



Fertility concerns among young women with breast cancer do not appear to vary by race

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BACKGROUND

The majority (51-80%) of young breast cancer patients have fertility concerns and that physicians lack awareness of fertility issues and options for addressing them. Few studies have examined how fertility concerns and access vary based on patient race.

METHODS

Women ≤ 40 years with non-metastatic breast cancer who underwent surgery at the University of Chicago 4/1/2020 – 10/1/2020 were retrospectively identified and mailed a survey assessing their pre-treatment fertility concerns, whether those concerns were addressed, and whether they received fertility counseling or preservation. Survey responses and patient and tumor characteristics were compared between White women and Black/African-American women with Wilcoxon signed-rank test and Fisher's Exact test.

RESULTS

- 39 eligible patients were mailed surveys
- 28 responded (71% response rate)
- No statistically significant differences between the two races in age at diagnosis, disease stage, tumor subtype, type of surgery, receipt of chemotherapy, receipt of ovarian function suppression, insurance status, or whether or not the respondent had biologic children.

Table 1: Participant characteristics

	All (= 28)*	Black (= 8)	White (=20)	p
Age	34.5 ± 3.8	36.6 ± 3.3		0.16
Insurance				0.06
Private	24	5	19	
Medicare/medicaid	4	3	1	
Highest education at diagnosis				0.08
Less than high school	0	0	0	
High school	2	2	0	
College	12	2	10	
Graduate School	14	4	10	
Marital status				0.02
Married or in a relationship	23	4	19	
Single	5	4	1	

Table 2: Fertility concerns by race among young women with non-metastatic breast cancer

	All (n = 28)*	Black (n = 8)	White (n = 20)	p
Fertility concerns				0.4
Not at all	11	2	9	
Somewhat or very	15	6	9	
No response	2	0	2	
Difficulty getting pregnant				1
Yes	3	1	2	
No	22	7	15	
Biologic children at time of diagnosis				0.54
Yes	25	8	17	
No	3	0	3	
Desire to have future children				0.02
Yes	8	5	3	
No or unsure	20	3	17	
Surgeon addressed fertility concerns				0.36
Yes or not needed	17	4	13	
No	8	4	4	
Met with fertility specialist				0.75
Yes	7	3	4	
No	18	5	13	
Unsure	1	0	1	
Fertility concerns addressed				0.2
Not at all or insufficiently	8	4	4	
Sufficiently	18	4	14	

*Totals not equalling 28 represent missing data

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RESULTS

Of the 15 patients who reported fertility concerns at the time of diagnosis:

- Eight (53%) said their concerns were addressed by their surgeon
- Seven (47%) met with a fertility specialist
- Five (33%) underwent fertility preservation; three of these women were white and two were black
- Nine (60%) said their fertility concerns were overall sufficiently addressed
- Of the seven women with fertility concerns who met with a fertility specialist, only one patient reported partial satisfaction due to "financial reasons." All others felt their concerns were adequately addressed.
- Four patients with fertility concerns reported that their fertility concerns were not at all addressed; none of these patients reported fertility counseling from the surgeon or a fertility specialist

A significantly higher proportion of black patients than white patients were single and reported wanting future biologic children, but this did not translate to a higher rate of receiving fertility counseling from a specialist.

CONCLUSIONS

The majority of young women had fertility concerns at the time of their breast cancer diagnosis. Approximately half those with fertility concerns met with a fertility specialist and reported satisfaction with fertility issues. We did not observe outright racial differences in fertility concerns or access to fertility counseling. More data may be needed to detect subtler differences that may explain the equivalent rate of access to fertility counseling despite more black patients wanting future children.

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