Risk for Anxiety and Depression Among Individuals with Ovarian Cancer: The Interplay Between Age and Distress

Alexandra K. Zaleta, PhD[1], Shauna McManus, BS[1], Julie Olson, PhD[1], Ritu Salani, MD, MBA[2], Nita K. Lee, MD, MPH[3], Marcia Donziger, BA[4], Kristen Santiago, MS[4], Shannon La Cava, PsyD[5], Mary Lou Smith, JD[6], Sarah DeFeo, MPA[7], Kevin Stein, PhD, FAPOS[1]

[1]Cancer Support Community, Research and Training Institute, Philadelphia PA; [2]The Ohio State University, James Cancer Hospital, Columbus, OH; [3]University of Chicago, Chicago, IL; [4]Cancer Support Community, Washington, DC; [5]Cancer Support Community Los Angeles, Benjamin Center, Los Angeles, CA; [6]Research Advocacy Network, Plano, TX; [7]Ovarian Cancer Research Fund Alliance, New York City, NY

CANCER SUPPORT COMMUNITY
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Background

- With limited screening options for ovarian cancer, most women are diagnosed with advanced disease, which can impact quality of life
- Younger age may also be associated with distress, given fertility and relationship concerns

Aims

- The objective of this study was to explore predictors of psychosocial distress among a community-based sample of ovarian cancer survivors
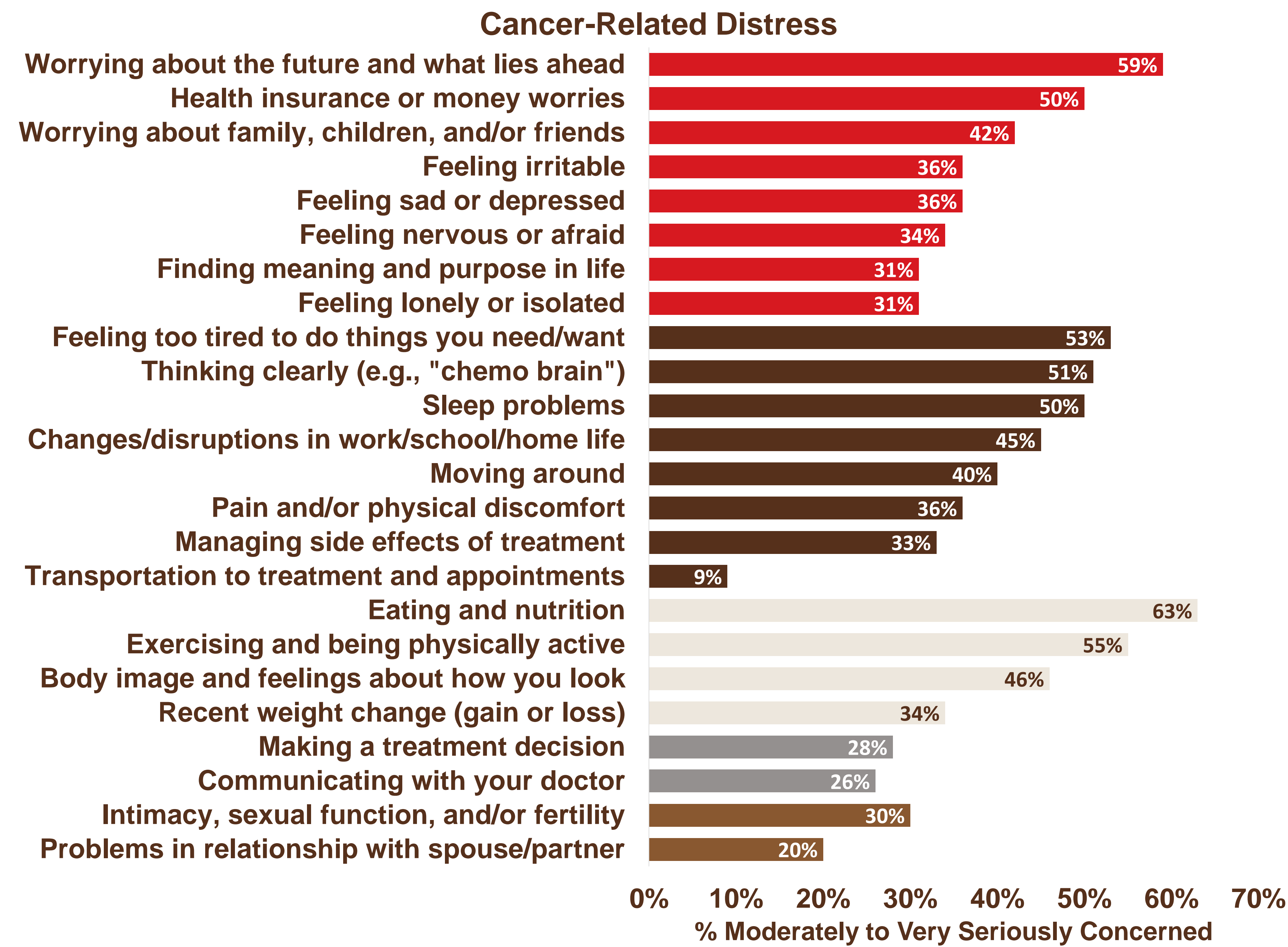
Methods

- 128 ovarian cancer survivors enrolled in the Cancer Support Community's online Cancer Experience Registry®
- Participants provided socio-demographics and reported cancer-related distress via CancerSupportSource®, a validated 25-item tool measuring level of concern (0-4) over 5 domains: *emotional well-being (including 2-item depression and 2-item anxiety risk screening subscales), symptom burden and impact, body image and healthy lifestyle, health care team (HCT) communication, and relationships and intimacy*
- We examined risk for clinically significant anxiety and depression, and used logistic regression to explore associations between domains of concern and anxiety/depression risk, and if associations vary by age
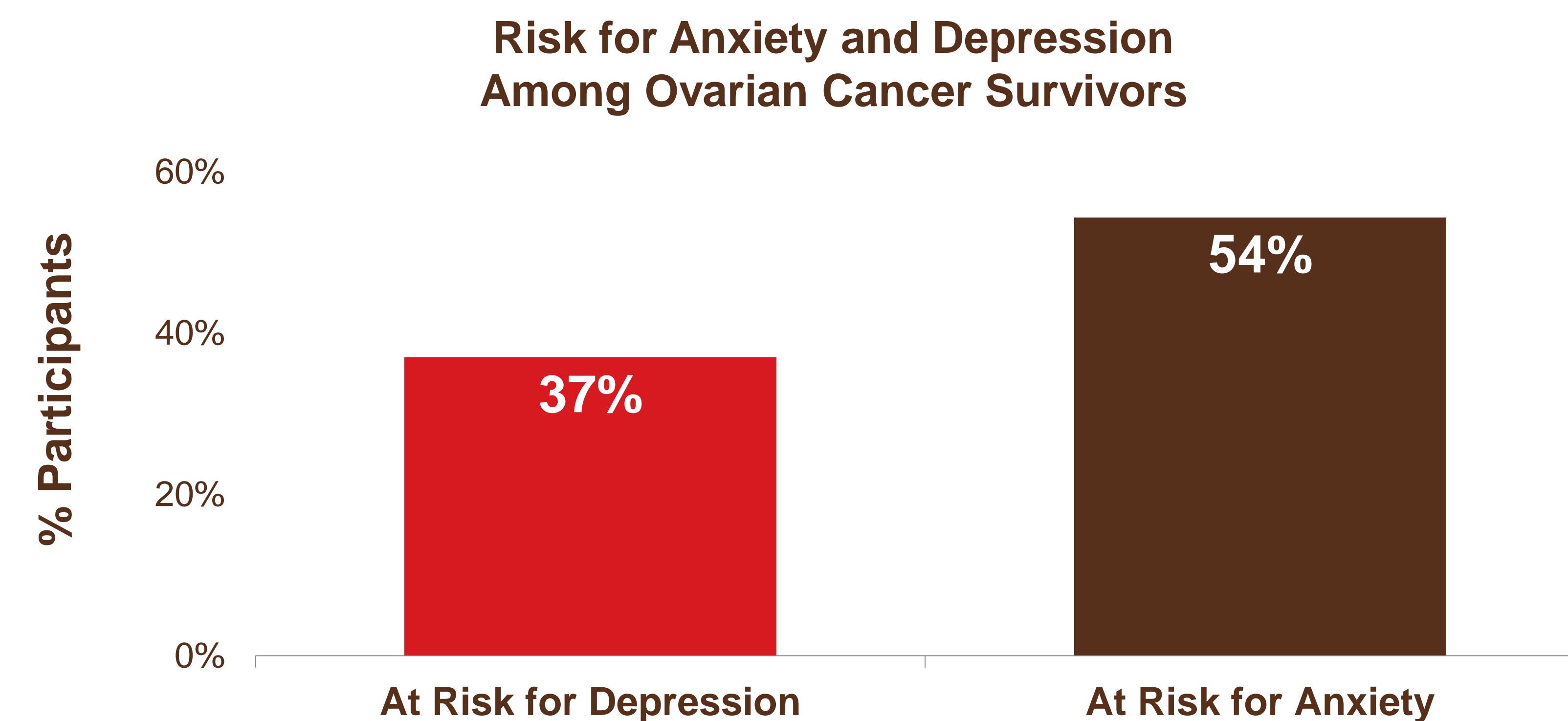
Participants

	M/n	SD/%
Age (years)	58	10
	Range: 30 – 79	
Non-Hispanic White	108	86%
Time Since Diagnosis (years)	5	7
	Range: <1 – 38	
Ever Diagnosed with Metastatic Cancer	42	33%
Treatment History		
Ever Had Surgery	120	98%
Ever Received Radiation Therapy	19	22%
Currently Receiving Radiation Therapy	3	4%
Ever Received Hormone Therapy	9	11%
Currently Receiving Hormone Therapy	3	4%
Ever Received Chemotherapy	116	91%
Currently Receiving Chemotherapy	33	45%
Stage at Diagnosis		
Stage I	28	19%
Stage II	21	14%
Stage III	76	51%
Stage IV (Metastatic)	22	15%

Results

Cancer-Related Distress

Bar chart: % Moderately to Very Seriously Concerned

- Worrying about the future and what lies ahead — 59%
- Health insurance or money worries — 50%
- Worrying about family, children, and/or friends — 42%
- Feeling irritable — 36%
- Feeling sad or depressed — 36%
- Feeling nervous or afraid — 34%
- Finding meaning and purpose in life — 31%
- Feeling lonely or isolated — 31%
- Feeling too tired to do things you need/want — 53%
- Thinking clearly (e.g., "chemo brain") — 51%
- Sleep problems — 50%
- Changes/disruptions in work/school/home life — 45%
- Moving around — 40%
- Pain and/or physical discomfort — 36%
- Managing side effects of treatment — 33%
- Transportation to treatment and appointments — 9%
- Eating and nutrition — 63%
- Exercising and being physically active — 55%
- Body image and feelings about how you look — 46%
- Recent weight change (gain or loss) — 34%
- Making a treatment decision — 28%
- Communicating with your doctor — 26%
- Intimacy, sexual function, and/or fertility — 30%
- Problems in relationship with spouse/partner — 20%

Legend: HCT communication | Emotional well-being | Symptom burden and impact | Body image and healthy lifestyle | Relationships and intimacy

- Top concerns included eating and nutrition (63%), worrying about the future (59%), exercising and being physically active (55%), feeling too tired (53%), and thinking clearly (51%)

Risk for Anxiety and Depression Among Ovarian Cancer Survivors

% Participants — At Risk for Depression: 37%; At Risk for Anxiety: 54%

- 54% of participants were at risk for clinically significant anxiety
- 37% were at risk for clinically significant depression

Multivariate Logistic Regression Analysis Predicting Odds of Depression Risk

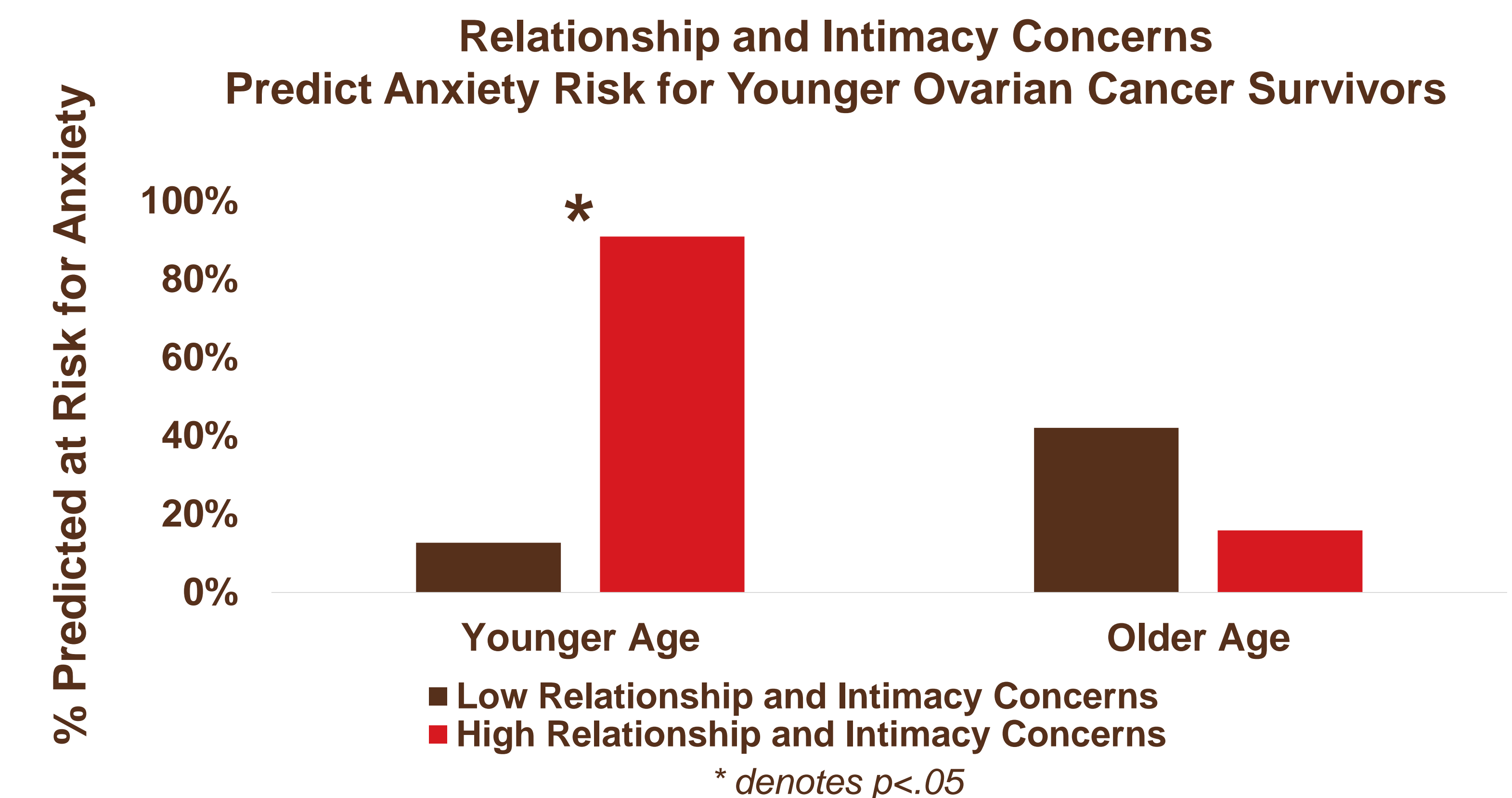| Controls	Independent Variables	Moderators
Age	HCT communication*	
Ever received hormone therapy	Relationships and intimacy	
# of comorbidities	Symptom burden and impact	
	Body image and healthy lifestyle	

* denotes p<.05 — Model: R^2=.51; p<.05

- Odds of depression risk were predicted by concerns about HCT communication (*OR*=1.59), after controlling for significant demographic/clinical variables

Multivariate Logistic Regression Analysis Predicting Odds of Anxiety Risk

Controls	Independent Variables	Moderators
Age	HCT communication*	
Ever received hormone therapy	Relationships and intimacy*	Relationships and intimacy by Age*
# of comorbidities	Symptom burden and impact	
	Body image and healthy lifestyle	

* denotes p<.05 — Model: R^2=.52; p<.05

- Odds of anxiety risk were predicted by concerns about HCT communication (*OR*=1.71) and the interaction between concerns about relationships and intimacy and age, after controlling for significant demographic/clinical variables

Relationship and Intimacy Concerns Predict Anxiety Risk for Younger Ovarian Cancer Survivors

% Predicted at Risk for Anxiety — Younger Age vs Older Age

Legend: Low Relationship and Intimacy Concerns | High Relationship and Intimacy Concerns

* denotes p<.05

- For younger survivors of ovarian cancer, odds of anxiety risk were greater among those with high relationship and intimacy concerns

Implications and Conclusions

- Concerns about health care team communication predict risk for clinically significant anxiety and depression in ovarian cancer survivors
- Additionally, concerns about relationships and intimacy predict anxiety risk for younger survivors of ovarian cancer
- Findings highlight the need for constructive patient-provider communications, focusing on relationships, sexual health, and fertility concerns

References
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CANCER EXPERIENCE REGISTRY
A PROGRAM of the CANCER SUPPORT COMMUNITY

The Cancer Experience Registry is an online research initiative that captures the immediate and ongoing or changing social and emotional experiences of cancer survivors and their caregivers.
- The Registry is for all cancer survivors and caregivers, and also includes 11 disease-specific surveys.
- Findings contribute toward advancing research, health care and policy.
- Over 13,000 cancer survivors and caregivers are registered in the Cancer Experience Registry.

Learn more or join the Registry at www.CancerExperienceRegistry.org