and professional psychological help-seeking attitudes among cancer caregivers on Guam.

Review of Literature

Since the 1980s, multiple studies have addressed the negative outcomes of family caregiving, which has been termed *caregiver burden*. Caregiver burden has been conceptualized as both “objective” and “subjective” constructs. Objective caregiver burden is associated with negative outcomes resulting from caring for an individual with chronic illness in observable measures, such as financial difficulties (Calhoun, Beckham, & Bosworth, 2002). Subjective caregiver burden, as it is addressed in this study, is measured through the individuals’ feelings and perception of their caregiving experiences (Brannan & Heflinger, 2002).

Even though caregiving burden is closely associated with psychological distress, previous research has demonstrated that the two are related yet different constructs. While caregiving burden is a risk factor, possibly a precursor to psychological distress, distress is the outcome of caregiving (Brannan & Heflinger, 2002; Nijboer et al., 1995). For example, in a longitudinal study of breast cancer patients and their primary caregivers, Grunfeld, Coyle, Whelan, Clinch, Reyno, Earle, et al. (2004) reported that caregiver burden is the most significant predictor of both anxiety and depression experienced by caregivers.

Research conducted on caregivers’ overall psychological health indicated an increase in psychological symptoms, such as depression, anxiety, and emotional distress as caregivers remain in their caregiving roles for longer periods (Calhoun et al.; Nijboer et al., 1998; Tang et al., 2008). In some cases, caregivers have shown even higher distress levels than cancer patients themselves. For example, in Nijboer’s study (1998), partners’ levels of anxiety, not only were higher than the patients who underwent surgery for cancer treatment, but these psychological problems peaked 60 days after the patients were discharged, and continued for up to six months. Caregivers’ roles as observers with no ability to alter or manage the illness may explain their distress.

Hodges and Humphris (2009) indicated that caregivers expressed more anxiety over fear of cancer recurrence than the patients themselves. The authors further reported that caregivers were reluctant to address their worries in fear of hindering the patient’s progress in treatment and disappointing friends and family. Hence, there is compelling evidence that caregivers often experience long-term and higher levels of distress than cancer patients themselves.

Moreover, in Hasson-Ohayon et al.’s (2010) study of 150 cancer patients and their spouses in Jerusalem, the healthy spouses reported more psychological distress than patients. Because their support networks seemed to focus on caring for the patient, spouses’ needs seemed to be neglected. This assumption was further supported when spouses of cancer patients actually reported having higher levels of psychological distress than the patients and less support from family and friends.

One of the significant factors affecting caregivers’ level of psychological distress is age. Gaugler et al.’s (2005) study on 233 caregivers of cancer patients in Southern and Northeastern America found younger caregivers reporting higher levels of distress than older caregivers. The authors attributed this finding to young caregivers’ lifestyle issues with higher demands such as child-rearing, full-time employment, and economic or financial responsibilities which may overburden them more than older ones. Authors found younger caregivers experiencing greater fatigue and exhaustion as well as feelings of distress.

Caregivers’ psychological distress also varies depending on their relationship to the cancer patients. Spouses of cancer patients were shown to be the most vulnerable group of all caregivers. Gilbar and Zusman (2007) reported that spouses of women with breast cancer were

more susceptible to distress because of their conflicting roles. They were suddenly expected to assume new roles in the household, provide tangible and emotional support, cope with the spouse's cancer diagnosis as well as physical ailments, and continue to be the primary financial supporter. Taking on these new roles while continuing to fulfill the existing ones must have exacerbated spouses' psychological distress.

Education was also found to significantly predict psychological distress among caregivers of cancer patients. Ferrario, Zotti, Massara, and Nuvoine (2003) reported caregivers with low educational level experienced more psychological distress than other caregivers in their sample. Income may be a confounding variable, being that participants with less education may have fewer financial resources. As they continue to deal with their limited finances, less educated caregivers become even more vulnerable to distress.

Previous research has also revealed several stress reducers. For example, caregivers may experience less distress as they become adjusted to their caregiving roles, and become more comfortable in fulfilling patients' needs. Gaugler et al.'s (2005) research demonstrated that as more time passed since the cancer patients' diagnosis or treatment, caregivers reported less psychological distress.

Additionally, presence of other caregivers in supportive roles may help in reducing the distress levels of primary caregivers. In their study of caregivers of cancer patients in Turkey, Kuscu et al. (2009) found caregivers who perceived high levels of support had low levels of depression and anxiety. Authors suggested that supportive network systems might have helped caregivers deal with daily stresses as well as caregiving burden, consequently, making them less susceptible to psychological distress. In support of this point, other researchers found that lacking in social support was associated with higher levels of depression (Gaugler et al., 2005; Sharpe et al., 2005). Therefore, there is enough evidence to draw the conclusion that social support helps caregivers deal with their caregiving roles and alleviates their overall psychological distress.

With literature indicating that caregivers benefit from social support as they continue to fulfill their caregiving roles, social support and its relationship to psychological distress is also of interest in the present study. Social support is defined as the perception of emotional and tangible assistance from various sources that include family, friends, and special person (Blankfeld & Holahan, 1999). Caregivers' perception of support available from family, friends, and significant others may be a mediating factor for psychological distress.

As previous studies have found that caregivers often experience caregiver burden and psychological distress while caregiving, their attitudes toward seeking professional psychological help may determine ways they maintain or even improve their mental health. However, there has not been extensive research on exploring caregivers' attitudes toward seeking psychological help, therefore most of the studies discussed below are from non-caregiver populations.

One of the variables that consistently predict people's help-seeking attitudes is age; a finding that is based on the results of Jackson et al.'s (2007) meta-analysis of 350 studies on help-seeking attitudes. Younger people have more favorable attitudes toward seeking psychological help than older people. Westerhof, Maessen, de Brujin, and Smets (2007) proposed that age differences in help-seeking attitudes may be a cohort phenomenon. Older people may be unfamiliar with psychological services, having grown up at times when these services were less known, or even less established, therefore leading to their unfavorable attitudes.

Several socioeconomic factors were also studied in relation to help-seeking attitudes. For example, Sheikh and Furnham (2000) found those with more education had positive attitudes toward seeking psychological help, possibly due to an increased awareness of the benefits of psychotherapeutic interventions. People with more income also hold more favorable attitudes. Ten Have et al. (2010) reported that respondents from higher income groups felt more comfortable with and were not ashamed of seeking professional psychological help.

The relationship between gender and attitudes toward seeking psychological help has also been explored. Atik and Yalçin's (2011) and Hamid et al.'s (2009) studies indicated that females have more positive attitudes toward seeking psychological services than males. In addition, Shea and Yeh (2008) found Asian female students to be more likely to seek psychological help. All studies addressed the effects of gender role socialization, specifically, males being expected to be emotionally restrained, while females being encouraged to display their emotions. Because psychotherapy involves displaying and discussing personal emotions, it is understandable why females would more readily seek psychological help while males would be more hesitant.

Finally, cultural background is found to be related to help seeking behaviors. Participants from collectivist cultures, specifically Asians, were shown to have negative attitudes toward seeking psychological services. Culture-specific solutions to distress, discomfort with emotional expression, saving face and avoidance of shame are possible factors contributing to negative attitudes toward psychological help seeking (Shea & Yeh, 2008; Kim et al., 2001).

Chamorros, the indigenous people of Guam, and the participants of this study, hold similar practices as Asians of saving face and trying to avoid shame (Twaddle, Roberto, & Quintanilla, 2003). In addition to being less likely to seek professional psychological services, Chamorros also have traditional healers, called *suruhano* (for male) and *suruhana* (for female) who may be favored over Western-trained professional help. Several studies investigated the role of traditional healers in providing needed services on Guam. For example, about one in five people in the sample of Pobutsky's (1983) research on Chamorros sought services from traditional healers. It was shown that mostly females of childbearing age and those under the age of 35 years had greater frequency of utilizing these services than those in other categories. In Twaddle et al.'s (2003) study, their Chamorro participants considered Western mental health practices to be more modern and advanced than their tradition of seeking *suruhanos*, even though some of them stated the Western model was "inadequate" and "culturally insensitive" (p. 55). Some participants further reported that *suruhanos* could only treat physical illnesses and not mental illnesses. Given that the practice of seeking traditional healers for psychological problems was also more accepted in the Chamorro culture than seeking help from mental health professionals, it is expected that participants who have a history of seeking traditional healers in the present study will also be likely to have negative attitudes toward seeking psychological help.

Literature on caregivers has demonstrated that factors, such as age, education, relationship to the cancer patient, time since cancer diagnosis, perceived level of social support available, and perceived caregiver burden are significant contributors to cancer caregivers' psychological distress. Research has also shown that sociodemographic factors, such as age, sex, education, and income, in addition to cultural factors, affect caregivers' tendencies to seek or resist psychological help. Therefore, the purpose of the present study is to explore whether these factors established in the literature as contributing to psychological distress and professional psychological help-seeking attitudes are also valid for caregivers on Guam.

METHOD

Participants

A total of 32 cancer caregivers who were presently active in their caregiving roles participated in the study. Caregivers had a mean age of 49 years (SD 12.6), which ranged from 23 to 74 years. There were more female caregivers (81%) than males (19%), and the majority was married (75%). Fifty nine percent of the caregivers identified themselves as Chamorro, 22 percent as Filipino, and 16 percent were of other ethnicities. Most of the caregivers' religious affiliation was with Christianity (97%).

Majority of the caregivers had a high school diploma (53%), twenty five percent had Bachelor's Degrees (25%), while a smaller percentage had Associate's Degrees (6%), and Master's Degrees (16%). Forty-one percent indicated their total household income was between \$35,000 to \$49,999, and twenty-two percent reported less than \$25,000. A smaller percentage of the sample reported higher income levels, e.g., \$25,000-\$34,999 (6%), \$50,000-\$74,999 (12%), \$75,000-\$99,999 (16%), and \$100,000 and higher (3%).

There was an average of 30 months (SD 40.6) from the time caregivers knew of the cancer patients' diagnoses to the time they participated in the study, with a range from one month to 165 months. The time from when they started caregiving for the cancer patient ranged from one month to 165 months as well, but the average was 25 months (SD 40.9). Half of the caregivers (50%) reported caring for their spouses, 25 percent their parents, 13 percent their close relatives, six percent their siblings, and three percent their close friends. Caregivers reported having at least four other people who are also providing care to the cancer patient, with some having at least one and others have 10 additional caregivers.

Cancer caregivers also reported having an average of three (SD 1.7) family members living with them in their household, with number of family members ranging from one to nine. Caregivers indicated their overall social network consisted of an average of nine people (SD 11.6), with some having at least one person and others having a maximum of 50. Most of the caregivers reported not having a history of seeking traditional healers (81%).

Measures

Demographic, background, clinical, and caregiving information. Cancer caregivers completed self-report forms asking about their demographic and background information. They were also asked clinical information of cancer patients they are caregiving for during the time of the study. Additionally, caregivers were asked information related to their caregiving, such as their hours spent on caregiving and their primary duties as a caregiver.

Psychological distress. *Kessler Psychological Distress Scale* (K10; Kessler et al., 2002) was administered to assess caregivers' levels of psychological distress. K10 measures nonspecific psychological distress, such as the level of current anxiety and depressive symptoms a person has experienced in the four weeks prior to the interview. It consisted of ten statements on a five-point Likert scale. The possible minimum score was 10 and maximum score was 50. The distress level was the sum of the item scores, with high scores indicating high levels of psychological distress. K10 also had cut-off scores that identify the likelihood of the respondent having a mental disorder. Scores 10 to 19 indicated the absence of any mental disorder, 20 to 24 of mild disorder, 25 to 29 of moderate disorder, 30 to 50 of severe disorder (Victorian Population Health

Survey, 2001). The K10 had a Cronbach alpha coefficient of .93, suggesting very good internal consistency with this sample.

Social support. Caregivers completed the *Multidimensional Scale of Perceived Social Support* (MSPSS; Zimet et al., 1988), which consisted of 12 questions on a seven-point Likert scale measuring the perceived adequacy of social support from the caregiver's family, friends, and significant others. The whole MSPSS produced a Cronbach alpha coefficient of .95 in this sample, indicating very good internal consistency.

Caregiver burden. Caregivers' perceived caregiver burden was assessed using the *Zarit Burden Interview* (ZBI; Zarit, 1983). It consisted of 22 questions which measured the feelings and emotions associated with caregiving. Items were answered on a five-point Likert scale, with higher scores indicating greater caregiver burden perceived (Grunfeld et al., 2004). The maximum possible score was 88 and the minimum was zero. In this sample, ZBI had a Cronbach alpha coefficient of .85, demonstrating good internal consistency.

Attitudes toward seeking professional psychological help. Caregivers also completed the *Attitudes Toward Seeking Professional Psychological Help—Short Form* (ATSPPH-SF; Fischer & Farina, 1995), which measured their attitudes toward seeking or resisting professional psychological services during a personal crisis or prolonged psychological discomfort. The questionnaire contained 10 questions on a four-point Likert scale, with higher scores indicating positive attitudes toward seeking professional services. In this sample, ATSPPH-SF had a Cronbach alpha coefficient of .60, demonstrating the scale did not have good internal consistency.

Procedures

The researcher obtained the approval of the University of Guam's Committee of Human Research Subjects (CHRS) prior to data collection and also secured approval from three private cancer clinics in Guam. Caregivers who were accompanying cancer patients in the clinics were asked to participate. Caregivers were provided a brief overview of the study and asked to sign informed consents. They spent approximately 20 minutes completing the questionnaires.

RESULTS

Results on Caregiver's Psychological Distress

A multiple regression analysis was conducted using Statistical Package for the Social Sciences (SPSS v. 20) to assess the extent to which the combined variables of age, relationship to patient, education, time since diagnosis, social support, and caregiver burden explain cancer caregivers' psychological distress. Results showed the model to be a significant predictor of psychological distress ($F(6, 23) = 6.290, p = .001$), explaining 62 percent of the variance. However, of all the predictors, only the variables of caregiver burden ($\beta = 0.412, t(27) = 2.689, p = .013$), relationship to patient ($\beta = -.482, t(27) = -2.968, p = .007$), and time since diagnosis ($\beta = -0.402, t(27) = -2.850, p = .009$) independently and significantly predicted psychological distress (see Table 1).

Table 1: Standard Multiple Regression Analysis for Variables Predicting Psychological Distress of Caregivers Based on the Original Proposed Model

Variables	b	SE b	β	p
Age	-0.097	0.101	-0.137	0.347
Relationship to patient (spouse of cancer patient or not)	-2.996	1.010	-0.482	0.007*
Education	-0.838	1.032	-0.113	0.425
Time since cancer patient's diagnosis (in months)	-0.088	0.031	-0.402	0.009*
Social support total score	-0.368	0.911	-0.054	0.690
Caregiver burden total score	0.308	0.115	0.413	0.013*

Note: (N=32) $R^2 = .621$, $R^2_{adj} = .523$, $F(6, 23) = 6.290$, $p = .001$; * $p < .05$.

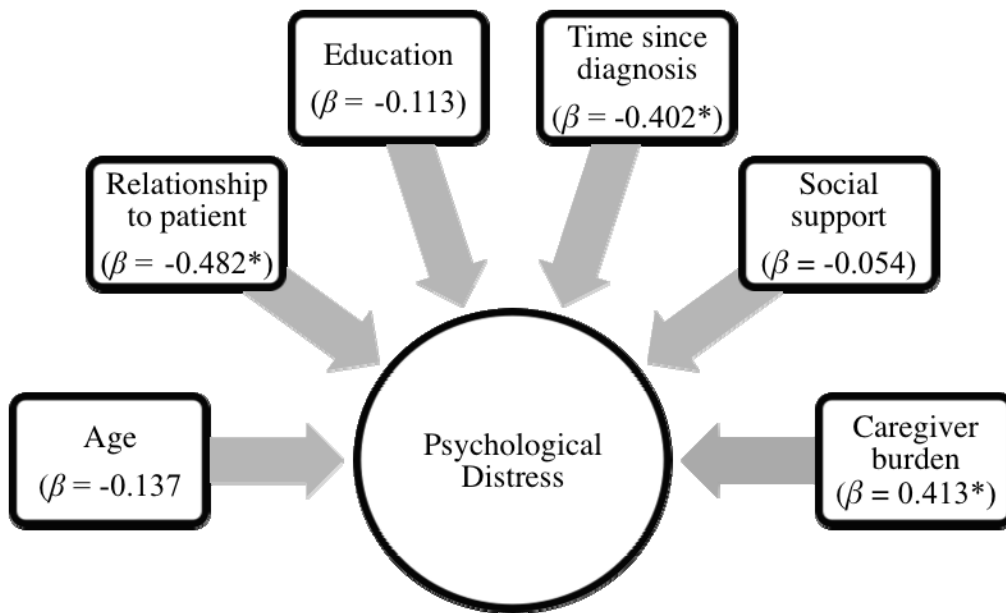


Figure 1. Standard multiple regression model of variables predicting caregivers' psychological distress. (N=32) $R^2 = .621$, $R^2_{adj} = .523$, $F(6, 23) = 6.290$, $p = .001$; * $p < .05$.

Results on Caregiver’s Attitudes toward Seeking Psychological Help

A multiple regression analysis was conducted to test whether the combined variables of age, sex, education, income, and history of seeking traditional healers affected cancer caregivers’ attitudes toward seeking psychological services. The results showed that the combination of variables did not predict caregivers’ psychological help-seeking attitudes ($R^2 = .337$, $R^2_{adj} = .198$, $F(5, 24) = 2.435$, $p = .064$). However, gender had independently and significantly predicted caregivers’ psychological help-seeking attitudes ($\beta = 0.479$, $t(27) = 2.519$, $p = .019$; see Table 2).

Table 2: Standard Multiple Regression Analysis for Variables Predicting Attitudes Toward Seeking Psychological Help of Caregivers Based on the Original Proposed Model

Variables	b	SE b	β	p
Age	-0.061	0.068	-0.155	0.386
Gender	5.940	2.358	0.479	0.019*
Education	1.122	0.708	0.275	0.126
Income of total household	0.271	0.649	0.079	0.680
History of seeking a traditional healer	-1.324	2.474	-0.093	0.597

Note: (N=32) $R^2 = .337$, $R^2_{adj} = .198$, $F(5, 24) = 2.435$, $p = .064$, ns; * $p < .05$.

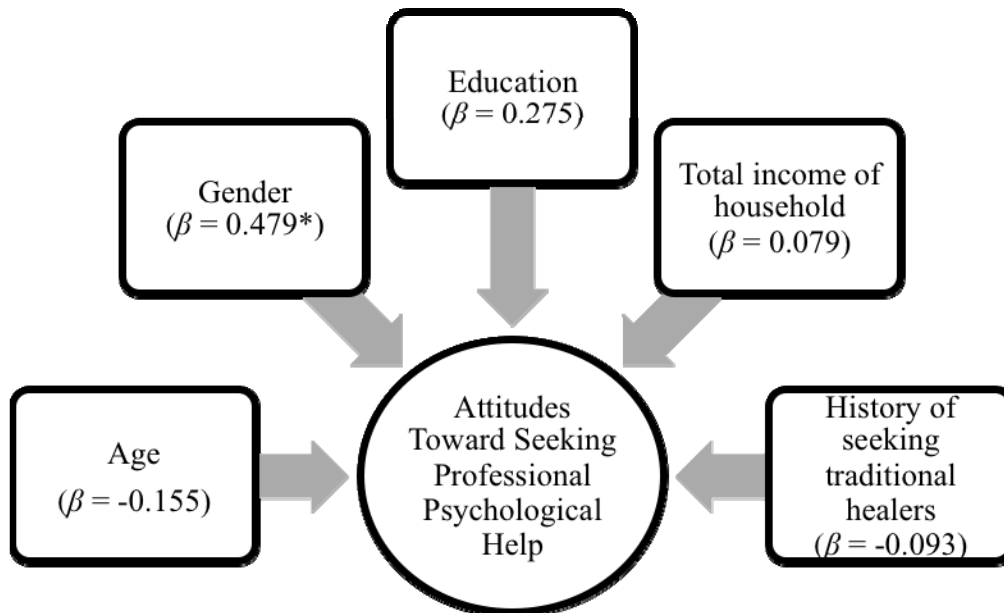


Figure 2. Standard multiple regression model of variables predicting caregivers' attitudes toward seeking psychological help. ($N=32$) $R^2 = .337$, $R^2_{adj} = .198$, $F(5, 24) = 2.435$, $p = .064$; $*p < .05$.

Because the previous multiple regression analysis was approaching significance ($p < .06$), additional correlational analyses were conducted to determine the relationships between the caregivers' attitudes toward seeking psychological help and variables of interest. The variables analyzed in the correlation included age, gender, education, total income of household, history of seeking traditional healers, number of family members, social network, relationship to patient, time of caregiving in months, social support, and caregiver burden.

Of all the variables entered in the correlational analysis, gender ($r(32) = .464$, $p = .007$) and the size of social network ($r(32) = .616$, $p = .000$), resulted in significant relationships. Female caregivers and those with more friends and relatives in their social network had more positive attitudes toward seeking psychological help than male caregivers and those who had fewer people in their social network. Moreover, perceived caregiver burden had a significant correlation with caregivers' attitudes toward seeking psychological help ($r(32) = -.409$, $p = .020$). Cancer caregivers who perceived more caregiver burden also expressed more negative attitudes toward seeking professional psychological services.

DISCUSSION

Discussion of Findings on Caregivers' Psychological Distress

One of the goals of this study was to examine how well the variables explored in the literature explain the psychological distress experienced by caregivers of cancer patients on Guam. Those variables, a combination of perceived caregiving burden, perceived social support, age, education, relationship to cancer patient, and time since cancer patient's diagnosis were found to significantly influence Guam caregivers as well.

Although social support was known to have a significant relationship to caregiver's psychological distress, the present study did not find it to have an independent impact. Cancer caregivers on Guam had high scores on the social support measure (MSPSS; Zimet et al., 1988), indicative of their satisfaction with the social support they received. However, there may have been other types of support that had affected their psychological distress more substantially. This was confirmed by the responses of nine caregivers, or 28 percent of the sample, who were asked additional open-ended question about the type of support they believe to be beneficial at the moment. Even though they mentioned the emotional type of social support to be helpful, caregivers also indicated financial support as an important type of support they would like to have while caregiving. As they continue on in their caregiving roles, financial costs of the cancer patients' treatments and their families' activities of daily living were clearly of paramount concern for them. It seemed that despite their satisfaction with emotional support, availability of financial support would have alleviated their psychological distress more.

Another important finding is the burden caregivers experienced. Cancer caregivers on Guam indicated similar sentiments to those reported in the literature: They felt more psychological distress as they continued to fulfill their caregiver responsibilities. Other responsibilities in addition to caregiving, as well as not having enough personal time and worrying about the future resulted in more burden and thus, more distress.

Additionally, living with the cancer patient also brought additional distress. Spouses of cancer patients felt more overwhelmed by their duties such as working and parenting, when they had the additional care of the cancer patient. This combination of daily activities, financial responsibilities, and prognosis of the cancer illness overwhelmed spouses more than other caregivers available to the cancer patient.

On the other hand, caregivers experienced less distress as more time elapsed since the patients' cancer diagnosis, a finding similar to previous studies. Gaugler et al. (2005) indicated this may be due to caregivers having adapted to their caregiving roles over time. It is also possible that some caregivers had a more positive outcome of the patients' cancer illness as time passed since diagnosis, feeling that the patient is being treated and getting better, and that they (caregivers) were able to provide the needed care.

Discussion of Findings on Caregivers' Attitudes toward Seeking Psychological Help

Gender was found to be a significant factor in predicting attitudes toward seeking psychological help, in that female caregivers had more positive attitudes toward seeking psychological help than males. This finding is consistent with previous studies. According to traditional gender role socialization, female socialization encourages seeking help, while male socialization does not. Men face stigma when they become emotionally and psychologically vulnerable which may explain their negative attitudes toward seeking psychological services.

An unexpected finding in this study was that cancer caregivers with larger social networks had more positive attitudes toward seeking psychological help. It was easier to assume that people with a smaller social network would likely seek psychological services to compensate for their lack of social support, but results in this sample proved to the contrary. It is possible that caregivers in this sample felt the benefits of a larger social network, so seeking psychological services would be a positive and welcome addition. It is also possible that caregivers with a larger social network have more interpersonal problems, thus the need for professional support to deal with these issues. Caregivers may have felt their personal needs

were neglected despite the support from family and friends, thus feeling more inclined to seek professional help.

Finally, it was found that cancer caregivers who perceived less burden had more positive attitudes toward seeking psychological services. There are many ways to explain this relationship. It is possible that the caregivers who expressed less burden were already getting psychological services. On the other hand, it is also possible that caregivers with more perceived burden may have felt already overwhelmed with all the responsibilities and did not have time to consider getting psychological help. Since this study did not require the participants to report whether they were getting any professional psychological services, it is not possible to answer this question.

CONCLUSION, IMPLICATIONS, AND FUTURE DIRECTIONS

Conclusion

Cancer is a chronic disease that often poses considerable and continuing problems for not only cancer patients but their caregivers as well. Studies have been conducted on these specific groups, but caregivers on Guam have not yet been included in the literature. Although there are some limitations to the present study, this is the first scientific study known on Guam to the researchers to explore the burden associated with caregiving and the attitudes of caregivers toward seeking psychological help.

Limitations. This study assessed a small, convenience sample of caregivers present at the private cancer clinics on Guam. The sample consisted of 32 caregivers of patients currently receiving cancer treatments in three local clinics, who volunteered to participate. Data was collected over a period of two years, through weekly visits to the clinics. Given the very busy lives of caregivers, the amount of time they had to participate in the study was very limited.

There is no data on the population of caregivers on Guam, but it was reported that approximately 316 people in Guam were diagnosed with cancer each year from 2003 to 2007 (GDPHSS, 2009). If there are as many caregivers as cancer patients each year, the 32 caregivers in this study would be approximately 10 percent of this population. However, the caregivers in this study reported having approximately four other caregivers who help them with the patient, so there may be many more caregivers than cancer patients. The small sample size, and the fact that caregivers were recruited from the private clinics limit the generalizability of the findings.

Moreover, the sample was not representative of the caregiver population on Guam. The cancer caregivers in this sample were predominantly female, with high school education, from low to middle-income households and were predominantly spouses of the cancer patients, thus further limiting generalizability.

Furthermore, social desirability and cultural factors may have influenced caregivers' reports of social support, caregiver burden, and psychological distress. They had high scores on the social support scale indicating the presence of and satisfaction with helpful people around them. They also scored low on caregiver burden, either because they felt supported by the presence of other caregivers or they did not want to acknowledge the extent of their burden. It is also possible that they did not feel burdened because they view their role as a necessary and an important factor in improving the cancer patients' illness.

Summary of findings. This study on cancer caregivers found that the combination of age, relationship to patient, level of education completed, time since cancer diagnosis, perceived

social support, and perceived caregiver burden influenced their psychological distress. In particular, caregivers who expressed more caregiver burden, who were spouses of the cancer patient, and had recently known the patient's cancer diagnosis experienced more psychological distress. Additionally, caregivers who were female, with large social networks, and perceived less burden had positive attitudes toward seeking psychological services.

Implications

There were different variables contributing to the psychological distress experienced by cancer caregivers. Their distress was remarkably influenced by their perceived caregiving burden, relationship to the cancer patient, and time since cancer diagnosis.

These findings are beneficial to psychotherapists, counselors, social workers, and health care providers working with caregivers on Guam. The study identified sociodemographic factors, such as age, relationship to patient, education, time since cancer diagnosis, social support, and caregiver burden being associated with caregivers' psychological distress. Results would be helpful to professionals in identifying caregivers who may be more vulnerable to psychological distress and would need psychological help.

Moreover, there were several factors predicting caregivers' attitudes toward seeking psychological help. The caregivers' gender, the number of people in their social network, and perceived burden of care were important factors. Mental health and medical professionals who recommend counseling or therapy to caregivers may keep in mind these factors of psychological help-seeking behaviors and approach accordingly. Mental health professionals who are already working with caregivers may use these factors to assess their motivation to remain in therapy.

Future Directions

Future research should include more participants to increase statistical power. In terms of methodological improvements, taking repeated measures would be more helpful in assessing cancer caregivers' psychological distress and help-seeking attitudes over the course of patients' treatment. More information on their family size, such as the number of children, as well as total household income, measured in terms of perceived comfort with the level of income, may be useful in understanding how these factors influence their psychological distress.

Open-ended interviews would also be more informative in addition to self-report measurements. This would provide more insight into the factors affecting the psychological distress of caregivers. Most specifically, the construct of perceived social support, perceived caregiver burden, and psychological distress can be further explored using interviews. Caregivers can identify their own meaning for each construct and address their own view of the extent of social support, burden, and distress they currently experience. In-depth interviews can also provide more insight into the cultural and spiritual factors that influence the levels of psychological distress they may experience. Assessing personality types and coping strategies of caregivers may further identify ways they maintain or improve their mental health.

Moreover, it is a fact that Guam lacks psychological services at the local hospital and clinics for cancer patients and for their caregivers who accompany them for treatment. This study demonstrated how distressed caregivers could become in their caregiving roles. It would be beneficial for them to obtain free therapeutic sessions from mental health professionals to release the burden associated with caregiving.

Educational outreach services for cancer caregivers, as well as professionals and paraprofessionals working them would also be worthwhile. They, along with other people in the community, can be informed of factors that may make caregivers vulnerable to experiencing psychological distress. Being informed of available resources would not only benefit the caregivers who will continue to provide optimal care, but help the cancer patients as well.

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