



Should Place of Death be Added to the Index of Disparities Between Black and White Breast Cancer Patients?

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Background

Rises in hospital deaths and reductions in home deaths began to raise concern in the mid-late 1900s.

In 1982, 74% of deaths occurred in institutions, and the majority were in hospitals (Field et. al 1997).

National shift from an “artificial” death → a “good” death.

Medicare began to cover hospice in 1983.

The majority of people prefer to die at home (De Roo et. al 2014).



Background

Hospice and home deaths have become more popular given

- More comfort and autonomy
- Lower rates of PTSD among caregivers
- Better symptom management

But unfortunately, place of death can vary according to age, urbanization level, marital status, race/ethnicity, and even cancer type (Chino et. al 2018).



Background

Black women continue to face breast cancer disparities including more aggressive histology, earlier onset of diagnosis, higher mortality, and risk of racial bias from providers and treatment that does not match the standard of care (Daly et. al, 2015).

Project aim: Investigate place of death among patients who died of breast cancer to identify any disparities between Black and white women.

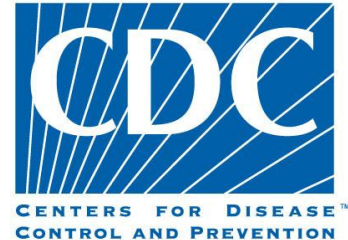


Methods

We used publicly available data from the CDC WONDER comprehensive database to look at place of death trends between 1999 and 2019 among patients who died of breast cancer.

Inclusion criteria:

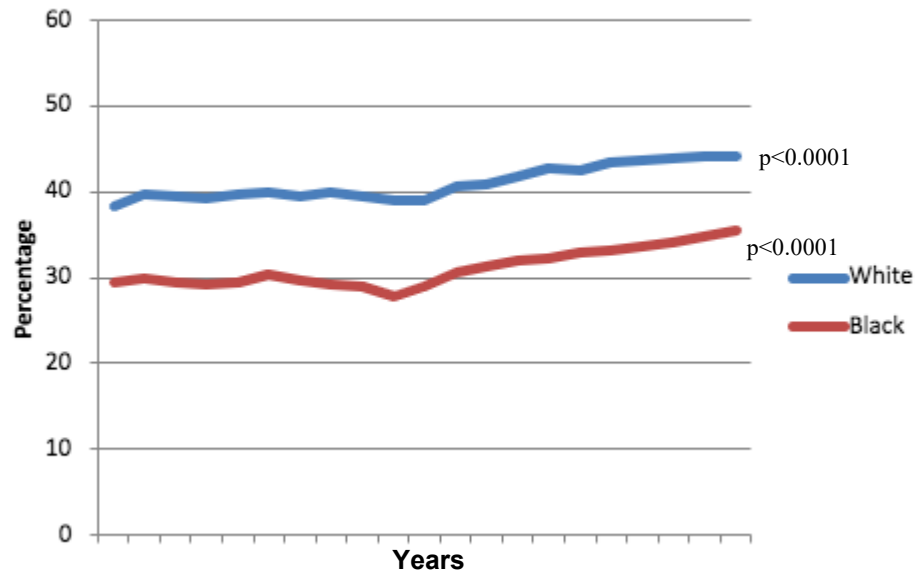
- Female
- Primary breast cancer death
- Died at home, hospice, or hospital
- White or Black



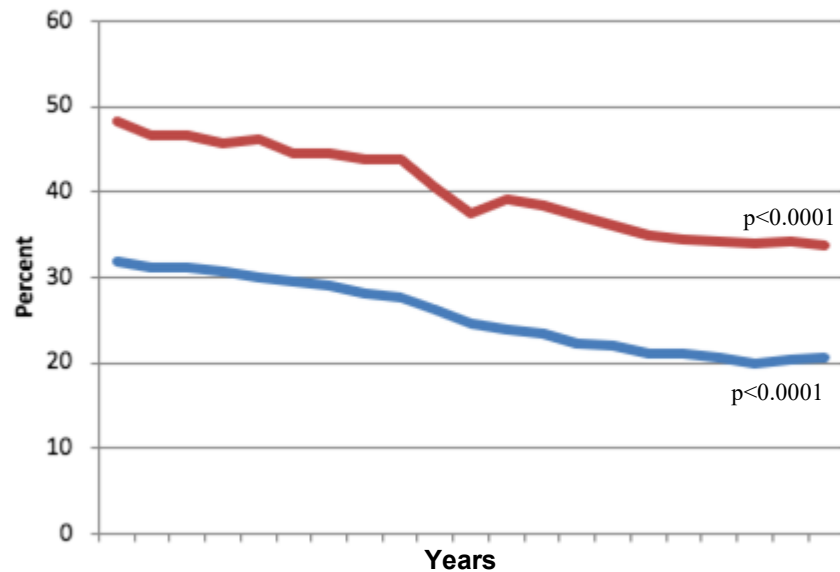
Linear regression and chi-squared statistical tests were done to determine significance.

Results

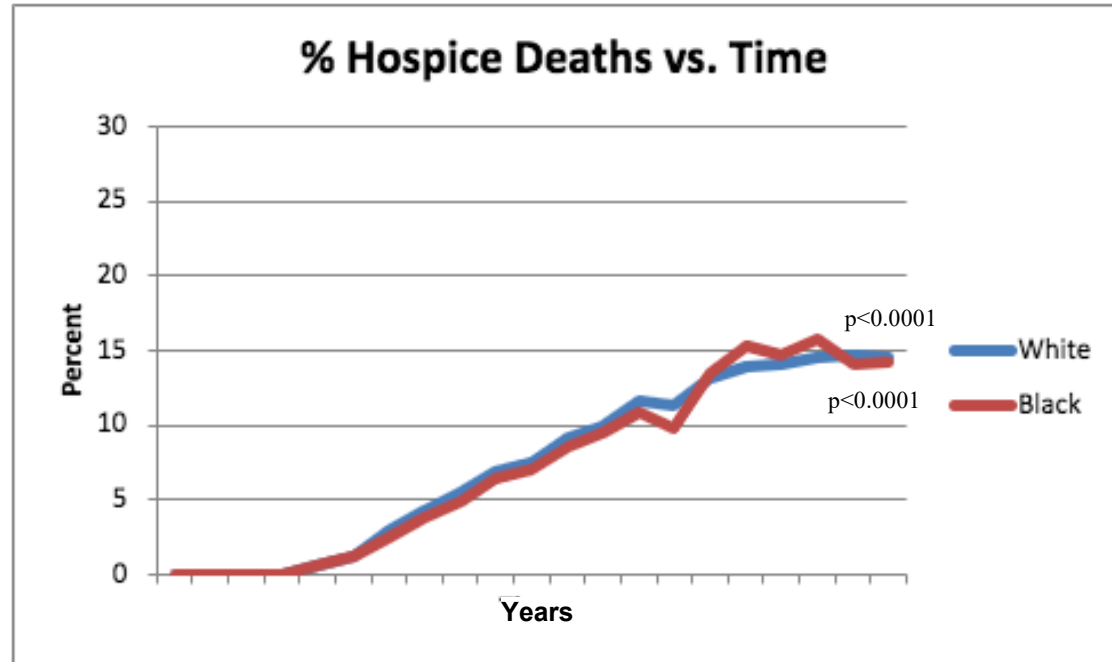
% Home Deaths vs. Time



% Hospital Deaths vs. Time

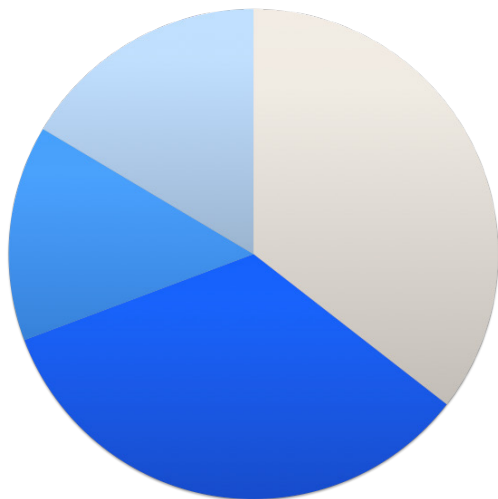


Results

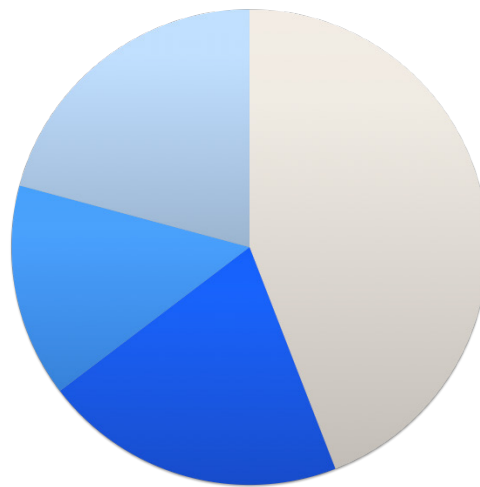


Results

Black Women in 2019



White Women in 2019



■ Home
■ Hospital
■ Hospice
■ Other

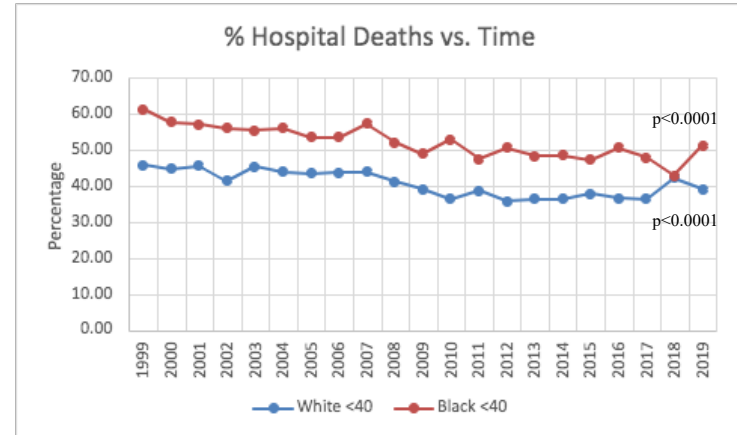
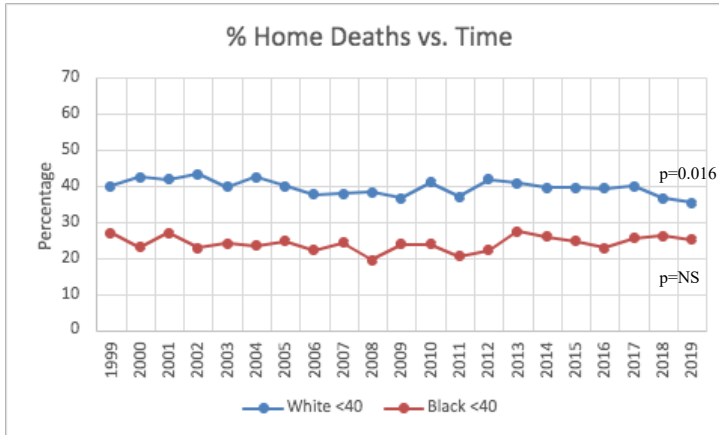
In 2019, white women with breast cancer were 1.24x more likely than Black women to die at home .

In 2019, Black women were 1.65x more likely than white women to die in the hospital.

Results

We also analyzed a subset of women with breast cancer under 40 given the correlation between young age and more aggressive pathology (Fabiano et. al 2020).

Unsurprisingly, disparities were worse within this subset; young white women were 1.40x more likely to die at home than young Black women.





Conclusions

While overall, home and hospice deaths are increasing and hospital deaths are decreasing, there is still a concern for Black patients with cancer not experiencing the same quality of end-of-life care.

Place of death disparities indeed exist between Black and white women with breast cancer, and have persisted in the last two decades.

In comparison, Black women are dying more in the hospital and white women are dying more at home.



Conclusions

Possible reasons for place of death disparities include

- Inaccurate prognosis

- Delayed conversations about palliative care

- Lack of access to healthcare resources

- Differing cultural beliefs

- Medical mistrust

- Availability of familial support for home death

- Desire for more aggressive end-of-life care



Conclusions

Limitations of the study include

- Potential inaccuracy of death certificate data

- Hospice death trends only available from 2003 to 2019

- No data on patient preferences

- No data on stage of diagnosis or cancer treatment

Conclusions

More research is needed to elucidate the reasons for these place of death disparities, as well as public health efforts to address them.

Solutions include

- More effective physician-patient communication

- ~Identify and fulfill patient specific goals of care

- Enhanced patient education

- Increased access to healthcare

- Better prognostic tools for breast cancer





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