Demographic Differences in Cancer Patients on Psychosocial Outcomes

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BACKGROUND

- For individuals with cancer, diagnosis and treatment phases constitute a tremendous set of stressors for themselves and their social circles.
- These results present preliminary findings from a five-year prospective study of breast, prostate and colorectal cancer survivors.
- Previous research shows that survivors exhibit lower levels of physical and mental health including anxiety and depression and fear of cancer recurrence leading to greater role limitations and social functioning.
- Our aim is to examine psychosocial outcomes by the demographic variables of gender, race, age, working status and relationship status.

METHODS

Procedures:

- Participants were recruited using the Rapid Case Ascertainment (RCA) Shared Resource of the Yale Cancer Center.
- All participants were within six months of surgery at study enrollment.
- Participants completed either a paper or online questionnaire concerning demographics and domains of health and well-being.

Participants:

- 201 cancer survivors (120 breast, 58 prostate & 23 colorectal).
- Ages 24-79 years (M= 58.4 years, SD= 11.8; 132 female).

Measures:

Consented participants were asked to complete a questionnaire electronically or by mail which included the following measures:

- Self-Efficacy (SEMIOC)
- Difficulties With Emotion Regulation (DERS)
- Depression & Anxiety (HADS)
- Spirituality (FACIT)
- Resilience (RSES)
- Impact of Illness Event (IES-R)
- Concerns About Recurrence (CARS)
- Coping (COPE)

Analyses: Between subjects t-tests were conducted to assess differences between participants' gender, race, working status and relationship status while correlations were run between age and outcome variables.

RESULTS

Outcome by Gender

	Male (n= 69, 34.3%) <i>M (SD)</i>	Female (n= 132, 65.7%) <i>M (SD)</i>	Total Sample (N=201) <i>M (SD)</i>	t-value
Self-Efficacy	8.22 (1.79)	7.69 (1.74)	7.87 (1.77)	-2.05*
Emotion Regulation	32.44 (9.86)	33.66 (10.61)	33.24 (10.35)	0.78
Depression	9.54 (3.49)	10.52 (3.35)	10.18 (3.42)	1.91
Anxiety	9.43 (3.57)	11.47 (4.48)	10.77 (4.29)	3.42**
Spirituality	39.49 (7.31)	40.12 (7.64)	39.91 (7.52)	0.55
Resilience	12.41 (2.95)	13.30 (2.47)	12.99 (2.67)	2.10*
Impact of Illness Event	36.73 (11.69)	40.48 (14.77)	39.28 (13.94)	1.80
Concerns about Recurrence	8.96 (3.68)	12.17 (4.32)	11.19 (4.38)	5.06**
COPE: Positive Reinterpretation	10.96 (2.81)	12.94 (2.84)	12.25 (2.98)	4.67**
COPE: Active Coping	11.13 (2.47)	12.19 (2.44)	11.83 (2.49)	2.84**

**Difference is significant at the 0.01 level (2-tailed)
*Difference is significant at the 0.05 level (2-tailed)

- Males reported higher levels of self-efficacy than females.
- Females reported higher levels of anxiety symptoms in addition to an elevated concern of cancer recurrence compared to males.
- However, female participants scored higher on resilience, indicating healthier responses, and reported higher rates of positive reinterpretation and active coping.
- Non-significant differences were identified among spirituality, difficulties with emotion regulation and impact of illness scores among this group.

Outcome by Race

	White (n= 173, 86.1%) <i>M (SD)</i>	Non-White (n= 23, 11.4%) <i>M (SD)</i>	Total Sample (N=196) <i>M (SD)</i>	t-value
Self-Efficacy	8.06 (1.59)	6.81 (2.24)	7.91 (1.72)	-3.36**
Emotion Regulation	32.81 (10.14)	36.14 (10.85)	33.19 (10.25)	1.44
Depression	9.91 (3.21)	12.00 (4.48)	10.13 (3.41)	2.63
Anxiety	10.70 (4.25)	11.05 (4.07)	10.74 (4.21)	0.35
Spirituality	39.40 (7.11)	42.95 (9.73)	39.82 (7.52)	2.10*
Resilience	12.96 (2.49)	13.27 (3.89)	12.99 (2.68)	0.52
Impact of Illness Event	38.09 (12.57)	45.40 (17.80)	38.96 (13.44)	2.31**
Concerns about Recurrence	11.05 (4.22)	10.89 (5.16)	11.03 (4.31)	-0.14
COPE: Positive Reinterpretation	12.33 (2.80)	11.43 (4.31)	12.23 (3.00)	-1.30**
COPE: Active Coping	11.96 (2.30)	10.77 (3.57)	11.82 (2.50)	-2.12**

**Difference is significant at the 0.01 level (2-tailed)
*Difference is significant at the 0.05 level (2-tailed)

- Race was dichotomized into White and non-White (Black, Asian, Native American and Mixed Race) due to unequal representation among participants.
- White participants reported greater self-efficacy, positive reinterpretation and active coping than non-White participants.
- However, non-White participants reported higher rates of spirituality than White participants but also reported higher impact of illness scores.
- Non-significant differences were identified among difficulties with emotion regulation, depression and anxiety symptoms, resilience and concerns of cancer recurrence among this group.

Outcome by Age

Age was positively correlated with self-efficacy, indicating that older participants had greater confidence in managing their cancer. There was a negative association between emotion regulation and age, which reveals that older adults reported fewer difficulties with regulating their emotions. However, depression and anxiety symptoms decreased with age, indicating a greater prevalence of depression and anxiety in our younger participants. The illness event itself also appeared to impact younger participants significantly more than older participants.

Outcome by Working Status

 Working participants (full-time, part-time, or full-time homemaker) reported greater self-efficacy, and resilience than participants without employment but also reported greater concerns of cancer recurrence. Non-working participants reported higher impact of illness scores.

Outcome by Relationship Status

 Married participants and those in domestic relationships reported greater self-efficacy and spirituality than non-partnered participants, while non-partnered participants reported greater difficulties with emotion regulation and higher impact of illness scores.

CONCLUSIONS

- Overall, self-efficacy scores were significant among males, White, married or partnered and working participants. This indicator of confidence to manage cancer is in direct contrast to the non-partnered, non-working or non-White participants who reported higher levels of impact of illness scores.
- However, working participants as well as women reported higher level of concerns of cancer recurrence but also higher levels of resilience overall. These contrasting findings may illuminate greater levels of subjectivity within these populations.
- While men report experiencing fewer mental and physical health problems during cancer diagnosis, women may partake in more meaning-making in the form of coping.
- Those who are married or in partnerships and non-White participants reported higher spirituality levels suggesting some benefit of these pre-illness conditions.
- Older participants reported greater confidence in managing their cancer and they also reported lower levels of depression and anxiety.

Implications

- These results have the potential to inform stakeholders of the post-treatment variables related to physical, psychological and social well-being.
- After diagnosis, awareness of demographic differences related to poor outcomes can inform future targeted interventions.

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