Introduction

Disparities in breast cancer diagnosis, treatment, and outcomes. We seek to determine if socioeconomic and geographic disparities exist nationally in immediate reconstruction type after mastectomy.

Methods

This retrospective study compares socioeconomic and geographic features for 14,986 women who underwent mastectomy in 2008 using the Nationwide Inpatient Sample (NIS), an all-payer stratified statistical sample of all US hospital discharges. Statistical analysis was performed to understand variations between three groups: patients without reconstruction (NR), patients who underwent breast implant/tissue expander reconstruction (TE), and patients with advanced reconstruction techniques such as free or pedicled flaps (FLAP).

Results

The majority of women (63%) had no reconstruction (NR), while 25.3% had TE and 12% underwent FLAP. Compared to patients with NR, women with TE or FLAP were younger (64.9 years vs. 51.3 & 51.1 years, p<0.001), had fewer chronic conditions (3.85 vs. NR), patients who underwent breast reconstruction were more likely to have private insurance (81.1%), than TE (80.1%) and NR (35.2%) while women without reconstruction were more likely to have Medicare and Medicaid insurance. Compared to NR, those undergoing reconstructions were more likely to live in zip codes with higher average incomes and more likely to live in or near a major city (>1 million people).

The states with the highest rates of mastectomy without reconstruction of the breast include Hawaii, South Dakota, Vermont, and Wyoming (all 100%). The states with the highest rates of reconstruction with tissue expander/implants are Colorado (41.0%), Massachusetts (38.5%), Tennessee (36.9%), and Connecticut (35.6%). The states with the highest rates of FLAP reconstruction are New Hampshire (52.9%), Kansas (22.6%), New York (20.9%), and New Jersey (20.0%).

Conclusion

This is the first national study analyzing patients of all insurance types and regions of the US to show statistically significant disparities in the type of immediate reconstruction after mastectomy based on age, race, insurance type, and geographic location.

Disclosures

The authors have no financial disclosures.