



Distress levels vary as a function of race, ethnicity, and language preference in patients with breast cancer (ID#: 787869)

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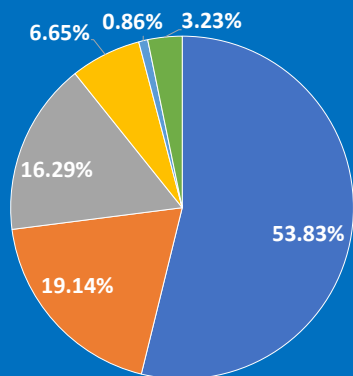
BACKGROUND AND OBJECTIVES

Distress is defined by the National Comprehensive Cancer Network as an unpleasant experience of a psychological, social, and/or spiritual nature that interferes with one's ability to cope.¹ Studies have demonstrated distress is higher among patients with cancer compared to their unaffected peers.² However, little is known regarding the difference in distress among cancer patients across races/ethnicities. Furthermore, the impact of language as a potential confounder is also poorly understood. Our objective was to assess distress levels in female breast cancer patients as a function of race, ethnicity, and preferred language. We hypothesized that minority patients and those with a preferred language other than English would have higher distress levels compared to English speakers and non-Hispanic whites.

METHODS

We conducted a retrospective observational study of all female breast cancer patients treated at an NCI designated cancer center from 2009 to 2016 who were administered a validated psychosocial distress screening questionnaire. The questionnaire consisted of 70 items evaluating 5 domains of psychosocial distress: physical, practical, emotional, functional, and substance/tobacco use. Self-reported data on race, ethnicity, and preferred language was collected.

RACIAL/ETHNIC DISTRIBUTION OF THE SAMPLE



■ Non-Hispanic White (NHW)
 ■ Hispanic
 ■ Asian
 ■ African American (AA)
 ■ Unknown

Table 1: Demographic variables of the study sample

Variable	N (%)
Age (Calculated)	
N	3156
Mean (SD)	56.3 (12.25)
Median	56
Q1, Q3	48.0, 64.0
Range	(24.0-99.0)
Education	
< Highschool	825 (26.1%)
College	1629 (51.6%)
Post college	551 (17.5%)
Unknown	151 (4.8%)
Household income	
< \$40,000	1056 (33.5%)
\$40,000 - \$100,000	694 (22%)
\$100,000+	513 (16.3%)
Unknown	893 (28.3%)
Preferred language	
English	2416 (76.6%)
Spanish	399 (12.6%)
Other	250 (7.9%)
Unknown	91 (2.9%)
Marital Status	
Married/Partnered	1034 (32.8%)
Single	767 (24.3%)
Unknown	1355 (42.9%)
Stage	
0/1	886 (28.1%)
2	948 (30%)
3	336 (10.6%)
4	130 (4.1%)
unknown	856 (27.1%)

RESULTS

Table 2: Multivariate analysis of distress domains stratified by race/ethnicity with NHW as reference group (AA African American)

Distress domain	Hispanic (N=604)	Asian (N=514)	African American (N=210)
Physical	1.2(0.96-1.49)	0.84(0.68-1.04)	1.52(1.1-2.1)
Practical	1.5(1.2-1.88)	1.12(0.91-1.39)	1.41(1.03-1.93)
Emotional	1.42(1.14-1.76)	0.92(0.75-1.14)	1.35(0.99-1.82)
Functional	1.08(0.87-1.34)	0.71(0.58-0.88)	1.3(0.96-1.76)
Overall Distress	1.41(1.04-1.9)	0.87(0.68-1.12)	1.2(0.8-1.81)

Table 3: Multivariate analysis of distress domains among Hispanic speaking patients. English speaking patients are the reference group.

Distress Domain	Spanish Speaking Hispanics
Physical	1.93(1.19-3.12)
Practical	2.66(1.59-4.43)
Emotional	1.74(1.08-2.79)
Functional	1.73(1.08-2.76)
Overall Distress	1.55(0.73-3.27)*

*Overall distress is not significantly worse due to a small sample size of Spanish speaking Hispanics in the mo-mild distress group compared to over 200 patients in the specific domains.

CONCLUSIONS

This is one of the largest studies evaluating distress in minority breast cancer patients at a single institution. Significant findings include:

- Top sources of distress in female breast cancer patients vary as a function of race, ethnicity, and preferred language
- Hispanics and African Americans experience significantly higher levels of physical, emotional and practical distress compared to NHW
- Asians experience significantly less functional distress compared to NHW
- Hispanic Spanish speaking patients experience significantly higher distress in all domains compared to their English speaking counterparts

Future studies should focus on identifying effective, culturally appropriate targeted psychosocial interventions to mitigate emotional distress levels in minority and non-English speaking patients with breast cancer

REFERENCES

¹National Comprehensive Cancer network. Distress Management (Version 2.2020). https://www.nccn.org/professionals/physician_gls/default.aspx#distress

²Miller K, Massie MJ. Depression and anxiety. Cancer J 2006;12:388-397.