Hispanic adolescents coping with parental cancer

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Abstract

Aim The aim of this study was to identify the coping strategies Hispanic adolescents employed to deal with parental cancer, looking specifically at how gender and psychological symptoms such as depression and anxiety relate to such strategies.

Methods Participants were 51 Puerto Rican adolescents who have a parent living with cancer. Adolescents completed a structured questionnaire with scales measuring depression (CES-D), anxiety (STAI), and coping strategies (COPE).

Results The strategies used with the highest frequency were those generally viewed as positive and emotion-focused: emotional support, acceptance, and religion. The means for these coping strategies indicated that they occurred with high frequency. The findings revealed no differences in coping strategies between girls and boys. Depression was related to two maladaptive coping strategies: denial and behavioral disengagement; and one emotion-focused strategy: acceptance. Anxiety had significant correlations with one emotion-focused strategy: acceptance; and two dysfunctional strategies: substance use and behavioral disengagement. The best predictors of adolescents' depression and anxiety were dysfunctional coping and problem-focused strategies.

Conclusions The study contributes to the knowledge about the coping strategies of Hispanic adolescents experiencing parental cancer and the importance of taking individual

coping strategies into account when evaluating the impact of parental cancer on psychological well-being. This is especially true for adolescents who are likely to use dysfunctional strategies such as denial, substance use, and behavioral disengagement. Through psychosocial interventions, professionals need to assist these adolescents to improve and learn better coping strategies.

Keywords Hispanics · Cancer · Coping · Oncology · Adolescence

The experience of a life-threatening illness is generally considered to cause considerable stress not only to the patient but also to family members. Particularly, adolescent children of cancer patients face significant disruption in family roles, dynamics, and routines; challenges related to the adjustment to their parent's condition, prognosis, treatment, and its side effects; and challenges associated with the specific issues related to their developmental stage. Research has consistently established the role of coping strategies and styles as factors that have a substantial impact on the psychological adjustment of adolescents. Most empirical research in this area, however, has been conducted with Caucasian samples, so little is known about the coping strategies specific to Hispanic populations.

Self-blame, rumination [1], avoidance, and ventilation are coping mechanisms that have been associated with more depression and anxiety [2]; whereas positive appraisal [1], problem solving, and interpersonal strategies are associated with fewer psychological symptoms [2]. Depressed adolescents use cognitive restructuring and social support less often, and self-criticism and social withdrawal more often than non-depressed adolescents [3]. Moreover, adolescents who report more strategies of active coping experience significantly less depression than those who use fewer coping strategies; and those using

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fewer strategies experience less depression than those using avoidant coping [4]. Regarding symptoms of anxiety and stress, adolescents report that help-seeking and distraction are the most effective strategies in dealing with stress, followed by affective release and relaxation [5].

Unfortunately, despite the acknowledged link between psychological symptoms and coping strategies, little is known about how adolescents cope with parental cancer [6, 7]. Children of cancer patients report using more emotion-focused coping than problem-focused coping. Other coping mechanisms utilized by these children are helping others, distraction, parentification, “keeping it in the head”, and wishful thinking [6]. Youth who use avoidance and emotion-focused coping have been found to exhibit more symptoms of anxiety and depression [7]. Furthermore, children of parents with advanced cancer adopt primarily distraction and “maintaining normality” as coping mechanisms [8].

The scientific literature documents differences between genders [2, 9, 10] and ethnic backgrounds [11, 12] in terms of the use of coping mechanisms. Both boys and girls increase their use of emotion-focused coping strategies during adolescence. However, girls increase in the use of emotionally attentive or ruminative coping strategies [9] and interpersonal coping [2], whereas boys increase in the use of emotion-distraction coping [9] and physically active strategies [2]. Moreover, a greater degree of ruminative coping is related to high levels of depressive symptoms [10]. Problem-focused and distractive coping are positively correlated to masculinity and negatively associated to depression [10].

There are differences in the use of coping strategies between ethnic groups; among Latinas, evidence supports the link between coping and depression. Latina breast cancer patients use more self-distraction, less humor, and more ventilation than European American and African American patients [11], and more religion-based coping than European American patients [12]. Furthermore, Latina adolescents showing better coping strategies (problem solving, seeking social support, emotional regulation, and expression) exhibit fewer depressive symptoms [13].

The aims of this study were to: (1) identify the coping strategies most frequently utilized by Hispanic adolescents dealing with parental cancer, (2) explore gender differences among the coping strategies, and (3) confirm the association between coping strategies and depression and anxiety in Hispanic children of cancer patients. On the basis of previous research with depressed and anxious adolescents, it was hypothesized that the female participants would report more emotion-focused strategies (acceptance, seeking emotional support, humor, positive reframing, and religion) and the male participants would report more problem-focused strategies (active coping and planning).

Methods

Procedure

Approval for this study was granted by the Institutional Review Board of the University of Puerto Rico, Rio Piedras Campus. Parents of the study participants were recruited at the “Relay for Life” events of the American Cancer Society of Puerto Rico. Sixty-one patients and/or survivors were invited to participate, provided they had undergone treatment for cancer in the last 2 years, and had adolescent children (12–18 years). Approximately 83% of the invitees agreed to be contacted and 51 adolescents participated in this study. The investigator then contacted the parents and obtained written consent and assent from both them and their teen children. Each participant completed sets of questionnaires that took about an hour to complete.

Measures

Demographic and medical information

Participants were asked to report general demographic information, including their gender, age, relationship status, highest level of education achieved, and annual family income. Further items relating to participants parents’ cancer status included the type of cancer, time since diagnosis, treatment received, and stage of condition.

Depression

The Spanish version of the CES-D was used to measure depressive symptoms [14]. The scale is purported to measure the presence of depressive mood by asking respondents to rate how often they have experienced each of the 20 listed symptoms during the past week. A total score of 16 or higher is indicative of clinical levels of depression [14].

Anxiety

The Spanish version of the state anxiety scale of the State Trait Anxiety Inventory was used to measure participants’ anxiety levels. The state anxiety scale consists of 20 items arranged on a four-point scale of intensity. The validation and adaptation studies of STAI have been performed with Hispanic populations [15].

Coping

Coping was assessed using the Brief COPE [16]. The scales comprising the Brief COPE include problem-focused

strategies (active coping and planning), dysfunctional strategies (behavioral disengagement, denial, and substance use), and emotion-focused strategies (acceptance, humor, positive reframing, religious coping, self-distraction, seeking emotional support, and venting). Evidence of the construct equivalence of the Brief COPE in English and Spanish has been reported by Perczek et al. [17].

Data analysis

Analyses using SPSS involved a three-stage progression to investigate the relationship between coping strategies, depression, and anxiety. The first two stages involved the examination of descriptive statistics, and bivariate correlations to establish a degree of association between each of the measures. Multiple regression analysis was then utilized to establish associations between coping styles and psychological symptoms.

Results

Fifty-one (55% females, 45% males) adolescents with a mean age of 15.5 participated in this study. The majority of the adolescents' parents were diagnosed with breast (42%) and vaginal cancers (22%). Twenty percent of the parents were in the early phase of the disease, 28% were in the advanced stage, and 52% were in remission. In terms of treatment, 62% had received chemotherapy and radiotherapy, and 33% had a mastectomy.

The mean score for depression was 20.78 (SD=11.21), and that for anxiety was 44.49 (SD=10.57). Sixty-four percent of participants received a score higher than 16, indicating clinical levels of depression, and 44% presented high levels of anxiety. The strategies used most frequently were those generally viewed as positive: seeking emotional support, acceptance, and religion. The mean scores for these coping strategies were from 6.5 to 6.8 (with 8 the highest possible score) indicating that the three more commonly used coping strategies occurred with high frequency. The second hypothesis was partially supported; no difference was found between girls and boys in terms of their coping strategies and anxiety levels. However, girls reported higher levels of depression than boys.

The correlations in Table 1 provided a general sense of the intercorrelations between adolescents' depression, anxiety, and coping strategies. As was shown, depression was positively related to two maladaptive coping strategies: denial and behavioral disengagement; negatively related to acceptance and humor. Anxiety had significant negative correlations with the emotion-focused strategies: active coping and planning; and with one emotion-focused

Table 1 Intercorrelations between psychological symptoms and coping strategies ($n=51$)

Variable	1	2	3	4	5	6	7	8	9	10	11	12	PF	EF	DS
Depression	-0.15	-0.07	-0.02	-0.30*	-0.24*	-0.13	0.14	-0.02	0.36**	0.08	0.14	0.45***	-0.12	-0.18	0.44***
Anxiety state	-0.26*	-0.23*	-0.07	-0.31**	-0.20	-0.22	0.11	-0.16	0.32**	0.16	0.22*	0.27*	-0.27*	-0.23	0.33*
1. Active coping	1	0.68***	0.58***	0.29*	0.04	0.59***	0.59***	0.59***	0.07	0.49***	-0.03	0.05	0.05		
2. Planning		1	0.55***	0.38**	0.04	0.75***	0.56***	0.63***	0.15	0.30*	-0.12	-0.02			
3. Positive reframing			1	0.47***	0.15	0.56***	0.51***	0.54***	0.05	0.31*	0.12	-0.14			
4. Acceptance				1	-0.06	0.45***	0.12	0.43***	-0.30*	0.16	0.03	-0.35***			
5. Humor					1	-0.12	-0.23	-0.03	-0.04	-0.05	0.06	-0.10			
6. Religious coping						1	0.50***	0.55***	-0.01	0.30*	-0.14	-0.12			
7. Use of emotional support							1	0.50***	0.12	0.37**	-0.03	0.06			
8. Self-distraction								1	0.02	0.18	-0.42***	-0.08			
9. Denial									1	-0.07	0.16	0.39**			
10. Venting										1	0.15	-0.14			
11. Substance use											1	-0.02			
12. Behavioral disengagement												1			
Problem focused (PF)													1		
Emotion focused (EF)														1	
Dysfunctional strategies (DS)															1

* $p<0.05$; ** $p<0.01$; *** $p<0.001$

strategy: acceptance. Finally, anxiety was positively related to dysfunctional coping strategies: denial, substance use, and behavioral disengagement.

Multiple regression analyses were used to identify which type of coping strategies were predictors of depression and anxiety symptoms. As illustrated in Table 2, the dysfunctional coping strategies provided the greatest level of prediction of variance in depression (31%) and anxiety scores (29%). Problem-focused strategies accounted for 6% of the depressive symptoms variance and 14% of the anxiety variance.

Discussion

This study explored depression, anxiety, and dimensions of problem-focused, emotion-focused, and dysfunctional coping strategies, in a sample of Puerto Rican adolescents who have a parent diagnosed with cancer. This is the first study to focus on the use of coping strategies and its relation to psychological symptoms among Hispanic adolescents who have a parent diagnosed with cancer. It also focused on comparing adolescent males and females regarding the reporting of psychological symptoms, coping strategies, and their relationship to symptoms of depression and anxiety. This study is supported by other studies showing that specific coping strategies are related to depression and anxiety [1–5]. Findings suggest that adolescent children of cancer patients: usually use positive methods to deal with their difficulties (such as acceptance, seeking emotional support, and religion); seldom use negative methods; and most frequently use emotion-focused coping strategies. The frequent use of religion-based strategies by Latino adolescents is consistent with the findings of other studies [11, 12], indicating a tendency of Latino adolescents to turn to religion in moments of stress.

Denial, behavioral disengagement, and acceptance were the coping strategies that most strongly related to psychological symptoms. Denial as a way to disengage from the stress of their parent's cancer was found to

contribute to more rather than less distress. On the other hand, acceptance, as a coping mechanism, is particularly important and useful in circumstances in which the stressor is something that must be accommodated to (such as parental cancer), as opposed to circumstances in which the stressor can be changed [18]. This strategy was the second most frequently used, indicating an attempt made by the adolescents to effectively cope with parental cancer. Finally, behavioral disengagement such as denial is considered a maladaptive coping style, as it indicates an attempt to give up and not deal with the stressful event. The results suggest that dysfunctional strategies were better predictors of higher psychological morbidity, followed by problem-focused strategies. These findings are supported by previous studies, which suggest that children of cancer patient who use avoidance strategies tend to exhibit more psychological symptoms [6]. However, in contrast with other studies, problem-focused strategies were more strongly related to adjustment than emotion-focused strategies [6]. This suggests that among Latino adolescents, the presence or lack of problem-focused strategies has more impact than the presence or lack of emotion-focused strategies.

Limitations

Broad generalization of the findings to all Hispanic populations must be guarded. First, the sample was purposive and does not represent all ethnic and cultural groups that comprise Hispanic populations. Second, the sample size was fairly small. A larger sample size would have provided adequate statistical power to conduct multiple regression analysis for each coping strategy and to examine bivariate relationships within an overall model.

In addition, the results are based on cross-sectional data and it cannot be determined whether the coping strategies have an impact on the psychological symptoms or if previous psychological morbidity reinforces the use of specific coping mechanisms. Longitudinal research is therefore needed to assess whether the coping strategies

Table 2 Multiple regression of coping strategies on psychological symptoms ($n=51$)

Variables	R^2	Adjusted R^2	F value	p value	Beta	sr^2	p value
Depression	0.34	0.30	7.97	0.001			
Problem focused					-0.42	0.06	0.05
Emotion focused					-0.06	0.01	0.75
Dysfunctional strategies					0.65	0.31	0.001
Anxiety	0.36	0.32	8.63	0.001			
Problem focused					-0.66	0.14	0.01
Emotion focused					0.10	0.01	0.60
Dysfunctional strategies					0.63	0.29	0.001

have an impact on the psychological morbidity or whether previous levels of adjustment affect the choice of specific coping mechanisms.

Conclusions

The present study clearly shows that maladaptive strategies constitute a significant risk factor for psychological morbidity in adolescent children of cancer patients. The study also contributes to the body of knowledge on psychological adjustment and coping strategies among Hispanic adolescents. Latino adolescents facing parental cancer were found to frequently rely on religion-based coping mechanisms, and may therefore benefit from interventions that help them acquire more problem-focused strategies, develop acceptance, and decrease the use of maladaptive coping mechanisms. The findings also suggest the need for developing more timely and informed psychological interventions for the children of cancer patients. Such interventions would ideally identify adolescents who are experiencing high levels of anxiety and depression due to their parent's cancer diagnosis, and specifically focus on those who lack adaptive coping strategies such as acceptance, or who cope through denial and behavioral disengagement.

Conflicts of interest None.

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