

# Fear of Cancer Recurrence, Perceived Risk, Self-Efficacy and Barriers to Screening in Young Breast Cancer Survivors

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**FUNDING: MC KATAPODI, Centers for Disease Control & Prevention – SIP11-044, Grant Award: 5U48DP001901-03**

## BACKGROUND

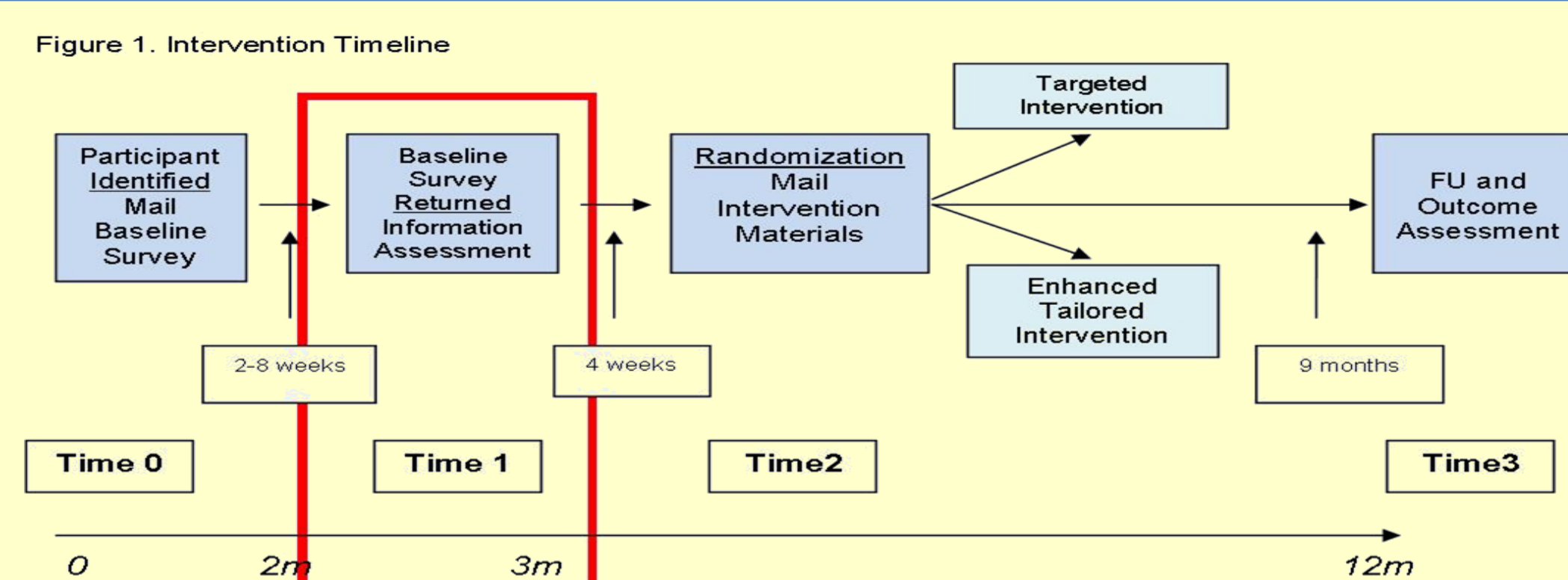
- Fear of recurrence (FoR) is a common concern among cancer survivors
- FoR may be a barrier to cancer surveillance
- Young breast cancer survivors (YBCS) have high risk for recurrence and secondary cancers
- Little is known about predictors of FoR in YBCS, and if FoR influences breast cancer surveillance in YBCS

## AIMS

1. Explore predictors of FoR that are amenable to intervention in YBCS
2. Examine associations among FoR and breast cancer surveillance

## METHODS

- Identified 3,000 YBCS (Dx. 20–45 y.o.) from the Michigan Cancer Registry
- Stratified by race (Black vs. White/Other)
- Baseline data of a randomized efficacy trial (Figure 1.)
- Established instruments using a 1 – 7 Likert scale, ranging from ‘*Strongly disagree*’ to ‘*Strongly agree*,’ assessed self-efficacy (i.e., confidence in own ability) to deal with breast cancer, family communication, family support in illness, and barriers to surveillance
- Perceived risk of getting another cancer was assessed with a 1 – 10 scale using five verbal anchors ranging from ‘*Definitely will Not*’ to ‘*Definitely Will*’
- FoR was assessed using a 1-7 Likert scale ranging from ‘*Not at all/Never*’ to ‘*All the time/A great deal*’
  1. How much time do you spend thinking that your breast cancer could come back?
  2. How much does thinking that your breast cancer could come back upset you?
  3. How often do you worry that your breast cancer could come back?
  4. How afraid are you that your breast cancer may come back?



## DEMOGRAPHICS

Table 1	Total N=859	White/ Other (n=519)	Black (n=340)
Age (yrs)	51 +/- 6		
Education***			
High school or less	23%	19%	30%
Some college	38%	38%	37%
College graduate	39%	43%	33%
Household income***			
Less than <\$40,000	24%	21%	55%
\$40,000-\$79,999	32%	35%	28%
\$80,000+	24%	44%	17%
Has medical insurance**	94%	95%	91%
Has usual source of care*	95%	96%	92%
Did not seek care because of cost***	18%	13%	25%
Time since diagnosis (yrs)	11 +/- 4		
Has multiple cancer diagnoses***	22%	27%	14%
Had bilateral mastectomy***	19%	23%	11%
Tested negative for BRCA1, BRCA2, Chek2, PTEN, p53, ATM, STK11, CDH1 mutation***	20%	25%	12%
Had diagnosis of Depression	30%	30%	30%
Had diagnosis of Anxiety	30%	31%	27%

Table 2	Total	White/ Other	Black
Fear of Recurrence	3.5 +/- 1.8	3.4 +/- 1.6	3.6 +/- 2.0
Perceived risk-another cancer	4.8 +/- 2.5	5.3 +/- 1.2	5.3 +/- 1.2
Self efficacy-breast cancer**	5.7 +/- 1.2	5.8 +/- 1.1	5.6 +/- 1.3
Family communication	5.3 +/- 1.2	5.3 +/- 1.2	5.3 +/- 1.3
Family support in illness***	5.8 +/- 1.2	5.9 +/- 1.1	5.7 +/- 1.3
Screening Behavior			
≥ 1 CBE past 12m	88%	88%	88%
≥ 1 mammog. past 12m***	89%	91%	86%
Barriers to Mammography			
Worry of finding cancer	3.3 +/- 1.6	3.2 +/- 1.5	3.4 +/- 1.8
Influence of others***	2.1 +/- 1.2	2.3 +/- 1.2	1.9 +/- 1.1
No benefits***	1.9 +/- 1.1	2.1 +/- 1.2	1.8 +/- 0.9
Lack of information	1.8 +/- 0.9	1.8 +/- 0.9	1.9 +/- 1.0
Access	1.6 +/- 1.1	1.6 +/- 1.0	1.7 +/- 1.2
Uncomfortable/unpleasant	1.5 +/- 0.8	1.4 +/- 0.7	1.5 +/- 0.9
Susceptibility to cancer	1.5 +/- 0.7	1.4 +/- 0.7	1.5 +/- 0.7

\*p<.05; \*\* p<.01; \*\*\* p<.001

## RESULTS

- A linear regression model predicted 35% in the variance of FoR (Table 3)
- Figure 2 shows that higher FoR was associated with being Black, had been diagnosed with anxiety, lower education. Testing negative for a mutation was associated with lower FoR
- Stressors, i.e., perceived risk for another cancer and worry finding cancer with screening increased FoR. Availability of coping resources, i.e., self-efficacy dealing with cancer decreased FoR (Figure 2)
- FoR correlated with frequency of CBE but not with frequency of mammograms (Table 4)

Table 3	R = .59	R <sup>2</sup> = .35	F (25, 561) = 12.10	p< .000
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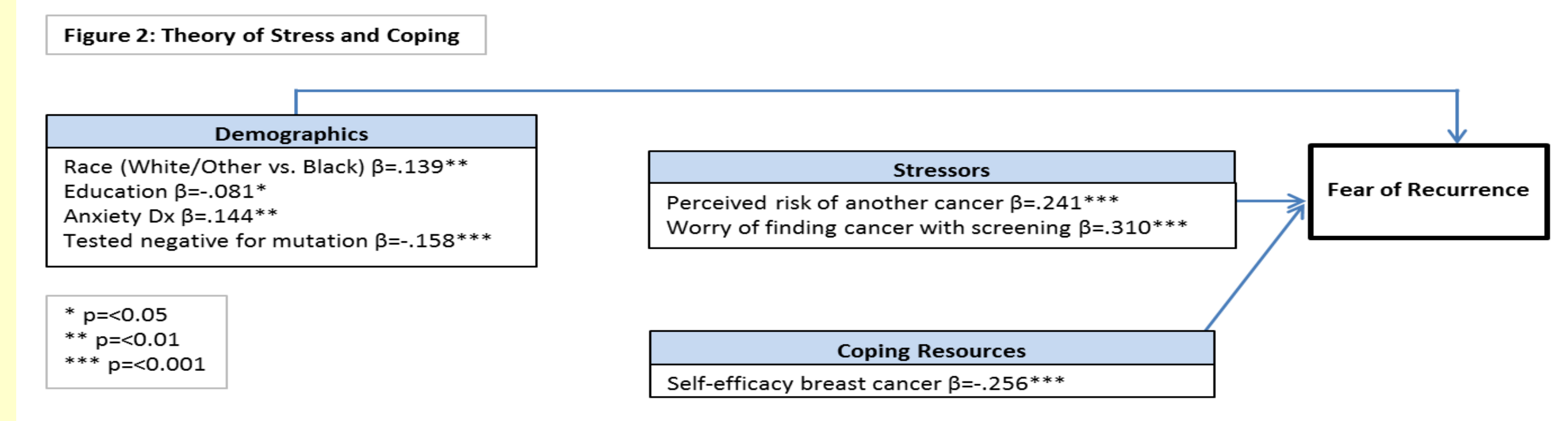


Table 4	Frequency of CBE	Frequency of Mammography
Fear of Recurrence	r= .104, p= .003	r= .027, p= .444

## CONCLUSIONS

- Higher perceived risk for breast cancer, worry about finding cancer with screening, and lower self-efficacy predicted higher FoR
- Black women were more likely to report higher FoR; although there was no significant difference in FoR between Black and White/Other YBCS in this large statewide sample
- White/Other women were more likely to report having bilateral mastectomy, fewer barriers accessing care, higher self-efficacy dealing with breast cancer, and a mammogram during the past 12 months
- FoR may influence adherence to screening recommendations for YBCS

## ACKNOWLEDGEMENTS

MDCH: Wendy Stinnett, Jenna McClosky, CGC, Glenn Copeland, MBA  
UM: Sonia Duffy, PhD, RN, FAAN; Scott Roberts, PhD; Jennifer Griggs, MD, MPH; Emily Mancewicz, BSN