Study finds education and navigation increase cancer genetic counseling and/or testing

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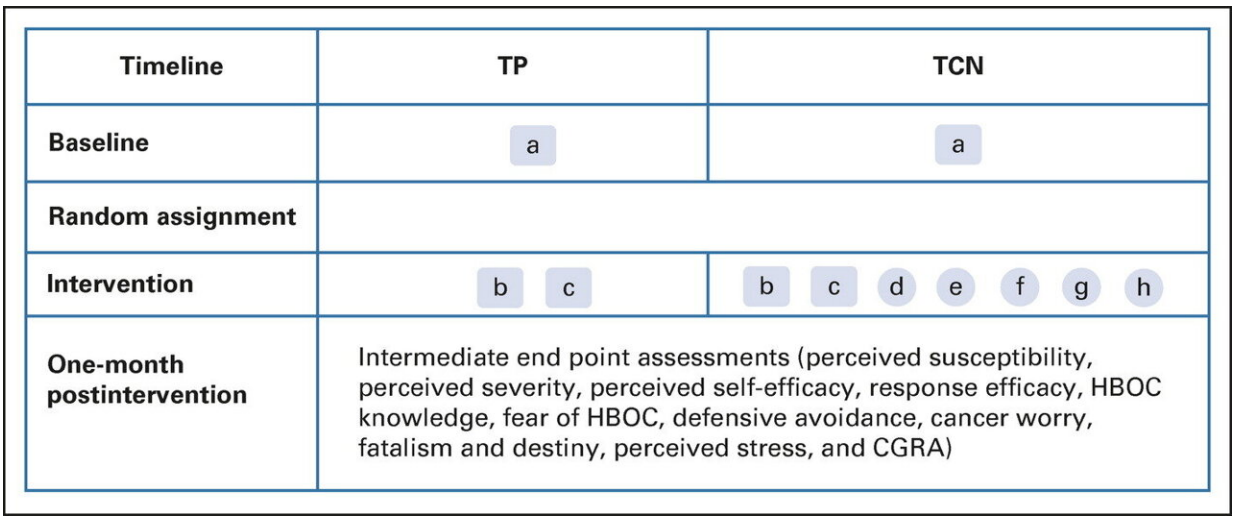

Graphical depiction of TP and TCN interventions. (a) Baseline survey, which captured sociodemographic information (age, rural status, etc), self-reported health status, cancer diagnosis, health literacy, number of living first degree relatives, cancer worry, perceptions of threat and efficacy, presence of a primary care provider and/or cancer care provider, history of provider CGRA recommendation, genetic counseling, genetic testing, barriers, and facilitators; (b) notification letter indicating random assignment and next steps; (c) mailed educational brochure; (d) sealed envelope of visual aids sent by mail; (e) TCN telephone session with a cancer education specialist addressing perceived hereditary breast and ovarian cancer risk, threat, response efficacy, and self-efficacy; creation of action plan to obtain CGRA; and navigation assistance to overcome specific barriers to CGRA; (f) mailed tailored summary letter of TCN telephone session and outlined the participant's stated initial steps to getting

CGRA. With the participants permission, a copy was mailed to the patient's provider; (g) mailed tailored reminder card detailing genetic counseling and genetic testing action plan; and (h) follow-up call from cancer education specialist (for those who verbally consented to a call at the end of the initial TCN session). CGRA, cancer genetic risk assessment; HBOC, hereditary breast and ovarian cancer; TCN, tailored counseling and navigation; TP, targeted print. Credit: *Journal of Clinical Oncology* (2023). DOI: 10.1200/JCO.22.00751

Genetic counseling and genetic testing for mutations in certain genes such as BRCA1 and BRCA2 genes—can help people understand their risk of certain types of cancer that can run in families, and improve outcomes through prevention, early detection, and targeted treatments.

National guidelines recommend cancer genetic risk assessment (CGRA) for all women with epithelial ovarian, fallopian tube, primary peritoneal, and high-risk breast cancer; however, many patients who meet national criteria have not had genetic counseling and/or testing, with the lowest rates among minority, rural, and other underserved populations. Thus, they and their family members are unaware of their hereditary cancer risk.

Researchers at Rutgers Cancer Institute of New Jersey explored informing patients of their potentially increased risk for generically inherited cancers and navigating them to receive a CGRA (genetic counseling and/or testing) through phone-based decision coaching and navigation. The project, called the Genetic Risk Assessment for Cancer Education and Empowerment (GRACE):

- Leveraged statewide cancer registries as a low-cost approach to deliver a remote, telehealth intervention for ethnically and geographically diverse high-risk cancer survivors
- Included a diverse sample of participants from underserved

populations, utilizing the New Jersey State Cancer Registry, which, under the direction of Rutgers Cancer Institute and the NJ Department of Health, is a local and national resource for population-based studies into the causes, treatments and outcomes in patients with cancer and for informing them about and recruiting them to intervention trials.

Findings

The findings are published in the *Journal of Clinical Oncology*. Investigators found that the expanded use of a personalized remote risk communication intervention increased CGRA uptake among women at increased risk of hereditary breast and ovarian cancer.

"The results from our study support the expanded use of personalized remote risk communication and navigation interventions such as our GRACE Project's intervention, to increase genetic counseling and testing," said the study's lead author Anita Kinney, Ph.D., director of the Cancer Health Equity Center of Excellence at Rutgers Cancer Institute and Rutgers School of Public Health, associate director for Population Science and Community Outreach at Rutgers Cancer Institute and professor of biostatistics and epidemiology at Rutgers School of Public Health.

"Our novel approach to patient education and empowerment combined with navigation creates a promising approach to enhance motivation and remove barriers to potentially lifesaving cancer genetic services, including in historically underserved populations."

"Statewide, population-based cancer registries serve as a key resource for this type of research—often the basis for recruiting a large-enough study sample that is both geographically and ethnically diverse," said study author Antoinette Stroup, Ph.D., research member at Rutgers

Cancer Institute of New Jersey and Assistant Director of Research and Catchment Data at the Cancer Health Equity Center of Excellence, and director of the New Jersey State Cancer Registry (NJSCR).

"Breast cancer is still the leading cancer diagnosed among women in the U.S. This study undoubtedly provides much needed data-driven, evidenced-based strategies to aid future patient outreach in the area of genetic counseling and testing, which could lead to significant progress in addressing this cancer burden."

More information: Anita Y. Kinney et al, Improving Uptake of Cancer Genetic Risk Assessment in a Remote Tailored Risk Communication and Navigation Intervention: Large Effect Size but Room to Grow, *Journal of Clinical Oncology* (2023). DOI: 10.1200/JCO.22.00751

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