Cancer Knowledge, Self-efficacy and Cancer Screening Behaviors Among Mexican-American Women

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Mexican-Americans make up the largest subgroup of the Hispanic population and represent one of the fastest growing ethnic groups in the United States (Amaro, Whitaker, Coffman & Heeren, 1990). However, studies that specifically pertain to Mexican-Americans are few. References are often made to Hispanics, Chicanos, or Latinos interchangeably rather than Mexican-Americans as a distinct subpopulation. The published studies of the Hispanic population that do exist have found that Hispanics are less informed than the general public about cancer. They are less familiar with the warning signs of cancer, less aware of available cancer screening tests, and much less convinced of the effectiveness of cancer treatments (Villejo, 1991). Researchers have also found that misconceptions about cancer are more prevalent among Latinos than Anglos (Perez-Stable, Sabogal, Otero-Sabogal, Hiatt & McPhee, 1992) and that Hispanics are more likely to be diagnosed at advanced stages of cancer than non-Hispanic whites (Vernon, Vogal, Halabi, Jackson, Lundy & Peters, 1991).

Mexican-Americans' lack of knowledge and misconceptions about cancer lead to underutilization of early-detection programs and can partially explain the lower survival rates for some cancers in that group. The difference in knowledge between Mexican-Americans and the general public is a result of many factors, including low socioeconomic status, which is a barrier to information, language barriers, and a fatalistic perception that individuals have no control over their chances of getting cancer (Yancey & Walden, 1994; Perez-Stable, et al., 1992).

Previous research has shown that poor health, inappropriate health behavior, low levels of health knowledge, and little use of

preventive health services cluster in the lowest socioeconomic groups (Freimuth & Mettger, 1990). Poverty and low educational level, the major components of socioeconomic status, go hand in hand with high cancer mortality (Gonzalez, 1989). Many Mexican-Americans are undereducated: the median number of school years completed by Mexican-Americans is 10.2 years, compared with 12.7 for non-Hispanics. In addition, 17.1% of Mexican-Americans have completed fewer than five years of school, while only two percent of non-Hispanics have completed less than five years.

This lack of education is a tremendous problem, especially in relation to economic factors. A large portion of the Hispanic population lives below the poverty line; in 1985, 25.2% of Hispanics lived in poverty compared with 11.6% of the total population (Montes, 1989). The link between poverty, educational level, and health status is especially important to consider for Mexican-American women, many of whom struggle to meet basic needs.

Risk factors for cancer among Mexican-American women

The four major risk factors for cancer are socioeconomic status, smoking, alcohol, and diet/nutrition (Montes, 1989). These risk factors proliferate among the Mexican-American population. As Mexican-American women acculturate into the mainstream culture of the United States, they often adopt the norms and patterns of their American counterparts (Black & Markides, 1993). As a result, many of these women smoke cigarettes, drink alcohol, and have poor nutrition habits. The smoking rate for Mexican-American women is 24%, up from 18.3% in the National Health Interview Survey (NHIS) data for 1979-1980 (Montes, 1989). Alcohol consumption rates are also increasing. As Mexican-American women acculturate, they are more likely to become drinkers and drink with greater frequency (Black & Markides, 1993). Poor dietary practices are widespread among Mexican-Americans as well. Montes (1989) reported that about 30% of the Mexican-American population, mainly women, are overweight, a

proportion two to four times higher than in the Anglo population. The data suggest that these risk behaviors tend to co-occur and probably have a common factor that relates them, such as attitude toward health promotion and disease prevention (Marks, Garcia, & Solis, 1990).

Several explanations exist for the prevalence of these risk factors and the infrequent use of preventive health services. One such explanation is a lack of information and general knowledge about cancer. Many Americans are misinformed about cancer and lack sufficient information about the disease. According to Weinberg and colleagues (1982), the general public is often surprised to learn that many cancers can be prevented by lifestyle changes and that cancer deaths can largely be prevented by early detection and treatment. The public fears cancer, underestimates its incidence, and overestimates mortality from the disease (Weinberg et al., 1982).

Mexican-Americans have even less knowledge about cancer, which partially explains the high prevalence of risk factors and underutilization of health services among this population. According to evidence from HHANES, reasons for the differential include language and cultural differences, lack of transportation, geographic inaccessibility, financial constraints and isolation from the mainstream culture. Misconceptions about cancer's causes, symptoms, and signs are often also barriers. In a study to assess the magnitude of these misconceptions, Perez-Stable and associates (1992) found that Hispanics were significantly more likely than Anglos to believe that sugar substitutes, bruises, microwave ovens, antibiotics, eating pork, drinking coffee, eating spicy foods, and breast-feeding could cause cancer. They were also less likely to know that involuntary weight loss and a change in bowel habits were possible symptoms of cancer.

Self-efficacy and health behavior

Mexican-American women often seek medical attention at a more advanced stage of many cancers than do non-Hispanics, often as a

result of their failure to get or perform screenings such as Pap smears, pelvic examinations, colorectal examinations, and breast self-examinations (Vernon, Vogel, Halabi, Jackson, Lundy, & Peters, 1991). An important factor in these women's ability and willingness to perform cancer screenings is the concept of self-efficacy, or a judgment that individuals make about their ability to perform a behavior (Lawrance & McLeroy, 1986). Perceived self-efficacy has been shown to play a significant role in adherence to preventive health programs (O'Leary, 1984); evidence indicates that among the general population, the concept is essential in developing self-management capabilities.

The concept of self-efficacy can be applied to many health behaviors. In fact, people's efficacy to exercise some control over conditions affecting their lives largely determines the extent of preventive efforts they will make (Bandura, 1986). A study by Perez-Stable & colleagues (1992) showed that many Latinos believe that cancer is God's punishment and that a person can do little to prevent getting the disease. This type of cultural information is pertinent to a discussion of self-efficacy and its effect on cancer survival, because if self-efficacy toward a particular behavior is low, the behavior is often not performed. Rhoads (1992) noted that for a behavior to have a high likelihood of occurrence, a person must have knowledge about the behavior, believe him or herself capable of performing the behavior, know how to perform the behavior, and want to perform the behavior.

Complicating Factors: Fatalismo and Marianismo

Many Mexican-Americans have attitudes that may be detrimental to cancer control efforts. *Fatalismo*, the perception an individual can do little to prevent a disease or sickness, is common in Hispanic culture. *Fatalismo* may lead Mexican-American women to assume that they cannot alter their "fate" of developing cancer (Perez-Stable et al., 1992). *Fatalismo* is compounded when Mexican-American women encounter the health care system, because their experiences often lead

them to believe that health care professionals are obstacles to receiving help. As a result, they mistakenly believe that there is no hope of surviving cancer and subsequently avoid seeking medical care (Freimuth & Mettger, 1990).

In addition, *marianismo*, a strong moral code in which honor and shame are basic concepts, regulates the relationship between Mexican-American men and women and maintains male dominance over women. Suffering is an important component of both *fatalismo* and *marianismo* because for Mexican-American women, suffering gives strength. According to Melhuus (1990), "it is a power or a force which gives life its vitality or its sustainability." As a result, Mexican-American women have little reason to *want* to prevent illnesses and diseases, because they believe that they derive strength by suffering through these hardships.

Belief in both *fatalismo* and *marianismo* contributes to the fact that Mexican-American women may be less likely than the general population to change behaviors that increase their risk for cancer or to perform preventive cancer screenings. In fact, a study by Perez-Stable and colleagues (1994) found that in a study of 844 Latinos and 510 white, non-Latinos, the Latinos felt less vulnerable to cancer. Once diagnosed with cancer, however, many of the participants in the study did not feel that having detected the cancer earlier could have made a difference in their survival. According to the study, this fatalistic attitude may be a component in the higher proportion of some cancers that are diagnosed with distant metastases among Latinos (Perez-Stable et al., 1994). Reasons cited for the differentials among Latinos and Anglos largely included attitudinal and personal factors such as fear and embarrassment rather than structural barriers such as cost and transportation.

Implications for health education

Although interventions have not typically targeted Mexican-American women, it is imperative that this ethnic population be

reached and educated about the importance of preventive cancer screenings. Clearly, efforts must be specialized for this population, because as Perez-Stable and colleagues (1992) found, even after adjusting for differences in years of formal education and other confounding variables between Anglos and Hispanics, Hispanics were still more likely to have more misconceptions about causes of cancer and to have less knowledge regarding symptoms of cancer. Their study also showed that Hispanics had less information about cancer because many have little education and do not know how to read either Spanish or English.

A study by Horm and colleagues (1992) demonstrated that although Mexican-Americans usually use cancer screening tests with less frequency than either whites or blacks, the differential almost completely disappears when they are made aware of the tests. Therefore, it seems that increasing knowledge among this population will increase the utilization of preventive cancer screenings, and will thus decrease or at least maintain their low levels of colorectal and breast cancers and decrease the incidence of cervical cancer.

Knowledge should be increased by developing materials that specifically target Mexican-American women. The most effective way to increase the use of cancer screenings is to focus on service delivery aspects (cost of care, convenient hours, etc.) and outreach aspects (education and transportation) to reach people who may not know what services are available to them and who may not be able to access the care even if they know of its availability (Estrada et al., 1990). This would alleviate some of the barriers that Mexican-American women experience as a result of their generally low socioeconomic status.

Increasing the number of bilingual staff also could lead to increased use of medical screenings (Solis, Marks, Garcia & Shelton, 1990; Chesney, Chavira, Hall & Gary, 1982), but placing bilingual personnel at any of the entry points to health care is not enough. Minority representatives who can help health care professionals better understand the Mexican-American culture are also needed. According to Montes (1989), Hispanics need "interdisciplinary and culturally

appropriate care" so that the barriers to early diagnosis and quality treatment can be broken down. They are not easy to reach, but this must be done in order to reduce their incidence and mortality from cancer (Montes, 1989).

It is also important to develop programs that address the specific health needs of the Mexican-American, because as Roberts & Lee (1980) state, "ethnic status exerts an independent effect on health and illness behavior" (p. 279). New materials need to be developed in simple Spanish to provide accurate information and address culture-specific concerns. However, it is not enough to develop programs aimed at the "typical" Mexican-American woman. Health planners must recognize the diversity that exists among this population and go beyond education to provide social support that will increase accessibility.

Data have shown that people who have a regular provider and regular source of care are most likely to utilize health care services. Hispanics, however, often lack a regular provider or source of care (Solis et al., 1990). In fact, it has been reported that differentials in usage of health care services among Mexican-Americans are not only a direct function of cultural or socioeconomic factors, but also an indirect function of inadequacies in the health care systems often used by this population (i.e., hospital outpatient clinics, emergency rooms, and public health facilities) (Roberts & Lee, 1980; Solis et al., 1990). Since they cannot afford a regular provider or source of care, it is important to either incorporate screening programs into the health care settings that they do use or to establish effective referral mechanisms that direct them to appropriate screening centers.

Mexican-Americans are at a significantly greater risk of death from cancer than are Anglos in the United States, and rates of certain cancers are increasing in the Hispanic populations (Montes, 1989). It is imperative that health educators study this ethnic subgroup and take steps to improve the ways in which they receive health care. In particular, Mexican-American women must be educated about the importance of preventive cancer screenings in an effort to increase their utilization of these tests.

References

Amaro, H., Whitaker, R., Coffman, G., & Heeren, T. (1990). Acculturation and marijuana and cocaine use: Findings from HHANES 1982-1984. *American Journal of Public Health, Suppl. 80*, 54-60.

Bandura, A. (1986). *Social foundations of thought and action.* Englewood Cliffs, NJ: Prentice-Hall, Inc.

Black, S., Markides, K. (1993). Acculturation and alcohol consumption in Puerto Rican, Cuban-American, and Mexican-American women in the United States. *American Journal of Public Health, 83*(6), 890-892.

Chesney, A., Chavira, J., Hall, R. & Gary, H. (1982). Barriers to medical care of Mexican-Americans: The role of social class, acculturation, and social isolation. *Medical Care, 20*(9), 883-891.

Estrada, A., Trevino, F. & Ray, L. (1990). Health care utilization barriers among Mexican-Americans: Evidence from HHANES 1982-1984. *American Journal of Public Health, Suppl. 80*, 27-31.

Freimuth, V. & Mettger, W. (1990). Is there a hard-to-reach audience? *Public Health Reports, 105*(3), 232-239.

Gonzalez, M. (1989). Cancer of the cervix in the Rio Grande Valley of South Texas. In Jones, L.A. (Ed.), *Minorities and Cancer* (pp.193-198). New York:Springer-Verlag New York, Inc.

Horm, J., Anderson, K. & Winn, D. (1992). Cancer prevention knowledge and practices of Hispanic subgroups in the United States. *Cancer Weekly*, 15.

Lawrance, L. & McLeroy, K. (1986). Self-efficacy and health education. *Journal of School Health, 56*(8), 317-321.

Marks, G. Garcia, M. & Solis, J. (1990). Health risk behaviors of Hispanics in the United States: Findings from HHANES, 1982-1984. *American Journal of Public Health, Suppl. 80*, 20-26.

Melhuus, M. (1990). A shame to honour-a shame to suffer. *Ethnos, 55*(5), 5-25.

Montes, J. (1989). Specific cancers affecting Hispanics in the United States: In Jones, L.A. (Ed.), *Minorities and Cancer* (pp.21-33). New York:Springer-Verlag New York, Inc.

O'Leary, A. (1985). Self-efficacy and health. *Behavior Research and Therapy, 23*, 437-451.

Perez-Stable, E., Otero-Sabogal, R., Sabogal, F. (1994). Self-reported use of cancer screening tests among Latinos and Anglos in a prepaid health plan. *Archives of Internal Medicine, 154*, 1073-1081

Perez-Stable, E., Sabogal, F., Otero-Sabogal, R., Hiatt, R. & McPhee, S. (1992). Misconceptions about cancer among Latinos and Anglos. *Journal of the American Medical Association, 268*(22), 3219-3223.

Rhoads, D. (1992). Research and measurement issues in self-efficacy. *The Eta Sigma Gamma Monograph Series, 10*(1), 17-25.

Roberts, R. & Lee, E. (1980). Medical care use by Mexican-Americans. *Medical Care, 18*(3), 266-281.

Solis, J., Marks, G., Garcia, M. & Shelton, D. (1990). Acculturation, access to care, and use of preventive services by Hispanics: Findings from HHANES 1982-1984. *American Journal of Public Health, Suppl. 80*, 11-19.

Vernon, S., Vogel, V., Halabi, S., Jackson, G., Lundy, R. & Peters, G. (1991). Breast cancer screening behaviors and attitudes in three racial/ethnic groups. *Cancer, 69*, 165-173.

Villejo, L. (1989). Patient education for Hispanic cancer patients. In Jones, L.A. (Ed.), *Minorities and Cancer* (pp. 295-300). New York:Springer-Verlag New York, Inc.

Weinberg, A., Spiker, C., Ingersoll, R. & Hoersting, S. (1982). Public knowledge and attitudes toward cancer: Their roles in health decisions and behaviors. *Health Values, 6*(3), 19-26.

Yancey, A. & Walden, L. (1994). Stimulating cancer screening among Latinas and African-American Women. *Journal of Cancer Education, 9*(1), 46-52.