Mammography use and association with social determinants of health and health-related social needs among women — United States, 2022

Jacqueline W. Miller, MD[1]; Jessica A. King, MPH[1]; Katrina F. Trivers, PhD[1]; Machell Town, PhD[2]; Susan A. Sabatino, MD[1]; Mary Puckett, PhD[1]; Lisa C. Richardson, MD[1]

[1]Division of Cancer Prevention and Control, National Center for Chronic Disease Prevention and Health Promotion, CDC; [2]Division of Population Health, National Center for Chronic Disease Prevention and Health Promotion, CDC

Background/Objective

- More than 40,000 U.S. women die from breast cancer each year.
- Mammography is recommended to screen for breast cancer and reduce breast cancer mortality.
- Understanding the impact of social determinants of health (SDOH) and health-related social needs (HRSNs) on mammography use could help improve cancer control efforts to reduce breast cancer deaths.
- This study assessed the association between mammography use and a comprehensive list of specific SDOH and HRSNs.

Methods

- Data from the 2022 Behavioral Risk Factor Surveillance System were analyzed to estimate the prevalence of mammography use in the past 2 years among women aged 40–74 years by state, age group, and sociodemographic factors.
- Association between mammography use and measures of SDOH and HRSNs was assessed for states that administered the Social Determinants and Health Equity module.

Association of SDOH and HRSNs with not having a mammogram within the previous 2 years

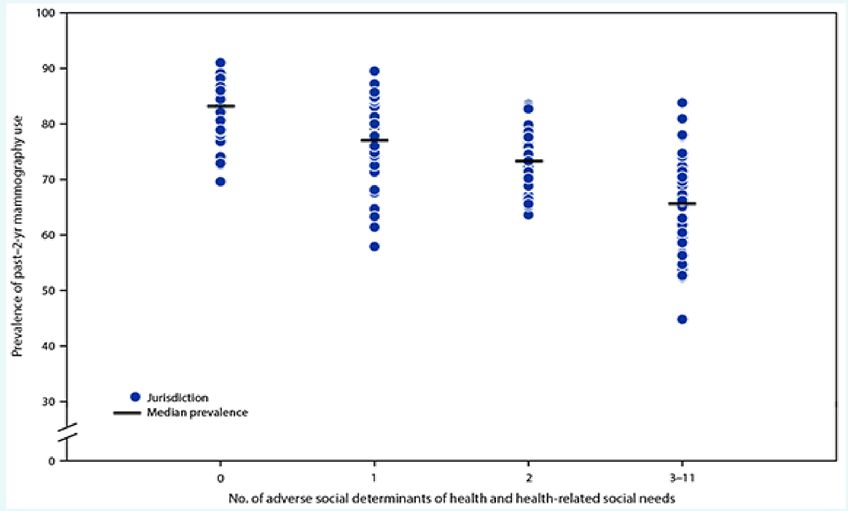
Adverse SDOH and HRSNs	Aged 50–74 years	
	OR (95% CI)	p-value
Life dissatisfaction	1.47 (1.20–1.81)	<0.001
Lack of social and emotional support	1.09 (0.96–1.24)	0.18
Feeling socially isolated	1.19 (1.07–1.32)	0.002
Lost or reduced hours for employment	1.20 (1.01–1.43)	0.04
Receiving food stamps (SNAP)	1.29 (1.10–1.52)	0.002
Food insecurity	1.19 (0.99–1.42)	0.06
Housing insecurity	1.02 (0.82–1.26)	0.88
Experiencing threat to shut off utility services	1.24 (0.97–1.58)	0.09
Lack of reliable transportation	1.29 (1.06–1.56)	0.01
Mentally distressed	1.00 (0.86–1.15)	0.96
Cost is barrier to health care access	2.11 (1.80–2.47)	0.00

§Significantly associated with not having had a mammogram within the previous 2 years if p<0.05.

Results

- State-level mammography use ranged from 64.0% to 85.5% for women aged 50–74 years.
- Having health insurance and a personal health care provider were associated with having had a mammogram in the past 2 years.
- Among women aged 50–74 years, mammography prevalence was 83.2% for those with no SDOH and HRSNs.
- Among those reporting one, two, or 3–11 SDOH or HRSNs, the mammography prevalences were 77.1%, 73.3%, and 65.7%, respectively.
- Life dissatisfaction, feeling socially isolated, experiencing lost or reduced hours for employment, receiving food stamps, lack of reliable transportation, and cost as a barrier for access to care were all strongly associated with not having had a mammogram in the past 2 years.

Percentage of women aged 50–74 years who reported having had a mammogram within the previous 2 years by number of reported SDOH and HRSNs and jurisdiction*



* Data available for 39 states (Alabama, Alaska, Arizona, California, Connecticut, Delaware, Florida, Georgia, Idaho, Indiana, Iowa, Kansas, Kentucky, Maine, Maryland, Massachusetts, Michigan, Minnesota, Mississippi, Missouri, Montana, Nebraska, Nevada, New Hampshire, New Jersey, New Mexico, North Carolina, Ohio, Oklahoma, Rhode Island, South Carolina, Tennessee, Texas, Utah, Vermont, Washington, West Virginia, Wisconsin, and Wyoming) and the District of Columbia.

Conclusion

- The more health related social needs a woman has, the less likely she is to get a mammogram.
- Identifying specific SDOH and HRSNs that individual women experience, and coordinating efforts between health care, social services, community organizations, and public health to provide services that help address these needs might improve mammography use and ultimately decrease breast cancer deaths.



Unmet social needs can lower a woman's chance of being up to date with her mammogram

Reference

Miller JW, King JA, Trivers KF, Town M, Sabatino SA, Puckett M, Richardson LC. Vital Signs: Mammography use and association with social determinants of health and health-related social needs among women — United States, 2022. MMWR Morb Mortal Wkly Rep 2024;73(15):351-357.

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