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ADDRESSING HEALTH DISPARITIES IN HIGHLY SPECIALIZED MINORITY POPULATIONS: CASE STUDY OF MEXICAN MENNONITE FARMWORKERS

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ABSTRACT: The Kansas Statewide Farmworker Health Program (KSFHP) has developed a unique set of culturally competent health interventions in response to the pressing public health needs of the state's underserved farmworker population. Key among these are its health education and translation efforts on behalf of the fast-growing Low German-speaking Mexican Mennonite farmworker population. Linguistic, religious, and cultural values have created unique and complex health disparities and barriers to care that can be broken down only through innovative approaches. KSFHP first conducted a health needs assessment survey of the farmworker population in 2003, which indicated prenatal care practices as a significant health disparity, especially among the Low German-speaking Mexican Mennonite population. In response, KSFHP successfully lobbied the state health department to implement a new standard of health behavior data collection that includes primary language data as a method of delineating population subgroups, making Kansas one of the first two states in the country to collect this information. KSFHP also developed culturally competent Low German-language recordings on health topics such as prenatal care in accordance with the information delivery needs of the Low German-speaking Mexican Mennonite farmworker population. Currently, a pilot program is in progress that offers additional outreach, health education, and interpretation, among other services. The work of the KSFHP has significant implications for further research into health disparities, specialized minority populations, and culturally competent data collection methods.

KEY WORDS: cultural competency; rural health; prenatal care; Mexican Mennonites.

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INTRODUCTION

The importance of culturally competent health interventions has been increasingly acknowledged in recent years,[1–5] especially as these relate to social policy and health care planning for low-income, highly mobile rural subcultures.[6–8] Many disparities in health and health care in rural communities exist in this country, and the task of ameliorating them often falls upon the public health workforce and other community agencies. The degree to which health care disparities can be successfully addressed depends in large part upon the level of cultural competence of an individual or organization.[2,4]

Disparities exist in the general health care of minorities due to a combination of provider bias, certain characteristics of the health care system's structure, and sometimes even the special nature of the minority group involved.[9] Prenatal care statistics provide a striking example of health disparities and the importance of culturally competent care. In general the use of prenatal care has been increasing in this country since 1990.[10,11] Not all groups share this improvement, however. Rates of prenatal care and infant mortality vary greatly between racial and ethnic groups, and resources are not universally available. For example, low-income Hispanic women initiate prenatal care later in pregnancy than other women.[12] The United States Department of Health and Human Services found that 88% of non-Hispanic whites sought prenatal care beginning in the first trimester of pregnancy in 1998, compared to 74% of Hispanics. Similar disparities exist in the adequacy of prenatal care, defined as a woman's number of prenatal doctor visits and point at which she commenced care. Nationwide, 66% of Hispanics, compared to 88% of non-Hispanic whites, received early and adequate prenatal care.[13]

The same findings hold true for the state of Kansas. The Kansas Department of Health and Environment (KDHE) Center for Health and Environmental Statistics reports that 90% of white (non-Hispanic) women began prenatal care in the first trimester in 2001, while only 70% of Hispanic women did the same.[14] KDHE also reports that 22.3% of Hispanics had inadequate prenatal care in 2000, compared to 8% of whites.[15]

Adequate health care is even harder to access for immigrants, especially those who are undocumented. In Kansas, many immigrants live and work without legal status, particularly in the farmworker population (defined by KSFHP as anyone who is currently or was within the past 24 months employed in crop-based agriculture). The Urban Institute estimates that 40–49% of foreign-born immigrants in Kansas were

undocumented in 2000.[16] Fragmented systems of care and a lack of culturally competent interventions are placing migrant and seasonal farmworker women (most of whom are recent immigrants) at risk of receiving inadequate prenatal services, which may lead to poor outcomes for themselves and their children.

It is particularly important when dealing with immigrant populations to maximize efforts to link women with the health care system, as undocumented and/or uninsured women are less likely to return for postpartum examinations for themselves or to seek neonatal care for their infants.[17,18] Welfare services increase the availability of pre- and post-natal care to low-income women, but the availability of such services does not necessarily lead to improved health outcomes. For example, Piper found that a change in presumptive eligibility for Medicaid in Tennessee resulted in no changes in birth outcomes or first-trimester use of prenatal care for immigrant women.[19] That is, eligibility to receive services did not result in increased use or improved health outcomes for women.

Urban Institute researchers conclude that while Medicaid policies have the potential to reduce many barriers faced by low income women to prenatal care, the program in no way addresses socioeconomic facts that affect prenatal care use and birth outcomes, such as poverty, lack of education, and discrimination.[16] The exact extent and nature of prenatal care disparities is therefore unknown. Most studies that compare birth outcomes of U.S. and foreign-born women use vital data with a limited number of covariates and compare outcomes at a single point in time.[20] What some authors have attributed to immigrant culture might in fact be explained by more complete and accurate data on income, insurance, stress, smoking, and illicit drug use.

The work of the Kansas Statewide Farmworker Health Program has developed in order to address pressing public health needs and disparities in specific minority populations. Particularly important are its efforts to address prenatal and infant care disparities within the Low German-speaking Mexican Mennonite population, a fast-growing and highly specialized group whose unique cultural values necessitate creative and culturally competent interventions. Toward this end, the current project created culturally appropriate health information for this rural minority population and implemented a mechanism for data collection among underserved populations.

General Needs for Addressing Prenatal Care Disparities

The U.S. Department of Health and Human Services Workgroup describes important issues related to adequacy of prenatal care on infant mortality that have significant implications for immigrant and farmworker women in Kansas.[21] Family planning is important, since a short interval of time between pregnancies has been linked to poor pregnancy outcomes. For example, congenital abnormalities remain the leading overall cause of infant mortality, accounting for one in five infant deaths. Cultural competency and social support in perinatal care is needed to ensure that racial and ethnic minorities receive appropriate care.[21]

The workgroup also reported the need to support research and effective interventions for racial and ethnic subgroups, stating that national data collection efforts should include all key subgroups. Significant attention must be devoted to incorporating more useful and specific racial and ethnic subgroup classification. Data collection for key subgroups must be updated and a minimum set of categories for use in all federal data collection activities should be constructed. Research should seek to include indicators such as foreign-born vs. U.S.-born, number of years of U.S. resident and urban vs. rural residence.[21]

There are thus several layers of social and informational barriers that make understanding the needs of specific populations both more difficult and more important. Overcoming these health disparities and barriers to prenatal care should be an essential goal of health care providers. The effectiveness of culturally competent programs targeted at reducing disparities among low-income and immigrant Mexican populations has been affirmed by previous research.[22,23]

Needs for Addressing Disparities Within Specialized Minority Populations: Case Study of the Mexican Mennonite Population

The Low German-speaking Mexican Mennonites are the fastest-growing farmworker population in Kansas, with 1452 members (43% of the migrant and seasonal farmworker population served by the Kansas Statewide Farmworker Health Program) in 2004.[24] Migrant and seasonal farmworkers make up 8.5% (about 4800) of the total population of approximately 56,000 agricultural employees.[25] Culturally competent health interventions are of particular importance to members of this population, who experience significant health disparities, including in the area of prenatal care. These disparities stem from linguistic and cultural

factors, along with the population's rural and often uninsured status, legal status, and consequent lack of access to care.[26]

The Low German-speaking Mexican Mennonites have a unique and complex cultural history that affects their health behaviors. Their ancestors immigrated to Canada from Eastern Europe in the 19th century and maintained an insular population there known as the ''Old Colony Mennonites.'' After World War I, when the Canadian government began attempting to secularize Mennonite schools, the most conservative members of the Old Colony church moved to Mexico to maintain their religion-centered culture. They subsisted there as farmers, basing their language, clothing, transportation, livelihood, and health beliefs upon their religion. They continued their traditional lifestyle, but the following decades brought swift population growth, declining amounts of farmland, and increased poverty. In recent years, Mexican Mennonites have been leaving Mexico in increasing numbers, hoping for greater stability in South America, the United States, or Canada.[27]

Since 1998, the number of Mexican Mennonites within the Kansas farmworker population has multiplied eightfold.[24] Efforts to collect data on this group have proved particularly challenging, as they fit no existing classifications. They are of European descent and are Caucasian; their country of origin is Hispanic; their native language is not Spanish, but a dialect of Low German (*Plautdietsch*) rarely spoken outside of Mennonite populations.

Still more barriers to care exist due to their health beliefs. Research with the Canadian branch of this population indicates that they, like their Kansas counterparts, have a high rate of illiteracy and that church leaders instruct them in everyday beliefs, knowledge, and behaviors, including health care.[26] Low German-speaking Mexican Mennonites have been found to seek medical care for acute or chronic health problems but do not invest in disease prevention activities such as prenatal care.[26] It appears that such underutilization of healthcare services is due to a lack of awareness of the value and importance of prenatal care, which can have a negative impact on birth outcomes in this population. Other contributing factors may be a lack of information about family planning, little time between childbirths, a limited gene pool, and limited access to adequate prenatal care. Organizing a culturally appropriate health care intervention for this population is more complex than for other populations due to the group's unique language, culture, and religious beliefs.

METHODS

While there has been increasing awareness of health disparities among immigrants in the state, until recently little documentation existed to support this concern. In an attempt to better meet the health needs of expectant mothers in the target population, especially within the Low German-speaking Mexican Mennonite community, the Kansas Statewide Farmworker Health Program (KSFHP) developed a survey of health behaviors in 2003.

RESULTS

The survey results offered insight regarding what health needs and services KSFHP most needed to target. Results indicated that 26% of the Low German-speaking farmworkers surveyed had never visited a doctor for a routine checkup; none of the Hispanic farmworkers polled reported the same. Forty-one percent of Low German-speaking farmworker women indicated not using birth control, a percentage twice as high as that of the corresponding Hispanic population's 20%.[28] Comparison groups for the Low German-speaking farmworkers utilized the Hispanic sub-populations despite their ethnic differences, as these are the two largest groups within the farmworker population.

While the health survey results offered KSFHP employees the information needed to consider the unique health needs of the population, a critical need has been also noted for greater cultural sensitivity in developing effective methods of working specifically with Low German-speaking populations.[29] Based on this information, KSFHP developed a twofold plan of action: first, to find a means for better evaluating the adequacy of prenatal care among immigrant women; and second, to offer culturally competent health education that is accessible to the Low German-speaking population. The primary objective for implementing this plan was to improve prenatal care and birth outcomes among the Low German-speaking Mexican Mennonite population.

The Evaluation of Adequacy of Prenatal Care among Immigrant Women

The data on prenatal care that is currently collected through KDHE Vital Statistics and the Bureau of Children, Youth, and Families was found to be inadequate due to the absence of demographic data related to sub-population categories. The implementation of a new survey was considered.

Options considered included the Prevalence of Selected Maternal Behaviors and Experiences and the Pregnancy Risk Assessment Monitoring System (PRAMS), a surveillance system developed by the Centers for Disease Control and Prevention (CDC) in 1987 that has been successfully used to identify at-risk pregnancies.[30] While this advanced assessment tool could improve the comprehensiveness of data collection, great barriers to implementation exist due to limitations in state personnel and resources. Such shortages are not uncommon within the public health workforce, especially in largely rural states like Kansas.[31,32]

Instead, a new workgroup within the state health department recommended the implementation of the Office of Management and Budget (OMB) standard for the collection of race and ethnicity data across state health department programs. While OMB standards do not include primary language, recommendations were made to collect primary language data nonetheless, as this could be used as a meaningful substitute for immigrant status with some capability to delineate subgroups.

This selection process facilitated discussions between the key administrators within the state health department and its Center for Health and Environmental Statistics/Office of Vital Statistics regarding the importance of this type of data. Within 2 weeks of finalizing major changes within its data collection system and consulting with its national association, the Office of Vital Statistics in Kansas determined that collection of primary language data should begin. As of January 1, 2005, Kansas became one of the first two states in the nation to collect primary language data for vital statistics.

The Creation of Health Education Materials that are Accessible to the Low German-speaking Population

The KSFHP survey of farmworkers in 2003 indicated several major informational needs within the target population: a need for information regarding the health care system in the United States; for communication of the importance of preventive services such as prenatal care and family planning; and for information about healthy habits, good nutrition, the effects of smoking and substance abuse, and options for addressing depression (an identified problem in the survey, especially among the Low German-speaking Mexican Mennonites).

KSFHP has begun to develop health promotion materials that are culturally responsive to this particular sub-group's needs. This includes the development of Spanish- and Low German-language transcripts and sound

recordings on the most vital health topics. Because Low German, or *Plautdietsch*, is exclusively a spoken language, and because many Mexican Mennonites are functionally illiterate, health transcripts must then be recorded onto compact discs. The next phase of this plan will include the distribution of these discs to individual farmworkers and their family members.

DISCUSSION

The Kansas Statewide Farmworker Health Program (KSFHP) works to ensure that all Kansas farmworkers, regardless of race, ethnicity, or language, can effectively enter into a coordinated system of clinical care. Toward this end, KSFHP has developed culturally and linguistically appropriate materials and has recruited staff to improve communication with specific population groups, offering ongoing case management and transportation services, targeting health information to high risk population groups, and giving technical assistance for effective worksite health promotion and disease prevention programs. Mexican Mennonite health promoters in the state have also offered further support and assistance to Mexican Mennonite farmworkers through a KSFHP pilot program that provides outreach, screening, application assistance, health education, and interpretation.

KSFHP has met the challenge of serving a new culturally and linguistically diverse population. The program serves as a national model in its efforts to work with rural farmworkers by surveying the specific health needs of Low German-speaking as well as Spanish-speaking Mexican farmworkers. The survey results not only offered information on what health needs and services should be targeted by KSFHP, but also supported Kansas's successful campaign to become one of the first two states to record data on language as a standard protocol for vital statistics. These new data collection methods will provide much-needed information on the vital statistics of immigrant populations and will allow for improved evaluation of adequacy of prenatal care in Kansas.

Results from the KSFHP survey indicated the need for early and adequate prenatal care as well as family planning services for the Low German-speaking Mexican Mennonite sub-group. Strategies were developed and are being implemented to overcome communication barriers to health care through the use of health promoters and culturally appropriate methods of information delivery, such as Low German-language recordings.

The work of KSFHP has implications for research into health disparities, minority populations, and data collection methods. Despite the progress and the many successes of KSFHP in working with the Low-German-speaking Mexican Mennonite population, considerable work still remains. Significant attention must be devoted to incorporating more useful and specific racial and ethnic subgroup classification to data collection systems locally and nationally. Data collection for key subgroups must be updated and a minimum set of categories for use in all federal data collection activities should be constructed. Research should seek to include indicators such as foreign-born vs. U.S.-born, number of years of U.S. residence, primary language, and urban vs. rural residence.

Future directions for research could also include assessing the effectiveness in communicating health education among Mexican Mennonites once health information recordings are distributed. In addition, birth certificate registration information should be evaluated to better understand the adequacy of prenatal care in conjunction with primary language. With this data, Spanish-speaking immigrants could be separated from those Hispanics that are native to the United States, and Mexican Mennonites could also be separated from non-Hispanic whites. A more complete picture of the state's population and health care needs could then be assessed.

If recommendations like these are implemented, all Kansans will benefit from healthier fellow community members, including farmworkers and their families. Supporting better integration of minority populations into the health care system will lead to greater health outcomes. Lack of adequate family planning and prenatal care cause too great of a financial and moral burden, especially when children are born with serious health problems. It is only through culturally appropriate health approaches that highly complex health disparities can be effectively addressed.

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