The Impact of Social Support Networks on Mental Health Outcomes for Individuals Diagnosed with Cancer

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Abstract

❖ Research regarding individuals diagnosed with cancer suggests that social support is inversely related to adverse mental health outcomes such as depression and anxiety. There is little research on the effect of different social support systems as they relate to individuals with cancer.

❖ The purpose of the current study is to examine the relationship between different social support systems (family, friend, partner, overall) as they relate to depression and anxiety as well as age and gender.

❖ This project utilized the third wave of the Midlife in the United States (MIDUS) 2013 survey in order to collect data regarding the social support and mental health outcomes for individuals who have been diagnosed with cancer.

❖ The results suggest that overall social support is significantly negatively correlated with depression and anxiety.

❖ The findings of the study provide evidence for the hypothesis that different social support networks are significantly related to mental health outcomes for individuals who have been diagnosed with cancer.

❖ The finding of the current project suggest that assessment of the types social support networks is critical in facilitating adjustment and adaptation to diagnosis for individuals with cancer.

Introduction

❖ Cancer is the second leading cause of death in the United States.

❖ Cancer is associated with negative mental health outcomes such as depression, anxiety, and PTSD (particularly for survivors).

❖ Social support is an effective means in dealing with negative life events such as physical health diagnoses.

Research Questions:

❖ What is the effect of different social support networks (friends, family, partner. overall) on the mental health (depressive and anxious symptoms) of individuals diagnosed with cancer?

❖ Are different support networks perceived differently by individuals with cancer?

Hypothesis

❖ Social support is inversely related to depression and anxiety.

❖ Family support, friend support, partner support, and overall support is perceived differently by individuals diagnosed with cancer.

Literature Review

❖ Cancer Incidences in the United States: ≈ 1.7 million cases

❖ Cancer Mortality Rate in the United States: ≈ 600,000

❖ Lifetime Diagnosis Incidence for Men and Women: 38.4%

❖ Cancer Survivors: ≈ 15.5 million (National Cancer Institute, 2018)

❖ Cancer treatment (chemotherapy, radiation, surgery) is associated with serious short- and long-term physical health affects.

❖ Cancer is associated with increased incidences of anxiety, depression and other negative mental health outcomes.

❖ Social support is associated with better coping and adjustment for individuals diagnosed with cancer.

Methodology

Original Data/Research Design:
Secondary analysis of the 3rd Wave of the MIDUS Survey 2013-2014
❖ Original study occurred in 1995, 2nd wave 2004, 3rd wave 2013
❖ Collected longitudinal health, social, spiritual, and psychological data
❖ Current study used cross-sectional design.

Data Collection:
Random selection from pool of US phone numbers
❖ Phone Interview and 2 fifty-page mail-in surveys (2 previous waves)
❖ Original participants (1995): 25-75yrs
❖ Current Study (2013): 43-91yrs

Sample:
Random selection of English-speaking US residents, not institutionalized
❖ N = 662 Individuals diagnosed with cancer
❖ Majority female 53.6%
❖ Majority married 65.3%
❖ Majority Caucasian 91.7%
❖ *Mean age (m ≈ 69)*

Measures: Independent Variables, Support:
❖ Family: Average of 4 Likert Scale questions
❖ Friend: Average of 4 Likert Scale questions
❖ Partner: Average of 5 Likert Scale questions
❖ Overall: Average of Family, Friend, Partner
❖ Overall w/o Partner: Average Family & Friend

Measures: Dependent Variables, Mental Health:
❖ Depression: Average of 7 yes/no questions
❖ Anxiety: Average of 10 Likert scale questions

Statistical Analysis:
Each study variable was analyzed by utilizing IBM's Statistics Packages for Social Science Version 26.
❖ Spearman's Rho Correlational Test, Mann-Whitney U Independent Sample Test, & Kruskal Wallis Mean Comparison Test

Results

Spearman's Rho:

❖ Depression was negatively correlated with family support r_s (662)= -0.123, p< 0.01, partner support r_s (662)= -0.147, p< 0.01, overall support r_s (662)= -0.124, p< 0.01, and overall support without partner r_s (662)= -0.097, p< 0.05. (Figure 1)

❖ Anxiety disorder was only significantly negatively correlated with overall support r_s (662)= -0.085, p< 0.01. (Figure 1)

❖ Age was negatively correlated with anxiety r_s (662)= -0.131, p< 0.01 and depressed affect r_s (662)= -0.092, p< 0.05. (Figure 1)

Correlations: Spearman's Rho								
	Respondent's calculated age	Depressed Affect (continuous)	Anxiety Disorder (continuous)	Friend Support	Family Support	Partner Support	Overall Support	Overall Support without Partner
Respondent's calculated age	1							
Depressed Affect (continuous)	-.092*	1						
Anxiety Disorder (continuous)	-.131**	.284**	1					
Friend Support	-0.067	-0.059	-0.074	1				
Family Support	.130**	-.123**	-0.04	.464**	1			
Partner Support	.120**	-.147**	-0.064	.199**	.249**	1		
Overall Support	0.031	-.124**	-.085**	.814**	.738**	.601**	1	
Overall Support without Partner	0.031	-.097*	-0.077	.888**	.790**	.257**	.927**	1

Note. *p < .05. **p < .01.

Figure 1: Spearman's Rho Table showing the relationships between social support, mental health outcomes and age.

Mann-Whitney U Test:

❖ There was a significant (r < 0.050) gender difference in perceived friend support U = 49545.0 z = 3.172, r = 0.38, partner support U =16043.0, z = -3.731, r = 0.0, and overall support without partner U = 48844.0, z = 2.579, r = 0.01. (Figure 2 & 3)

Mann - Whitney U Test				
	Respondent's Sex	Mean Rank	Standardized Test Statistic	Significance
Friend Support	MALE	271.24		
	FEMALE	315.42	3.172	0.002
Family Support	MALE	284.51		
	FEMALE	301.81	1.268	0.205
Partner Support	MALE	220.68		
	FEMALE	179.88	-3.731	0.000.
Overall Support	MALE	292.28		
	FEMALE	301.79	0.501	0.501
Overall Support without Partner	MALE	277.06		
	FEMALE	313.33	2.579	0.01

Significance < .050

Figure 2: Mann- Whitney U Test displaying the differences in perceived social support by gender.
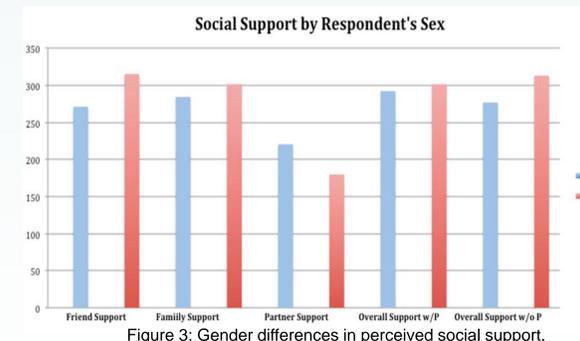

Figure 3: Gender differences in perceived social support.

Kruskal Wallis Test:

❖ There was no significant differences between support networks based on marital status.
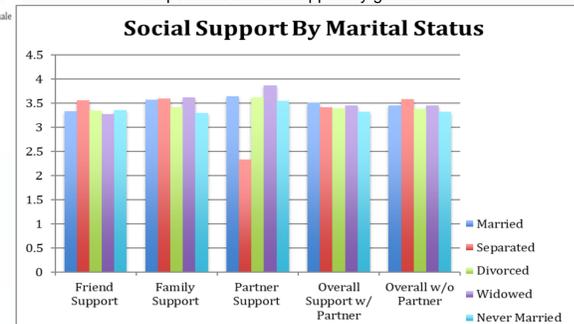

Figure 4: Kruskal Wallis Test comparing social support by marital status.

Discussion

Summary of Results:

❖ Depression is associated with lower levels of family support, partner support, and overall support.

❖ High levels of depression corresponds with high anxiety.

❖ Anxiety is associated with lower levels of overall support.

❖ Each type of social support network (friend, family, partner, overall) is positively associated.

❖ Younger participants reported higher levels of depression and anxiety.

❖ Older participants reported higher levels of family and partner support.

❖ Female participants reported higher rates of friend support than male participants.

❖ Male Participants reported higher levels of partner support than female participants.

❖ Female participants reported higher levels of overall support without partner than male participants.

Implications for Practice:

❖ It is critical to assess patients for depression and anxiety during the cancer disease course and after survivorship.

❖ Understanding patients' social support networks may help mental healthcare providers connect clients to needed social resources.

❖ Holistic treatment of patients diagnosed with cancer is crucial.

Future Research:

❖ Future studies should explore the relationship between social support and PTSD following cancer survivorship.

❖ Further research regarding patient age and social support at the time of cancer diagnosis is needed.

❖ Research is needed to understand the relationships between age at the time of diagnosis, social support, and time immediately following diagnosis.

❖ Additional research about the different types of cancer as they relate to different social support networks is necessary.

Strengths & Limitations:

❖ The current study was able to examined four different social support systems as they relate to the mental health of individuals with cancer.

❖ The current study is a secondary analysis therefore there is a lack of focus on the study variables

❖ The anxiety measure was not as sensitive, as necessary.

❖ Small sample size.