

**Consortium on Law and Values in Health, Environment & the Life Sciences
Award Report for the 2019-20 Academic Year**

“The effects of a pre-existing diagnosis of mental illness on breast cancer diagnosis, treatment quality, self-reported experiences, and survival.”

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Project Summary

Background

People with a mental illness die 8-25 years earlier than people without a mental illness. Among women, decreased life expectancy is partially due to higher mortality from breast cancer; women with mental illnesses experience up to 367% increased hazards of mortality after breast cancers compared to women without mental illnesses. Yet, with timely detection and appropriate treatment breast cancer is very survivable.

This research focuses on how a pre-existing diagnosis of mental illness affects breast cancer outcomes across the cancer continuum, focusing on differences in stage of diagnosis, receipt of guideline-concordant care, and survival. I also examine whether outcomes vary by type and severity of mental illness. Finally, I evaluate whether the impact of mental illness varies by race, arguing that having marginalized identities associated with multiple forms of oppression may worsen outcomes.

Breast cancer and mental illness are both common illnesses facing older women in the United States. This work provides new insights into issues of equity around breast cancer outcomes for older women with mental illnesses and provides entry points for considering interventions that will improve outcomes.

Results

At this point, Aims 1-3 have been completed. Aim 4 is currently in hiatus as I have left the University of Minnesota and have accepted a position in the Cancer Prevention Fellowship Program at the National Cancer Institute.

Aim 1: Stage of diagnosis.

Status: All planned analyses completed.

Planned and completed outcomes:

1. Completed oral presentation: Bhattacharya, M., Parsons, H., McAlpine, D. “Work in progress--Delays in Breast Cancer Diagnosis Associated with Having a Pre-Existing Mental Illness in Older Women.” Work in Progress Presentation. 15th Annual UMN Women’s Health Research Conference: Stigma, Racism, and Women’s Health. January, 2021. Virtual due to COVID-19.

2. Poster: Bhattacharya M., Parsons, H., McAlpine, D., "Pre-existing mental illness and stage of breast cancer diagnosis." 25th NIMH Conference on Mental Health Services Research. August 2022.
3. Manuscript under review: **Bhattacharya**, Parsons, Blaes, Call, Shippee, Mortimer, McAlpine. "Impact of a pre-existing diagnosis of mental illness on AJCC stage of breast cancer diagnosis in older women." Breast cancer research and treatment. Under Revise and Resubmit, 9/2022.

Aim 2: Quality of treatment

Status: All planned analyses completed.

Planned and completed outcomes:

1. Manuscript in preparation: **Bhattacharya**, Parsons, Blaes, Call, Shippee, Mortimer, McAlpine. "Impact of a pre-existing diagnosis of mental illness on breast cancer treatment completion in older women." Possible target journal: JAMA Oncology.
2. Poster: **Bhattacharya, M.**, Parsons, H., Call, K., Mortimer, J., McAlpine, D. "Impact of a pre-existing diagnosis of mental illness on breast cancer treatment completion in older women." American Society of Clinical Oncology Quality Care Symposium 2022. September 2022.

Aim 3: Survival

Status: all planned analyses completed

Planned and completed outcomes:

1. Manuscript in preparation: **Bhattacharya**, Parsons, Blaes, Call, Shippee, Mortimer, McAlpine. "Impact of a pre-existing diagnosis of mental illness on survival after breast cancer in older women." Target Journal: Cancer survivorship.
2. Poster: **Bhattacharya, M.**, Parsons, H., Call, K., Mortimer, J., McAlpine, D. "The effect of pre-existing mental illness on survival after breast cancer in older women." AcademyHealth Annual Research Meeting 2022, June, 2022.

Aim 4:

Status: Stalled. Little/no progress has been made on Aim 4 as I have spent my efforts publishing what is currently finished. I still hope, once the current planned papers are in the publication process, to return to this Aim.

Future project plans

Funding for this helped me gain the skills required to be able to work more with claims data, cancer registry data, and health equity in cancer outcomes. Currently I have proposed and am working on a project with SEER data at my current position that utilizes similar methodology and data to look at associations between a broad set of area-level social determinants measures and cancer outcomes, focusing on health equity in the cancer continuum.