Using Outreach Endeavors to Determine Hispanic Diabetics

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Abstract

Supporting the Hispanic population with the management of diabetes mellitus is escalating into an overriding challenge for health care providers. Developing an effective outreach undertaking is one mechanism for addressing barriers that restrict access to health services for Hispanic clients. This discussion of one clinically focused outreach endeavor is presented to provide a framework for considering the implications for practice when working toward the successful management of key risk factors related to the disease process.

Key words: diabetics, Hispanic population, outreach, Texas. (Texas Journal of Rural Health 2003; 21(3): 9-14)

Introduction

Assisting the Hispanic population with the management of diabetes mellitus is growing into a paramount challenge for health care providers. In Texas, the pervasiveness of a diabetes mellitus diagnosis for the Hispanic race over the age of 18 was established as 8.1% (Texas Diabetes Council, 2003). This percentage is the utmost intensity acknowledged for the race/ethnicity groups listed by the Texas Department of Health. The problem can be further understood by considering

other aspects of importance in the administration of health care for successful compliance with the treatment plan. The estimated cost (indirect and direct) for diabetes in Texas was 9 billion dollars in 1994 (Texas Diabetes Council, 2003). According to the National Coalition of Hispanic Health and Human Services Organizations (1990), the identified barriers that frequently result in restricted access to health services for Hispanics include: language differences or lack of bilingual health providers; lack of knowledge regarding what services are available; lack of insurance coverage; high costs of health care; lack of transportation to health care facilities; misunderstanding arising from differences in cultural expectations, communication styles and values; and institutional policies that display insensitivity to important values in the Hispanic community. Development of effective outreach undertakings is one mechanism for addressing several of these barriers. Diabetes is a major chronic illness that increasingly demands more health care dollars. Methods must be determined to address the management of this disease for this population.

Within the United States, the numbers for a diagnosis of diabetes emulate the same trends. According to *Healthy People 2010*, "800,000 new cases are diagnosed each year" (United States Department of Health and Human Services, 2000). In addition, *Healthy People 2010* asserts that diabetes goes undiagnosed in approximately 5 million people (United States Department of Health and Human Services, 2000). The goals within *Healthy People 2010* speak to the areas of individuals receiving formal diabetes education, annual hemoglobin A1C assessments, and daily blood-glucose monitoring (see Table 1) (United States Department of Health and Human Services, 2000). The Hispanic population is considered one of the most vulnerable, high-risk populations for this disease. This ethnic designation is identified with having a double to triple chance of developing diabetes mellitus, particularly non-insulin dependent diabetes mellitus (NIDDM) when compared to other ethnicities (Texas Diabetes Council, 2003). Multiple variables contribute to the negative effect of this disease process on the population. According to Lo (1999), "patient non-adherence is a well-recognized although poorly understood phenomenon that affects patients in all areas of health care." Outreach endeavors need to be considered to facilitate the identification of "at-risk" individuals.

Despite the insidious dilemma of diabetes mellitus within the Hispanic population, limited research is documented on this group of individuals. In fact, research has been directed toward the Black ethnic group. Wagner, Schnoll, and Gipson (1998) found that Black clients (N=216) were non-compliant

Table 1. Healthy People 2010 Statistics Related to the Hispanic Race/Ethnicity

Category	Hispanic	Goal
Individuals receiving formal diabetes education	34%	60%
Annual Hgb A1C assessment	22%	50%
Daily Self Blood Glucose monitoring	36%	60%

when they couldn't recall the recommendations given to them, they didn't have a clear understanding of how to do a certain task, or what changes to make after getting the results of a glucose level. Each aspect was perceived as a barrier to the effective management of the diabetic regimen. Schlenk and Boehm (1998) investigated the problem of the Black client (N=117) not understanding instructions. The authors found contingency contracts between client and health care providers were useful if there were explicit directions from the health care provider concerning the goals to be met.

Brown and Hanis (1999) conducted research related to the development of a culturally competent diabetes education program for Mexican-Americans (N=247). This research was directed toward Mexican-Americans who resided in a border community. The research supported the use of focus groups as an effective intervention for improving compliance with the treatment regime.

OUTREACH PROJECT

The process of incorporating outreach endeavors to locate these individuals has not been adequately documented within the literature. The project was initiated to consider the use of outreach endeavors to identify and correlate aspects of undiagnosed Hispanic Diabetics in a medically underserved area of West Texas. A convenience sample was utilized for the process. One outreach aspect of the study was that a primary characteristic of minority individuals is the difficulty in getting participation. Burns and Grove (2001) endorsed the use of partnerships and face-to-face recruitment as a method to improve involvement. The use of an outreach clerk who was a member of the targeted population and familiar with the community sites addressed these issues. The study interacted with 321 individuals (N=321). No power analysis was done prior to the initiation of this study. According to Burns and Grove (1999), a power analysis is used to establish the likelihood that a statistical test would detect a significant discrepancy that existed between the variables under examination. However, to examine the adequacy of the study, power analysis was done after the completion of data collection. According to Cohen (1988) with an N = 300, the power for this study would be 97% with an effect size of 0.20 and a significance level of 0.05.

A descriptive research design using a structured, cross-sectional design for collection and analysis of the data was employed. The variables used for this project were diagnosis of diabetes, risk factors identified, and results from random capillary blood sugar. Any individual with a random capillary blood sugar assessed at greater than 126 mg/dl was instructed to seek further medical attention. The focus for this study was to identify risk factors. Consequently, no direct follow up was initiated within this study.

PROCESS

An outreach clerk was hired to conduct outreach undertakings at a wide selection of community sites within a predominately Hispanic community. At these encounters, the outreach clerk offered random capillary blood sugar testing to interested Hispanic individuals. During the process, the participants were given the option to complete a demographic sheet concerning risk factors and other pertinent information. Policies and

procedures were established to ensure safe and appropriate management of the outreach sessions. A wide selection of community settings was utilized for these encounters such as grocery, general, jewelry, and boutique stores, hair salon, schools, and churches.

RESULTS

The data from the demographic/risk sheet reflected several interesting aspects for consideration when engaged in rural health. The 321 individuals were assessed during the outreach sessions over a period of approximately six months. The age range for the individuals assessed was 18 to 81 years with the mean age being 39.8. Out of the individuals evaluated, 38 reported a previous diagnosis of diabetes. The range in years since the diagnosis of diabetes was 3 months to 45 years with the mean years since diagnosis calculated as 5.8 years. Seventy-one percent of the individuals in the study group were females.

As further investigation into the risk factors for diabetes were assessed, several characteristics were noted. When asked if anyone in the family had a diagnosis of diabetes, half of the individuals surveyed reported at least one family member. Eighteen percent conveyed that more than one family member had the diagnosis. The primary family members listed with a diagnosis of diabetes were mothers (11%) and fathers (10%).

Each individual was asked if certain risk factors were present in their daily lives. The possible symptoms were assessed as reports of hunger (27%), reports of thirst (26%), and frequent urination (31%). Risk factors such as elevated blood pressure (22%), obesity (40%), and a birth weight of more than 9 lbs. (15%) were also assessed. Weight was the risk factor with the highest percentage. The final factor assessed for each individual was the random capillary blood sugar. The blood sugars ranged from 58 to 369 mg/dl with the mean being 100 mg/dl.

For the four characteristics of thirst, hunger, frequent urination, and obesity, a Spearman's rank-order correlation (Spearman's rho) was completed comparing age and gender to the symptoms. This statistical test is used to designate the extent of a correlation between variables calculated on the ordinal scale. Both gender and age were significantly correlated with obesity at the 0.05 and 0.01 significant levels respectively.

IMPLICATIONS FOR PRACTICE

Outreach endeavors are an effective method for initiating contact with selected populations. Attention to cultural sensitivity consideration by the program planners prior to the initiation of the outreach process allows for improved entry into the designated community. Although health care providers frequently focus on the characteristics of thirst, hunger, and urination when assessing individuals, other factors, such as obesity, should be considered within the development and implementation of any outreach program. From this project, the area of weight was determined to carry more significance for identifying "at risk" individuals.

The challenges that occurred during this project supported the importance of health care providers taking the time to understand the social and cultural aspects of groups being attended to within the process. Only by working within these cultural and social

standards will a therapeutic relationship develop, which may result in improved management of the health care needs of the identified population.

Another challenge identified and confronted during this project was the magnitude for identifying strategic sites within the service area and making regular appearances at those strategic locations. To gain access within any culturally sensitive community, the individuals need a time period to become comfortable with the health care providers. Regular appearances at designated locations allow for the development of this sense of trust toward the health care providers. For the Hispanic community, becoming familiar and confident with the dedication of the individuals involved in the outreach endeavor is as important as the knowledge level of those individuals. During this project, the outreach clerk's repeated interactions with people at the designated sites provided an opportunity to develop trust and confidence with the project. Outreach projects and follow up procedures are one mechanism for addressing the health care disparities, which are present in our communities. Without the commitment to the community by the members of a project, many opportunities to facilitate the health care within the community are lost because of the lack of trust.

One of the paramount recommendations, which resulted from this study, is the need to develop an ongoing outreach process for these communities. Regular interaction and follow up with "at risk" individuals within any community would address the fundamental challenge of health promotion. The ability to become engaged in health promoting activities instead of waiting for the health problem to develop into a life-threatening situation must be cultivated. The health disparities, which are well documented within our society must be addressed and managed effectively to aid in the reduction of health care cost. Outreach endeavors such as this one meets the expectation for preventing the development of major, costly health care problems. Avenues to allow for the continuation of outreach endeavors to identify "at risk" individuals must be carefully and thoroughly investigated.

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