

Increasing the Delivery of Health Care Services to Migrant Farm Worker Families Through a Community Partnership Model

Ann Connor, Laura P. Rainer, Jordan B. Simcox, and Karen Thomisee

ABSTRACT The Farm Worker Family Health Program (FWFHP) is a 13-year community partnership model designed to increase delivery of health care services for migrant farm worker families. During a yearly 2-week immersion experience, 90 students and faculty members provide health care services, including physical examinations, health screenings, health education, physical therapy, and dental care for 1,000 migrant farm workers and migrant children. Students and faculty members gain a deeper appreciation of the health and social issues that migrant farm worker families face by providing health care services in the places where migrant families live, work, and are educated. Although the model is not unique, it is significant because of its sustained history, interdisciplinary collaboration among community and academic partners, mutual trust and connections among the partners, and the way the program is tailored to meet the needs of the population served. The principles of social responsibility and leadership frame the FWFHP experience. This community partnership model can be replicated by others working with at-risk populations in low-resource settings.

Key words: community partnership, migrant children, migrant farm worker families, migrant farm workers, social responsibility.

The Community Partnership Model

The Farm Worker Family Health Program (FWFHP) is a 13-year community partnership model designed to increase health care delivery for migrant farm

worker families. The model encourages a deeper understanding of the health and social issues that migrant farm worker families face in the context of their environment. This model can be adapted to deliver health care services with other at-risk populations in low-resource settings.

The partners include an interdisciplinary team of health professional students and faculty members from five colleges and universities, a federally funded farm worker health clinic, the local school system, the local Area Health Education Centers (AHECs), and other community members. An urban, Southeastern University School of Nursing coordinates the FWFHP, which expands and enhances the year-round work of the farm worker health clinic. The daily work of the clinic, its community presence, and long-standing partnerships are essential features of the success of the FWFHP model. The local school's summer education program, which serves migrant children, is another essential feature of the FWFHP.

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During an annual 2-week FWFHP immersion experience, approximately 90 students and faculty members from departments of nursing, physical therapy, dental hygiene, and psychology travel 4 hr at the beginning of the experience from an urban location to a rural community, work as an interdisciplinary team, and return after 2 weeks. The team delivers health care services, including physical examinations, health screenings, health education, physical therapy, and dental care for approximately 500 migrant farm workers and 500 migrant children.

Social responsibility and leadership frame the community partnership model. The interdisciplinary team members gain skills that help them work in partnership with communities to deliver health care services in low-resource settings and become stronger health care advocates for at-risk populations.

Review of the Literature on Community Partnerships

Community-academic partnerships provide the conceptual basis for the FWFHP. These partnerships can improve the health of at-risk populations by providing a sustainable health care delivery model. Community-academic partnerships bring human, educational, and financial resources into underserved communities (Sherrill et al., 2005; Wilson, Wold, Spencer, & Pittman, 2000), create sustainable programs (Meade & Calvo, 2001), and recruit future health professionals into shortage areas (Plowfield, Wheeler, & Raymond, 2005; Van Hofwegen, Kirkham, & Harwood, 2005).

The experiences and exchange of information that resulted from community-academic health partnerships were effective tools for improving health of at-risk populations according to Sherrill et al. (2005). The authors described a community-academic health partnership with migrant farm workers in South Carolina that utilized a collaborative approach to address the health of rural Latinos. This program included interagency collaboration among health professional students, Spanish-language students, and the local health department. Students reported satisfaction with practicing their skills, gaining clinical hours, learning culturally competent care, and delivering health services in a nontraditional health care setting. The authors concluded that community-academic partnerships can be successful at delivering quality care to at-risk communities if they are designed with

flexibility to focus on the strengths and needs of individual communities.

Assessing community-academic partnership models of community health nursing education, D'Lugoff and McCarter (2005) wrote that partnerships "are low cost options for engaging students in innovative projects which offer substantial benefits while fulfilling educational objectives" (p. 9). Van Hofwegen et al. (2005) stated "... rural communities face increasing challenges in health care provision including isolation, nursing staff recruitment and retention, and decreasing access to health care resources related in part to funding cutbacks" (p. 1). Reflecting on similar challenges facing migrant farm workers, Meade and Calvo (2001) wrote that community-academic health partnerships created a delivery system that prepared the institutions in a community to deliver viable health care services. Partnerships such as these enhanced health and preventative care, thereby improving the health of at-risk populations (p. 1578).

Plowfield et al. (2005) found that community-academic partnerships in environments with limited health care services succeeded when there was a sustained partnership over time and "a vision of mutual-ity" (pp. 218–219) in achieving the health care goal. Networks and partnerships built on trust were equally important.

Wilson et al. (2000) evaluated the FWFHP and stated that sharing of information helped partners and agencies identify health issues, plan future primary care interventions, and implement change based on community assets and needs (p. 213). The FWFHP involved collaboration among many partners and encouraged all to take an active role in issues facing the community.

The Target Population, Problem, and Opportunity

The estimated three million migrant (and seasonal) farm workers in the United States (Larson & Plascencia, 1993, as cited in National Center for Farmworker Health [NCFH], 2003a) are the strength and success behind the multibillion dollar agriculture industry in the United States (Economic Research Service, 2002, as cited in NCFH, 2003a). They often exist as an invisible at-risk population because they live and work in areas that are physically and socially isolated from the greater community.

The migrant farm worker population served by the FWFHP consists primarily of Mexican immigrants who migrate along the eastern seaboard from Florida to Maine. This is one of the three main migratory streams in the United States in addition to the Western and Midwestern streams (Weathers, Minkovitz, O'Campo, & Diener-West, 2004). Many immigrants are undocumented, and others are working under a temporary government visa. The National Agricultural Workers Survey (1997–1998) reports that the work force is predominantly young males; 80% are men, and the average age is 31 years, although the number of females and children is increasing. The majority of migrant farm workers speak Spanish, 84%; some speak English, 12%; and a small percentage speak native indigenous languages. The median level of education is sixth grade (United States Department of Labor, 2000, as cited in NCFH, 2003a).

Migrant farm workers face significant occupational hazards. "Farm workers are usually paid by the piece so they work at a quick pace, rarely stop for breaks, and often work 12-hours or more each day for six days per week during the peak season" (C. Hernandez, personal communication, June 15, 2006). "Agricultural crop and livestock production, combined with agricultural services, accounted for 13% of all occupational deaths from 1994 to 1999, while only covering 2% of overall employment" (Bureau of Labor Statistics, 2000, as cited in Larson, 2001, p. 8).

The environment challenges migrant farm worker families' abilities to sustain and improve health and wellness. They live in barracks or trailer parks that are often overcrowded and have numerous structural, sanitation, and electrical problems.

The harsh natural environment also puts migrant farm workers at risk for many health problems. Even with protective clothing, the humidity, plant fibers, and pesticides invite dermatological irritations and infections. Agricultural workers suffer the highest rates of skin disorders (Villarejo & Baron, 1999, as cited in NCFH, 2003b). Although the migrant farm workers wear rubber boots to offer some protection, most still succumb to foot fungus, infection, maceration, trench foot, or other ailments (J. Wold, personal communication, June 1, 2006). Nearly half of the tobacco workers claimed to have symptoms of sickness from nicotine exposure at least once during a tobacco growing season (Quandt, Arcury, Preisser, Norton, & Austin, 2000, as cited in Larson, 2001). Environmental agents such as dust and chemicals present a

hazard to workers' eyes (Larson, 2001). Constant sun exposure causes growths called pterygiums to form on the surface of the eyes, which, in time, can lead to blindness. Other health problems include back injuries and musculoskeletal problems, heat stress, dehydration, pesticide poisoning, depression and isolation, sexually transmitted infections, parasitic infections, and even loss of limbs due to farm equipment injuries. Poor nutrition, diabetes mellitus, hypertension, obesity, and other chronic diseases are also prevalent (NCFH, 2003c).

Latino children in general are at a high risk for mental health problems, dental caries, school dropout, environmental hazards, obesity, diabetes mellitus, and asthma, and lack access to health care (Flores et al., 2002). Additionally, children of migrant farm workers face health challenges due to their migratory status.

Migrant farm worker families have a difficult time accessing affordable health care. They must overcome barriers such as isolation, poverty, frequent mobility, language differences, and illiteracy. Also, a "lack of an independent means of transportation, lack of knowledge of where to go for needed care, and very high caretaker pressure to work contribute to unmet medical need among migrant children" (Weathers et al., 2004, p. 281).

There is a "reluctance of migrant workers, particularly Hispanics, to apply for services and seek out available community supports. Inherent fears of negative consequences, such as determination of employment ineligibility or deportation, are pervasive" (Breeding, Harley, Rogers, & Crystal, 2005, Overview of Hispanic Migrant Workers, p. 34). As a result, they frequently postpone accessing care until their condition is severe, at which point they rely on expensive emergency services. Existing migrant health care centers provide accessible care to < 20% of the nation's migrant farm workers (National Advisory Council on Migrant Health, 1993, as cited in NCFH, 2003a).

Poverty influences all aspects of health and well-being and underlies health disparities. This is especially true in rural areas where poverty rates exceed rates in urban areas (National Advisory Committee on Rural Health and Human Services, 2004, p. 4). Much of the southeastern United States is designated as a Health Professional Shortage Area by the Department of Health and Human Services (Health Resources and Services Administration. Bureau of Health Professions, 2005), including the FWFHP

sites, emphasizing a large gap in available services. The underlying health disparities of the farm worker community call for action from the health care system, and the FWFHP responds to this important opportunity.

Essential Features of the Model

The interdisciplinary team approach helps health professional students develop social responsibility and leadership skills in partnering with the community. The field experience increases collaboration, fosters cooperation among professionals, and creates a foundation for future professional partnerships among team members. The model also encourages a deeper understanding of the complex connection between health and the environment, thus strengthening health professional students' awareness of the need for advocacy for at-risk populations.

The FWFHP is tailored specifically to the migrant farm worker community. Weathers et al. (2004) concludes that the "delivery of health care during nontraditional working hours and in nontraditional working sites, in proximity to farm workers, also would likely reduce access barriers for migrant children" (p. 281).

The FWFHP provides health care services for migrant children (preschool to eighth grade) during the summer school day. The program coincides with the short period of time the migrant children are in school for the summer education program and is situated within the school to reach as many migrant children as possible.

The breadth and continuity of the program are essential features. For migrant children, the interdisciplinary team provides physical, emotional, developmental, and social health assessments. Undergraduate nursing students' responsibilities include height, weight, body mass index, blood pressure, vision and hearing screening, as well as hemoglobin and glucose testing. Nurse practitioner students complete physical exams and assess developmental milestones. Dental hygiene students clean teeth and apply fluoride and sealants to protect the migrant children's teeth from decay. Physical therapy students identify any gross-or fine-motor difficulties and teach proper body mechanics. Psychology students assess children needing counseling services or testing for learning difficulties, emotional, or social delays. The team completes the required health documents needed to assist children's transitions into and

between schools. The farm worker clinic coordinates follow-up care and referrals.

The FWFHP evening health camps are located in the fields, packing sheds, or living facilities, begin when the migrant workers finish picking crops, and end when everyone has been cared for often near midnight. Undergraduate nursing students conduct health histories, and screen for anemia, hypertension, and diabetes, while nurse practitioner, physical therapy, and dental hygiene students assess and treat those with a presenting illness. Psychology students assess and refer individuals in need of services or counseling. Each migrant farm worker family member has the opportunity to discuss their specific health concerns and may seek multiple services from the interdisciplinary team members. Interpreters, who are volunteers from the community, are present on-site to help team members who are not fluent in Spanish. The team also coordinates referrals, scheduling, and transportation to the farm worker health clinic.

The farm worker health clinic is available Monday through Saturday (including nontraditional hours and outreach visits to the fields in the evenings). The FWFHP strengthens the existing farm worker health clinic's services by extending hours of operation, providing additional sites, and increasing the delivery of health care services and education without loss of the migrant farm workers' valuable work time or income. The team collaborates with the farm worker health clinic to use treatments that are affordable and culturally appropriate for a low-resource setting. Extra time and consideration is given to the factors that influence patient care, scheduled breaks and meal times, hydration, clean water to drink with oral medicine, and access to emergency care. Health education, prevention, and promotion are often the most valuable tools that migrant farm worker families have as they move.

Lessons Learned for Replication in Other Settings

The FWFHP team must fit its work around the normal routines of migrant farm worker families, adapting to the summer education program and the migrant farm workers' planting and harvesting schedules. Typically, health care providers do not go to the locations of their patients; rather, they expect the patients to come to them and wait for care. Moving into the patients' environment and waiting for them to arrive can be a

difficult shift in power for providers. Flexibility is essential because the FWFHP model is implemented in unpredictable and unstructured environments, contrasting sharply with typical health care.

Working with a medical interpreter requires flexibility, patience, and an appreciation for how vital interpretation skills are in delivering health care services. While some team members come with Spanish-language skills, the value of a native speaker who knows the nuances of the farm worker community and is aware of local community resources quickly emerges.

Coordination of partnership responsibilities and program logistics while difficult are central to the FWFHP success. Communication involves countless discussions and meetings to finalize hundreds of program details. Working with dynamic institutions and partners creates a constantly changing environment and requires ongoing attention as issues emerge out of this complexity.

Granting agencies, the participating universities and colleges, the farm worker health clinic, the local faith communities, and local AHEC underwrite the costs for the program. Funding challenges always arise and create barriers and limitations that influence program planning and implementation.

Implications for Nursing Practice

Multiple implications for nursing practice emerge from the community partnership model for students, faculty, community members, and migrant farm worker families. This model increases the delivery of health care services to the community through a non-traditional approach and setting. The FWFHP project offers layer upon layer of exposure to new cultural perspectives. Through this exposure, participants gain skills working with populations who are impoverished, marginalized, at risk, and have significant health disparities. Students and faculty members begin to incorporate a broader scope of improving quality of life and decreasing health disparities into nursing practice.

As a result of this experience, students gain a deeper appreciation for the migrant farm worker community, culture, and pervasive poverty. They witness how migrant families endure isolation, poor housing, frequent mobility, disruptions in education, and health disparities without complaint for the promise of a better life.

The FWFHP participants begin to view migrant farm workers less as a vulnerable population and more as a resilient community, thus strengthening a commitment to social responsibility and serving at-risk populations. As with many marginalized populations labeled as “vulnerable,” the resiliency of those who make up this population continually surfaces as one spends time with them. The distance between students, faculty, and the population served decreases, and a community partnership based on trust, reciprocity, and dignity develops. As students gain this perspective, they strengthen their abilities to lead in new ways in their professional nursing careers, community lives, and the wider arena of social responsibility.

Summary

The FWFHP is a community partnership model designed to increase delivery of health care services to migrant farm worker families. The model is significant because of its 13-year history of partnership and mutual trust, its interdisciplinary team approach, and the way it is distinctively tailored to serve the population. Social responsibility and leadership are embedded in the experience. Team members gain new perspectives on the health and social issues that migrant farm worker families’ face in the context of their lives and increase their professional leadership abilities in a variety of areas.

The interdisciplinary team experiences create the foundation for future professional partnership, offering a deeper appreciation of one another’s professions and a more integrated model of patient care. It also enhances the team members’ abilities to deliver health care services in low-resource settings, adapt to unpredictable environments, and work to build community partnerships.

This article adds to the body of knowledge regarding migrant farm worker health, community partnerships, and models for increasing delivery of health care services to at-risk populations. The FWFHP strengthens interdisciplinary health care practice and serves as a model for others desiring to improve care for at-risk populations in low-resource settings.

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