Text Messaging May Improve Abnormal Mammogram Follow-Up in Latinas

Ingrid Oakley-Girvan, PhD, MPH, BS, Carlos Londono, MD, Alison Canchola, MS, and Sharon Watkins Davis, MPA

Oakley-Girvan is a research scientist II at the Cancer Prevention Institute of California in Fremont; Londono is the director of health education at the Tiburcio Vasquez Health Center in Hayward, CA; and Canchola is a biostatistician IV and Davis is a research associate IV, both at the Cancer Prevention Institute of California.

Purpose/Objectives: To develop and pilot test a text message notification process to reduce follow-up time for women with abnormal mammograms.

Design: Formative analysis; randomized trial with delayed intervention control group.

Setting: Tiburcio Vasquez Health Clinic (TVHC), a federally qualified health center in Hayward, California.

Sample: 29 Spanish-speaking Latinas with abnormal mammograms.

Methods: A Spanish text message was developed based on findings from two focus groups and five interviews with TVHC healthcare providers. Thirteen women were assigned to receive text messages within 24 hours of receipt of abnormal mammogram by TVHC (intervention group) and 16 to receive text messages four weeks later (delayed intervention group).

Main Research Variables: Number of days between the abnormal mammogram and the return for follow-up appointment.

Findings: The median number of days from the abnormal mammogram report to the return for follow-up was 23 days for the intervention group and 59 days for the delayed intervention group (p = 0.0569).

Conclusions: This study successfully developed a text message that, in Latinas, may decrease the time from receipt of an abnormal mammogram report to attendance at a follow-up visit.

Implications for Nursing: This simple, low-cost approach could result in earlier detection of breast cancers, lowering morbidity and mortality among Latinas.

The need exists for significantly improved follow-up care among Latina women who have received an abnormal mammogram. Although breast cancer incidence is lower for Latina women, they are more likely to be diagnosed with an advanced stage of breast cancer and are 20% more likely to die of breast cancer than non-Hispanic Caucasian women (American Cancer Society, 2012; Lantz et al., 2006). Foreign-born Hispanics are more likely than U.S.-born Hispanics to be diagnosed at an advanced stage (Keegan, Quach, Shema, Glaser, & Gomez, 2010), and women of Mexican origin were found to be at high risk for early onset, premenopausal breast cancer (Miranda et al., 2011). Latina Americans are more likely than European Americans, African Americans, or Asian Americans to report diagnostic delays (Ashing-Giwa et al., 2010), which is highly relevant because more than half of all women aged 50–69 years have an abnormal mammogram result (Karliner, Patricia Kaplan, Juarbe, Pasick, & Pérez-Stable, 2005). Timely initiation of diagnosis and treatment following abnormal mammography results has been shown to improve survival, and it may help to lessen the mortality differences among racial and ethnic groups (Gorin, Heck, Cheng, & Smith, 2006). The population growth of Latinas in the United States—to more than 128 million by 2060—makes diagnostic delays a significant public health concern (U.S. Census Bureau, 2012).