

Health-Related Quality of Life and Work Impairment Among Individuals Living with HER2+ Breast Cancer with Brain Metastases

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BACKGROUND

- About 1 in 5 people diagnosed with breast cancer (BC) will be considered HER2+,¹ and nearly half of those diagnosed with HER2+ BC develop brain metastases.² Brain metastases increase the risk of impairments, faster disease progression, and shorter survival time.³
- Despite the significant burden faced by people with HER2+ BC living with brain metastases (BMBC), there is little research available characterizing the unique experiences of this community.

AIMS

1. Examine the feasibility of recruiting individuals currently living with HER2+ BMBC to complete an online survey.
2. Describe participants' health-related quality of life (HRQOL) and experiences with work impairment.

METHODS

In this observational, cross-sectional study, 62 women living with HER2+ metastatic BC were recruited via advocacy partners, Living Beyond Breast Cancer and Metastatic Breast Cancer Alliance, and completed an online survey in January 2022. Participants answered questions about:

- Sociodemographic and clinical history, including history of brain metastases
- Current caregiving support received
- Physical health (PROMIS Global Physical Health 2av1.2)
- HRQOL (PROMIS-29v2.0 & PROMIS Cognitive Function 8a)
- Work impairment (WPAI-SHPv2.0)

Descriptive statistics were calculated for study variables; PROMIS measures were converted to T scores (M=50, SD=10), enabling comparisons to established population benchmarks.

Results presented in this study represent the 30 of 62 HER2+ respondents who self-reported brain metastases.

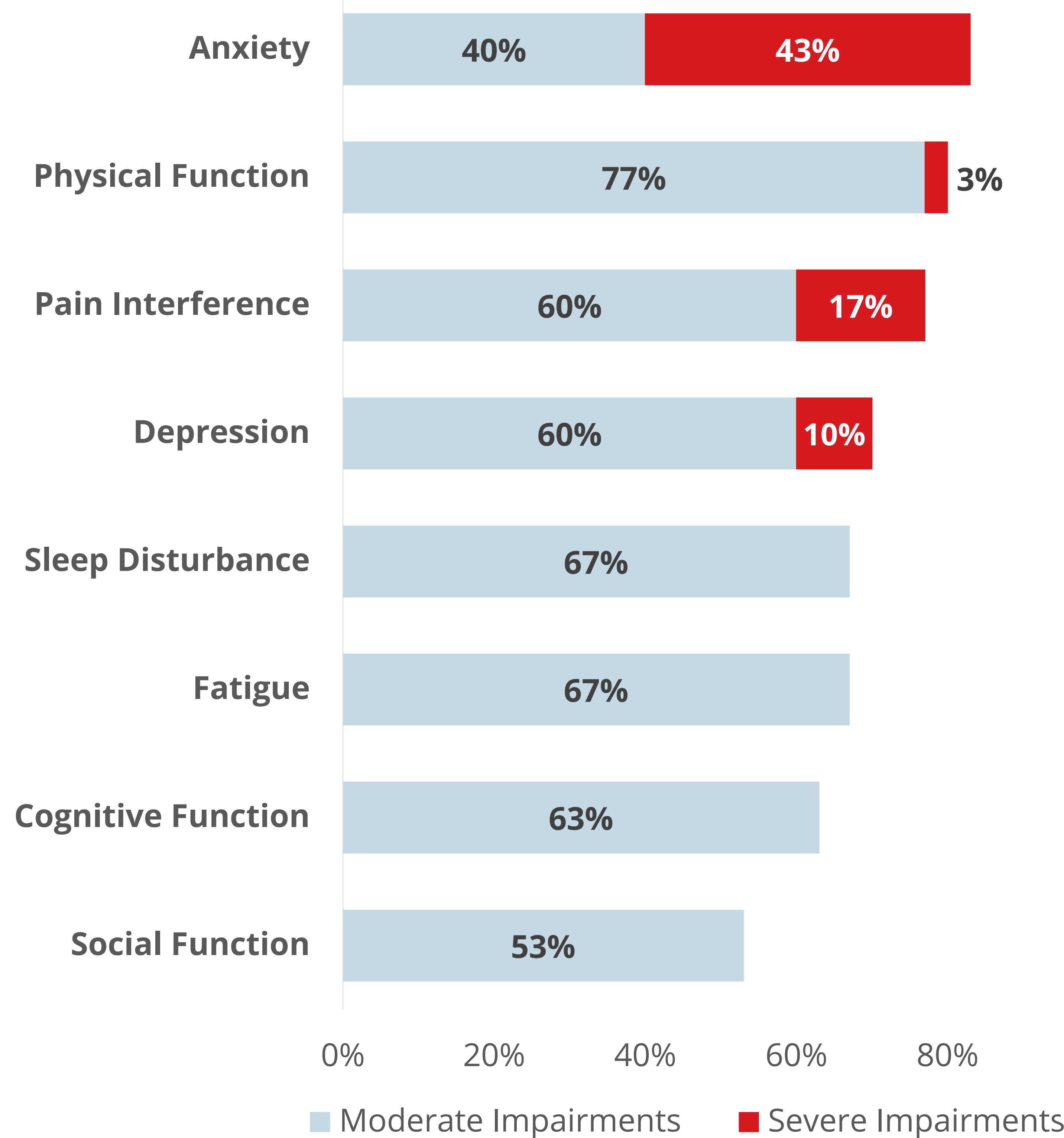
PARTICIPANTS

N = 30	M / n	Range / %
Age (years)	43	33-72
Race and ethnicity		
Hispanic, Latino, or Spanish origin	7	23%
Non-Hispanic Asian	7	23%
Non-Hispanic AIAN	1	3%
Non-Hispanic Black/African American	1	3%
Non-Hispanic White	14	47%
Years since BMBC diagnosis	2.7	<1-20
Years between diagnosis and metastatic disease onset	1.8	0-11
Educational attainment		
Some college	3	10%
College degree	17	57%
Graduate degree or higher	10	33%
Employment status		
Full-time	5	17%
Part-time/Temporary Employment	2	7%
Retired	1	3%
Not employed, disability	22	73%
Poor physical health*	15	50%

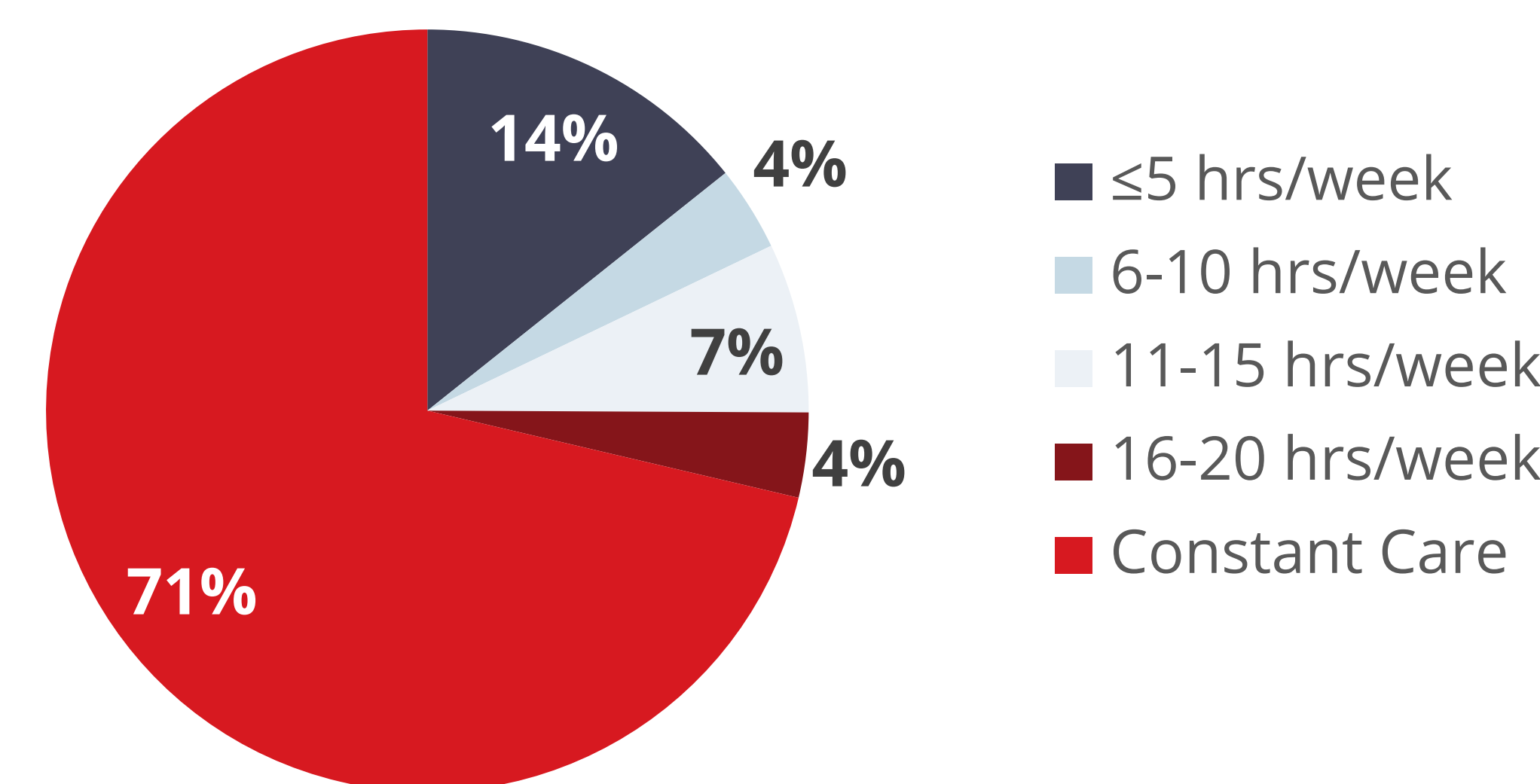
* PROMIS Global Physical Health 2av1.2 score >2 SD

RESULTS

Health-Related Quality of Life Impairments

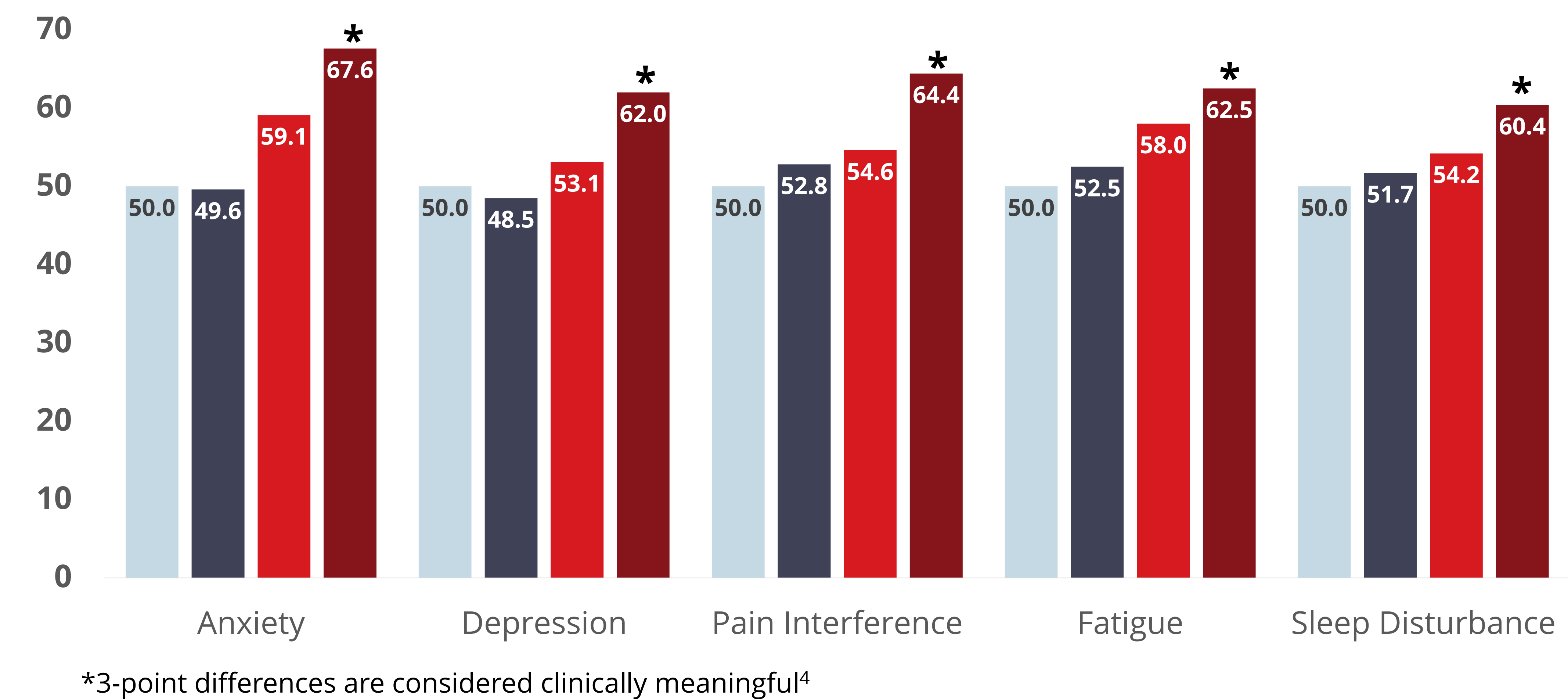


Frequency of Caregiver Support Received

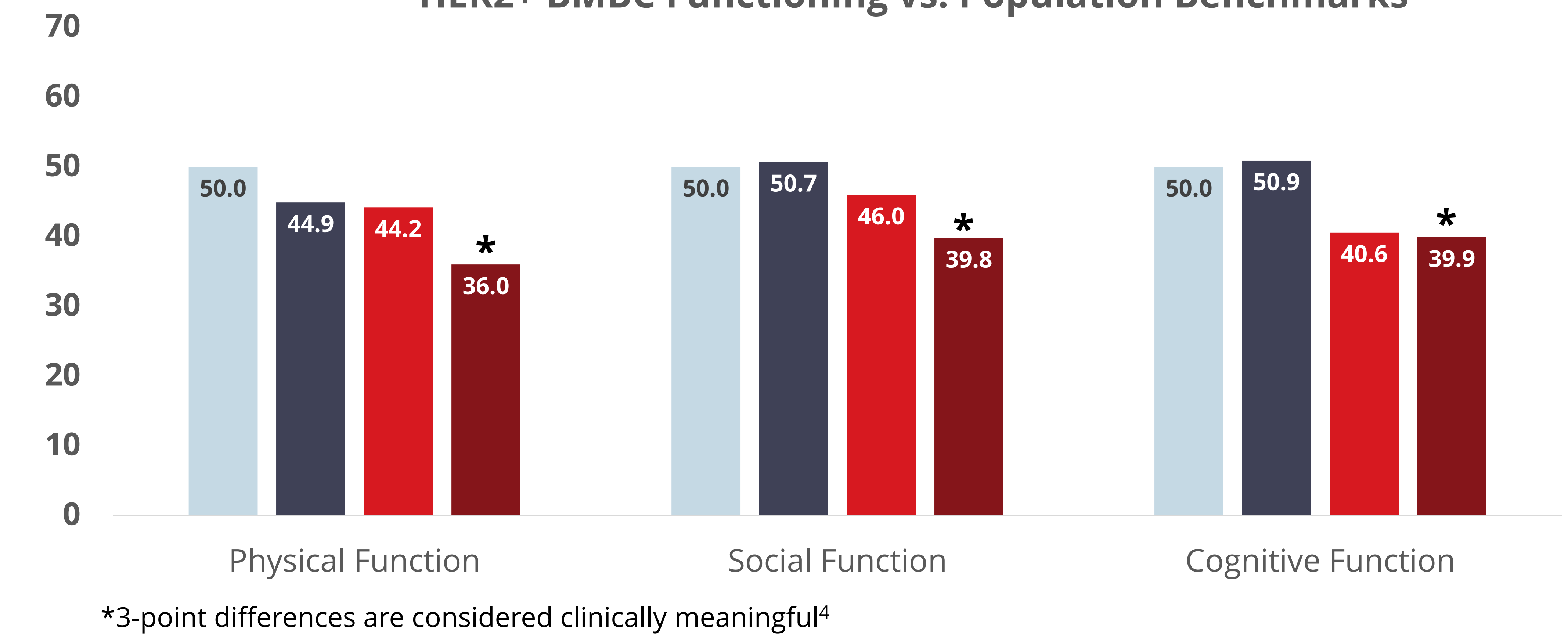


General U.S. Population Breast Cancer Population MBC without Brain Mets HER2+ BMBC Sample

HER2+ BMBC Symptom Burden vs. Population Benchmarks



HER2+ BMBC Functioning vs. Population Benchmarks



Work Impairment[†]

	Mean	Range
% Work Hours Missed	37%	14-74%
% Reduced Productivity while Working	39%	0-80%
% Overall Work Impairment	60%	39-95%

[†]n = 7/30 employed at time of the survey; 73% not employed due to disability

CONCLUSIONS AND IMPLICATIONS

- Participants living with HER2+ BMBC experienced substantial emotional, physical, social, and cognitive quality of life impairments, high work absenteeism, reduced productivity, and overall work impairment, suggesting significant unmet needs.
- Participant recruitment efforts were successful through advocacy partnerships, suggesting high feasibility of future research with larger communities of individuals living with HER2+ breast cancer with brain metastases.
- Despite the small sample size, our descriptive results indicate a clear need for supportive care programs that leverage collaborative efforts between community-based advocacy organizations and healthcare professionals to address the health-related quality of life and work impairments experienced by those living with HER2+ BMBC.

ACKNOWLEDGMENTS

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