THE PERCEPTIONS OF DIABETES LAY EDUCATORS WORKING WITH MIGRANT FARMWORKERS

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ABSTRACT

Diabetic medical care for Hispanic migrant farmworkers has been hard to obtain due to the lack of continuity in health care and limited access to services. These factors have led to either gaps or duplications of services for these clients. Migrant Health Service, Inc. (MHSI) Diabetes Program staff addressed these issues through the development of a Diabetes Lay Educator Program. This qualitative study explored the lived experience of Diabetes Lay Educators (DLEs) as they worked with migrant farmworkers traveling between multiple states. The sample consisted of seven female participants who migrated from southern Texas. Four main themes emerged: Understanding the lifestyle; Self-managing diabetes when traveling; Roles of the Diabetes Lay Educators; and Access to health care services. The utilization of DLEs is an effective way to provide health care and education to this migrant population.

INTRODUCTION

Migrant workers continue to suffer greater mortality and morbidity rates than the vast majority of the American population, due in part to the combination of poverty, limited access to health care, and hazardous working conditions (Migrant Clincians Network, 2006). The health status of this population is among the worst when compared to any other subpopulation because they lack access to preventive health care services; there are numerous occupational hazards; and the majority does not receive health insurance and have little money for out-of-pocket services. When compared to the general population, migrant farmworkers have higher rates of infectious diseases, diabetes, hypertension, tuberculosis, anemia, parasitic infection, and mental health disease (Farmworker Health Service, Inc., 2005).

To address these health issues, some communities are utilizing the concept of Lay Health Advisors (LHAs) within the migrant population. These individuals are part of the community and provide informal care, advice, and emotional support to their neighbor, friend, or coworker. If the LHAs travel with the farmworker population, they are able to encourage farmworkers to seek preventive care and assist them in accessing health care services in different locations. They can also bridge the cultural diversity gap in language and health beliefs that occur between farmworkers and health care providers (Watkins et. al. 1994). In a study conducted by Watkins et. al. (1994), LHAs were utilized with

migrant farmworker women and children who received services at two health care delivery sites. When the researchers assessed the impact LHAs had on the health status of patients over a year, mothers who interacted with these LHAs were more likely to bring their sick child in for care and had increased knowledge of health practices.

Additional studies within non-migrant Hispanic populations have shown that peer educators, promotoras, lay health-outreach workers, and bicultural community health workers have been used (Balcázar, Alvarado, Hollen, Gonzalez-Cruz, & Pedregón, 2005; Ingram, Gallegos, & Elenes, 2005; Phillis-Tsimikas et al. 2004; Teufel-Shone, Drummond, & Rawiel, 2005). The peer educators are individuals with diabetes who explenify the traits of a "natural leader." These peer educators are trained in the areas of diabetes and associated complications. They must meet established competencies before teaching classes on their own (Phillis-Tsimikas et al. 2004). In an effort to build broad community support for diabetes care, the Border Health Strategic Initiative used promotoras to work individually with the diabetic population (Ingram, Gallegos, & Elenes, 2005; Teufel-Shone, Drummond, & Rawiel, 2005). Corkery et al. (1997) utilized bicultural community health workers to determine their effect on the completion of diabetes education in inner-city Hispanic patients. Their findings revealed that an intervention with a bicultural community health worker improved completion rates of a diabetes education program for inner-city Hispanic patients irrespective of literacy or educational levels attained.

Due to their mobile lifestyle, diabetic medical care for the migrant population has been fragmented because they lack continuity of care and have limited access to health services. This has led to either gaps or duplications of services for these clients. Migrant Health Service, Inc. (MHSI) Diabetes Program staff addressed these issues through the development of a Diabetes Lay Educator Program in which Hispanic leaders from the migrant farmworker population were trained as Diabetes Lay Educators (DLEs) in the areas of health promotion, prevention, and basic medical knowledge. These DLEs provide support group meetings and diabetes education in Minnesota and North Dakota from April to September. They then return to their homes in southern Texas where they continue to provide support group meetings and home visits to their migrant clients from October through March (Heuer, Hess, & Klug, 2004 p. 266).

The purpose of this phenomenological study was to explore the lived experiences of Diabetes Lay Educators as they worked with migrant farm workers traveling between multiple states. In this article, the word Hispanic was used to designate individuals who have Mexican American or Mexican heritage. The term "migrant farm workers" encompasses both migrant and seasonal farm workers (Lausch, Heuer, Guasasco, & Bengiamin, 2003).

METHODS

Through the use of the phenomenological approach, the researchers studied the lived experience of Hispanic DLEs as they worked with migrant farm workers between Minnesota, North Dakota, and Texas. Phenomenological reflective inquiry was utilized to interpret the meaning or meaningfulness associated with the phenomenon of lived experience (van Manen, 2002). In this study, the research question was, "What were the

perceptions and experiences of Diabetes Lay Educators as they worked with Hispanic migrant farm workers in Minnesota, North Dakota and Texas?"

The sample consisted of seven female participants who migrated from southern Texas. Participants ranged in age from 21-47. Of these participants, six were married and one was single. The average level of education completed was the eleventh grade. Three participants were diagnosed with diabetes and all had immediate family members diagnosed with this chronic disease.

The interview guide for this research study was based on a tool developed by individuals from Migrant Clinicians Network. This tool had previously been used with migrant farm workers diagnosed with diabetes. The authors' adapted the tool to specifically address content related to the perceptions of DLEs, their training, and interaction with clients. Content included demographics, personal history of diabetes, DLE training, clients' self-management of diabetes, and experiences in the Diabetes Lay Educator Program.

The second author conducted the tape-recorded interviews, with interviews lasting 60 - 90 minutes. Participants were interviewed two times, approximately six months apart depending on their work or migratory schedule. They were interviewed at the beginning of the DLE Program and again upon their return from Texas. Twelve of the interviews were conducted at their place of employment. The interviews for one participant were conducted in her home. For each interview, the DLEs were compensated for their time with a $20.00 gift certificate for a local merchant. All the interviews were transcribed verbatim by a skilled transcriptionist. These transcripts were reviewed for correctness and then checked for accuracy against the audiotapes. Working as a team, the researchers developed a codebook to analyze the data. Validity and reliability were confirmed when the researchers identified similar recurrent themes independent of one another. These dominant themes are described in the results section.

RESULTS

Based on the experiences of the DLEs, the researchers identified four main themes that were common to all or most of the participants. These themes included: Understanding the lifestyle; Self-managing diabetes when traveling; Roles of the DLEs, and Access to health care services.

Theme 1: Understanding the Lifestyle

Migrant farmworkers who travel to the upper Midwest include large extended families. The DLEs interviewed were part of this network of migrant farmworkers. They provided the researchers with insights into the family life, dietary preferences, and seasonal employment of migrant farmworkers diagnosed with diabetes.

> I understand the problems they have because I am a migrant, I know because I have been [through this] experience also, so I try to understand them.

The DLEs described that in the Hispanic culture "family" is priority. With the diagnosis of diabetes, it was difficult for family members to take care of themselves because they tended to put the needs of other family members before their own.

> Its hard because some of them, they do have a large family and say 'Well I have to attend to my kids first, before I attend to my own health'.

Along with family, food is a central aspect of the Hispanic culture. According to the DLEs, the Hispanic migrant diet is high in carbohydrates and fat.

> It's the way that we eat. It is the way the Hispanic people are used to eating. That is what I have been telling them...to eat less than whatever they are used to. The amount and the food that we eat...is really greasy.

Another aspect of this culture is that farm workers travel thousands of miles each year for agricultural employment. Yet, agricultural work is unstable and often unpredictable as it varies by region, season, and crops; it is also vulnerable to any unseasonable conditions and natural disasters (Farmworker Health Services, Inc., 2005). The DLEs described seasonal employment as it related to their financial status:

> And then they come here and sometimes they work and sometimes they don't and it is a long trip for them. And then sometimes there is not work for them and they need to go back without money which is hard for the people.

Seasonal employment further complicated the ability to adapt to the nutritional changes required for diabetes management. The DLEs stated that many of the families did not have the financial means to purchase different foods.

> You don't have the money to buy whatever you can eat...so if everyone eats different from those ones, then you can't buy the different food because of money. You have to eat whatever everyone is eating.

The DLEs perceptions of the difficulties that migrant farm workers encountered when trying to self-manage their diabetes was supported in a study by Hunt, Pugh, & Valenzuela in 1998. These researchers interviewed 51 patients from Southern Texas regarding their experiences and personal histories with Type 2 diabetes. They reported that some patients stated that if they followed the recommended diet including fresh fruits and vegetables, they would need to prepare one meal for themselves and another for their family members. Many of these clients conveyed that they could not afford to prepare the recommended meals for themselves. Others stated that the ability to stay on the recommended diet varied over time, depending on their financial status on any given day (Hunt, Pugh, & Valenzuela, 1998).

According to the DLEs, managing diabetes as a migrant farm worker was complicated by multiple factors such as food preparation for large families, seasonal employment, and financial limitations. One DLE eloquently summarized these factors:

> Well I can tell you that it is difficult because if you want to go to work you can't prepare food for you and prepare food for your family because you want to go to work and just work and then eat whatever you can.

Theme 2: Self-managing Diabetes when Traveling

Each year, 20,000 to 30,000 migrant farm workers and their families travel to Minnesota to work in agriculture and food processing plants. The majority of these families come from southern Texas. The travel time from their home to the Upper Midwest is a 30-40 hour drive or an estimated 1,800 miles one-way (Contreras, Duran, & Gilje, 2001). According to the DLEs, it was difficult for migrant farm workers with diabetes to care for themselves while traveling between states. Many of the migrant families preferred not to make extended stops when traveling due to the cost of overnight lodging, meals at restaurants, and work related time constraints (Contreras, Duran, & Gilje, 2001). As a result, farm workers with diabetes had difficulty eating healthy meals.

> They don't bother to stop and get the proper food to eat, they will just stop at a grocery store and pick up a Coke or whatever. In other words, they are just trying to eat what they can because they are trying to get here as soon as they can. They hate being on the road that long. Just get whatever we can eat and go.

> Because you know, when they are on the road, they go and eat fast foods. They have a lot of grease and it is not healthy foods they eat on the road.

The DLEs also reported that migrant farm workers with diabetes have a difficult time maintaining their medication regimen.

> If it is oral, they will take their medications but not the ones who have to take the insulin.

During their time on the road, many of the migrant farm workers have limited time for daily exercise.

> It's hard to get exercise. Some of my patients, they stop in rest areas...walk a little bit.

Theme 3: Roles of the Diabetes Lay Educator

Initially, the DLEs were hired to hold support groups for migrant farm workers diagnosed with diabetes when they resided in Minnesota and North Dakota during the summer months and in Texas when they returned to their home in the winter months. As part of their job, the DLEs recruited clients for these meetings, obtained blood pressures and blood sugars, and interpreted when needed for the health care providers' educational component of meeting. After listening to the professional speaker at the meeting, it was

the DLEs' role to provide clarification and/or demonstration of the educational session to clients along with the provision of English or Spanish educational materials.

The DLEs described their recruitment efforts for Diabetes Support Group meetings:

> I took some flyers and gave it to the priest. And he announced it at Mass...I was putting flyers everywhere they would let me.
>
> Some we called them by phone because they lived far [away]. Or we just contacted them by the farmer.
>
> Give them a call or send them a letter.

The DLEs held support group meetings every three weeks when not migrating between the northern states and Texas. According to the DLEs, these well-attended meetings were beneficial because it increased their knowledge about their clients' perceptions of their diabetes. In addition, the clients had a place to learn about this disease and then be able to talk with others on how to self-manage their diabetes.

> [They are] talking to each other and asking 'How do you take care of your diabetes…' I listen to them, and then I learn about what they are sharing.
>
> These 17 people, that's who I talk with. Everybody tries to come to the meetings because I heard they feel better and they learn stuff that they have never heard about from diabetes...they are so excited because their blood sugar goes down...they feel so [much] pride and [are] so excited.

Initially, the DLEs were provided with a stipend to purchase food for these support group meetings. This was in an effort to make the support group meetings more of a welcoming and social experience for the educators and participants. As the DLEs evolved in their role, they suggested providing incentives for clients attending these meetings:

> Maybe I could encourage people to go to the sessions if you promise them something that you are going to give them.

As a group, the DLEs decided to offer incentives that reinforced the educational component of the meeting.

> I usually try to provide my clients at least a bottle of water at my support group meeting...some kind of a fruit, I give them for answering questions [about information they have learned on diabetes].
>
> They like little presents as well. It is a little box that comes [for] medication [pill caddy]. I also pass them out, like that little ball for a massage.

When the DLEs returned to their home in Texas, they identified the need to expand their role to include home visits. During these often lengthy and frequent visits, clients were provided with medical, emotional, and social support from the DLE.

> I don't go to a home visit that lasts 30 minutes or an 1 hour. Sometimes I am there three hours.

> I visit my patients...I go to their house every two weeks or almost every three weeks.

Additionally, the DLEs provided assistance for obtaining health care services or medications.

> I go to his home and I find out that he doesn't have meds or he does have meds, and he is having problems. I don't stop there, I always try to get them into their clinic.

> I would go to their houses and they would gladly [invite] me in and they would gladly let me check their sugars.

If needed, many of the DLEs were willing to expand their assistance to clients. One DLE provided the following example:

> If I can help you with anything let me know. I may not be able to help you with money but if I can go down there and interpret for them, fine, I will do it.

As part of their role in home visits, they provided and reinforced diabetes education for clients as depicted in the following quote:

> [I] show them how to clean inside their toes and whatever, show them how to clean and look with a mirror under their feet.

The DLEs perceived that individuals in the community respected them. They reported with pride:

> I like to work with people and I like they way they treat me you know. They respect me very well.

> I said, 'I am a DLE, an educator'.

Theme 4: Access to Health Care Services

When farm workers were employed in Minnesota and North Dakota, MHSI provided access to health care and education through the operation of 1) four seasonal, satellite, nurse-managed health centers, 2) two seasonal mobile units (open two-five

months a year), and 3) three primary centers that operated on a year-round basis (Heuer, Hess, & Klug, 2004). Nurse- managed health centers provided health care for acute and chronic conditions. Farm workers presented to these centers on a walk-in basis. They were either treated for their condition at one of these nurse-managed centers or they were provided a voucher to cover the cost of a referral visit with an affiliated health care provider. After this office visit, if medications were needed, the client received a pharmacy voucher that covered a portion of their medication cost.

Over the years, a relationship has been built between MHSI and the farm worker population. According to the DLEs, migrant farm workers relied on the services provided by these nurse-managed centers in the Upper Midwest to address some of their health care needs.

> Here in Minnesota they are so used to having Migrant Health Services. Anything they need, they go to Migrant Health Services.
>
> Now that they are up here, they can get the medicine until Migrant Health [seasonal site] closes. As long as Migrant Health is here, they know they can get medicine...Then down in Texas that is where the problem comes [getting services and medicine].

In collaboration with the MHSI seasonal staff, the migrant health diabetes program staff provided referrals to community providers, prevention screenings, educational sessions, and Diabetes Cluster Clinics (Guasasco, Heuer, & Lausch, 2002). Cluster Clinics provided care, education, and counseling to farmworkers from a multidisciplinary diabetes team that consisted of an ophthalmologist, nutritionist, dental hygienist, diabetes educator, phlebotomists, nurses, including some specializing in podiatry, mid-level practitioners and/or physicians, bilingual outreach staff, and diabetes lay educators (Heuer, Hess, & Klug, 2004). The DLEs believed migrant farmworkers received comprehensive diabetic care in the Upper Midwest.

> They have more diabetic care [in Minnesota] than in Texas.

Although these specialized health care services were available in Minnesota and North Dakota, some of the DLEs expressed concern regarding the utilization of these services by farmworkers. They described the number of barriers affecting their clients' ability to attend these clinics that included distance to be traveled, lack of transportation, and extended work hours.

> The [Diabetes Cluster Clinics] screening clinics are too far away when they go to Fargo, [North Dakota]. …We don't get out of work until 7:00 p.m.
>
> The [Diabetes Cluster Clinics] screening is too far…and we do not have anyone to drive us.

The DLEs conveyed how they encouraged their clients to attend these clinics because of the comprehensive care they would receive as depicted in the following quote:

> [I tell them] you don't understand, you are getting checked for everything where care down in Texas, you don't have any of that.

The DLEs discussed that when the migrant farm workers returned to their homebase in Texas; their clients would seek services from either local Community Health Centers or travel across the border to Mexico.

> They are asking me if they can have the same migrant health down there...the only thing I can refer you to is the low income clinic they have down in Texas.
>
> Like when we are in Texas, they don't have any migrant program to help them with medicines or to go see doctors. What they do is cross the border. They go into Mexico and try to find a doctor...they are cheaper in Mexico.
>
> In Texas, people go to Mexico to buy medication.

DISCUSSION

This project demonstrated that the implementation of DLEs with a Hispanic migrant farmworker is effective because they have a shared perspective of the cultural, social, and economic worldview. According to Zuvekas, Nolan, Tumaylle, & Griffin (1999) Community Health Workers (or DLEs) usually racially and ethnically reflect the communities they serve. These DLEs understood the inherent difficulties farmworkers encountered while managing their diabetes and traveling between states. Due to long hours on the road and their financial constraints, it was difficult for the farmworkers to follow their nutritional plans, medication regimes, and exercise programs.

According to Eng and Young (1992), LHAs can pursue a variety of goals and roles by using a mixture of activities and tactics. As part of their roles at the community level, DLEs disseminated health education and information through one-on-one client interactions, support group meetings, and home visits. Eng and Young (1992) separated the role of an outreach worker and a LHA. The outreach workers' role was described as reaching out to a specific population and motivating them to comply with the existing health care regimens, whereas the role of the lay health advisor was described as the health educator for their community and as the one to assist in mobilizing and advocating for health resources. The DLE, employed by MHSI, functioned in both capacities, as outreach workers recruiting migrant farm workers with diabetes and then educating them on utilizing the health care system.

Migrant Health Service, Inc. staff and the Diabetes Program staff offered comprehensive health care and educational services through their nurse-managed health centers, Diabetes Cluster Clinics, and community activities such as prevention screenings. The DLEs expressed their concern that even though such programs existed, only a limited number of clients sought these services during the summer months. Upon their return to

Texas, the DLEs believed that it was even more difficult for migrant farmworkers to receive health care services for diabetes. Their belief has been supported in a policy implication paper written by Hale, Burke, & Arias-Cantu (2004). These authors cited fragmented health services delivery systems and personal lifestyle choices as perpetuating health disparities among Texas populations. According to the DLEs, fragmented health care become even more problematic for the migrant farmworker population because they received health care from a variety of health care providers in different states.

CONCLUSION

This study is significant because it has captured a little known phenomenona, the perceptions of DLEs as they worked with migrant farmworkers who traveled between multiple states. The successes of the DLEs' work and interactions with the Hispanic migrant farmworkers were based on their similarity of culture, language, and health care experiences. Information gained from this study could be useful in developing policy that would fund lay educator programs to address issues such as access to health care and the prevention and treatment of chronic disease in this mobile population.

Additional research should be conducted on the impact of the DLEs regarding access, use of services, and the farmworkers' knowledge and behavior changes in relation to self-managing their diabetes. With this additional knowledge, the DLE would be a more effective liaison and advocate for the migrant farmworker population.

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