

# Breast Cancer Education for the Deaf Community in American Sign Language

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**T**he Deaf community (DC) is a subset of the 36–37 million Americans with some degree of hearing loss (Lucas, Schiller, & Benson, 2004; Pleis & Lethbridge-Cejku, 2007). American Sign Language (ASL) is the primary medium of communication for the DC subset (Padden & Humphries, 1990). The exact size of the DC is unknown because federal and state surveys do not list ASL as a language option; however, the DC is estimated to be about 550,000–1,000,000 adults in the United States and Canada (Mitchell, Young, Bachleda, & Karchmer, 2006).

Members of the DC are often “early-deafened,” and develop extensive hearing loss prior to acquiring English fluency (Barnett, 2002); therefore, if English is learned at all, often it will be a second language without the benefit of aural reinforcement. Consequently, the average reading level of the DC is between third and fifth grades (Gallaudet Research Institute, 1996; Holt, Traxler, & Allen, 1997; Singleton, Morgan, DiGello, Wiles, & Rivers, 2004).

Considerable evidence suggests that language and culture barriers qualify the DC as a medically underserved population (Iezzoni, O’Day, Killeen, & Harker, 2004; Steinberg, Barnett, Meador, Wiggins, & Zazove, 2006) and contribute to their poorer health status (Cooper & Powe, 2004). Individuals who are Deaf commonly report difficulties in accessing health care as well as frustrations with doctor-patient communication when health care is received (Barnett & Franks, 2002). Of all of the identified disability subgroups in the United States, the DC reports the highest dissatisfaction with access to and quality of health care (Iezzoni, Davis, Soukup, & O’Day, 2002).

Breast cancer is the most common, as well as the second leading cause of cancer death in women (American Cancer Society [ACS], 2009). Regular screenings detect breast cancer at earlier stages, decreasing morbidity and mortality. A review of the literature disclosed few studies related to women who are Deaf accessing breast cancer information, screening, and treatment (Orsi, Margellos-

**Purpose/Objectives:** To create and evaluate an educational video designed to increase breast cancer-related knowledge and screening behaviors among women who are deaf and use American Sign Language (ASL) as their preferred communication method.

**Design:** A test-retest survey was used to determine retained knowledge following an intervention with an ASL breast cancer education video.

**Setting:** Deaf-friendly community settings in southern California.

**Sample:** 122 women who were deaf with a preference for communicating via ASL.

**Methods:** Participants completed a knowledge survey to determine their breast cancer screening practices and baseline breast cancer awareness. Participants then viewed a 30-minute video in ASL. Immediately after viewing the video, participants completed an identical knowledge survey. The survey was administered again two months after the initial intervention to determine long-term breast cancer knowledge retention.

**Main Research Variables:** Age, breast cancer knowledge and screening practices, education, and health insurance.

**Findings:** At baseline, breast cancer knowledge varied widely and respondents’ answered an average of 3 out of 10 questions correctly. Postintervention, respondents answered an average of 8 out of 10 questions correctly, a significant increase from the baseline scores. At the two-month follow-up, respondents answered an average of 6 out of 10 questions correctly, still a significant increase from the baseline scores.

**Conclusions:** Breast cancer knowledge of women who are deaf increased significantly by viewing an educational video in ASL and most of the new knowledge remained at the two-month follow-up.

**Implications for Nursing:** Nurses can help improve the Deaf community’s (DC’s) access to breast cancer-related information by disseminating awareness of this online program.

**Knowledge Translation:** With this online resource, nurses can more easily initiate discussions to help improve knowledge and screening behaviors in a linguistically and culturally appropriate manner. Improving the DC’s access to breast cancer information is of paramount importance to reducing breast cancer morbidity and mortality in the DC.