

Healthy Start Programa Madrina: A Promotora Home Visiting Outreach and Education Program to Improve Perinatal Health among Latina Pregnant Women

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Abstract

The purpose of this article is to describe the development, implementation, and evaluation of Healthy Start Programa Madrina (HSPM), a home visiting promotora outreach and education program for Latina pregnant women and to present the 10-year findings of the program (1996-2005). Perinatal health disparities continue to persist among low-income Hispanics. Promotoras are both bi-lingual and bi-cultural (Spanish speaking) indigenous women who participated in a comprehensive 115-hour training program to connect low-income pregnant immigrant Latina women with needed perinatal support and health promotion services. Promotoras identified pregnant women through community outreach, and then helped them access prenatal care and other support services by providing them with a panel of services such as medical interpretation, transportation, insurance application and enrollment, health education as well as emotional support and guidance. Using multiple methods of evaluation, results show that the program was successful at linking pregnant Latinas to perinatal health care, health education and support services, as well as decreasing barriers to prenatal care. Outcome electronic birth record data indicates that HSPM participants had fewer babies born early and with low birth weight compared to births in a non-participant group. Implications for practice and research are discussed, as well as strengths and limitations.

Introduction

Reducing perinatal health disparities and improving access to prenatal care among ethnic minority groups is

an important public health priority for the nation (U.S. Department of Health and Human Services, 2000). However, pregnant Latinas, particularly those who are low-income, and recent immigrants continue to be at risk for adverse maternal and infant health outcomes due to a multitude of systemic barriers that result in reduced access to prenatal care and related support services. Of particular concern is the prevention of the two leading causes of infant morbidity and mortality: preterm birth and low birth weight (LBW), or birth weights <2,500 grams or 5.5 pounds (March of Dimes, 2005, 2007). Rates of preterm birth (births occurring <37 weeks gestation) have been on the rise for the past decade in the U.S. Hispanic population. Although rates of LBW for Latinos tend to be lower than rates for non-Latino Whites, a phenomenon referred to as the “Latina LBW paradox” rates nevertheless continue to exceed the Healthy People 2010 objective of no more than 5.0% of live births (National Center for Health Statistics, 2004). For instance, compared to a national non-Hispanic LBW rate of 7.3% in 2005, the rate for Hispanics was 6.9%. This Latina paradox, or protective effect against LBW, is under investigation and research indicates that it is more common among Mexican born immigrants compared to U.S. born Latinas, and that it may erode as Latinos acculturate within the United States (Fuentes-Afflick & Lurie, 1997; Hessol & Fuentes-Afflick, 2000; James, 1993; McGlade, Somnath, & Dahlstrom, 2004).

Despite this paradox, many Latinas continue to experience a number of problems related to accessing prenatal care. These include lack of health insurance, language barriers, lack of transportation, fear of deportation because of undocumented status, and other socio-cultural barriers such as distrust and unfamiliarity with the U.S. health care system (Torres, 2005).

In order to reduce barriers to perinatal health care services and attendant maternal and infant health risks, culturally appropriate health promotion and support intervention programs are needed. One intervention strategy that has been reported effective in the Americas for Latinos in improving access to health care, removing barriers to care, increasing health knowledge, and in improving healthy behaviors has been the use of promotoras (lay health workers), also known as community health workers (Andrews, Felton, Wewers, & Heath, 2004; Balcázar et al., 2005; Gibbons, & Tyrus, 2007; Reinschmidt et al., 2006; University of Arizona & Annie E. Casey Foundation, 1998; Zuvekas, Nolan, Tumaylle, & Griffin, 1999).

For more than 40 years, promotoras or community health workers have been utilized in the United States in a variety of community health programs (Nemcek & Sabatier,

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2003; Rudner, 1996; University of Arizona & Annie E. Casey Foundation, 1998). Their use began in the 1960s in public health programs with minority communities (Rudner) and continues today because they are an effective strategy in reaching Latinos and addressing health disparities in Latino communities (Balcázar et al., 2006; Gibbons & Tyrus, 2007; Sherril et al., 2005).

To overcome perinatal health disparities found among low-income Latino immigrants in Chester County, Pennsylvania Healthy Start Programa Madrino (HSPM) was developed. HSPM offers a range of education and support services that are delivered by promotoras and aims to help low-income pregnant Latinas access prenatal care, reduce barriers to care, connect to needed services and health education, and improve perinatal health outcomes. This program was funded as part of the national Healthy Start initiative which was established in 1991 under the U.S. Department of Health and Human Services, Health Resources and Services Administration, Maternal and Child Health Bureau to reduce infant mortality and other perinatal health disparities. Additionally, it is funded under Title V legislation, enacted by Congress in 1935 as the only federal public health legislation dedicated to improving the health of the nation's mothers and children. The name Programa Madrino (which literally means Godmother Program in Spanish) was chosen because in many Latina cultures the godmother has important obligations in child rearing. Promotoras thus serve as "godmothers" to support pregnant women and children.

The purpose of this article is to report on the development, implementation, and evaluation of the first ten years (1996-2005) of this ongoing program. The article aims to (a) describe the need for the program, (b) provide an overview of the promotora model and intervention components, (c) describe program results, and (d) offer lessons learned from the program and recommendations for future research/practice. Health educators can benefit from understanding the value of this type of indigenous, culturally competent intervention model and approach in better serving the fastest growing population group in the United States—Latinos.

Methods/Strategies/Intervention Components

In 1995, The Maternal and Child Health Consortium, a local maternal and child health advocacy agency in Chester County, Pennsylvania, initiated a perinatal care program to link high risk women to perinatal care services, and in 1997 received a federal Healthy Start grant to reduce perinatal disparities among Latinos and African Americans. This article reports on the Latino program and findings. This was accomplished by implementing a multifaceted program that uses a trained cadre of bi-lingual, bi-cultural promotoras who conduct outreach and case finding to enroll pregnant Latina women into early and sustained prenatal care and provide them with comprehensive case management services and a range of health education opportunities. HSPM has four major objectives and service intervention components:

(a) outreach and recruitment of pregnant Latinas in need of prenatal care and support services; (b) facilitation of services by promotoras to reduce linguistic, financial, and transportation barriers to care; (c) health and care coordination through case management services by bi-lingual promotoras, enabling clients and their infants to access the full range of needed community and health services; and (d) promotion of perinatal health through individual and group health education of clients (e.g., HSPM offers the only Spanish language prenatal and parenting classes in the county).

Target Population Description

The program targets low-income pregnant Latina women and their children (up to age 2) in need of perinatal care and support services. Like many communities in the United States, Latinos are the fastest growing population in Chester County, Pennsylvania. Their numbers increased by 88% from the 1990 Census to the 2000 Census (U. S. Census Bureau, 2000). Many Latinos in Chester County are low-income, uninsured, and undocumented migrants/immigrants from Mexico with limited English proficiency. As a result, access to health care and attention to health is problematic and often neglected for this group.

Needs Assessment Survey Results

As part of the program development process, needs assessments were conducted to assess barriers to perinatal care in the project area (Bill, 1999; Family Planning Council, 1998). The most prominent barriers included delays in initiating prenatal care, lack of transportation, linguistic issues, lack of health insurance, fear of using services due to undocumented immigration status, and an array of complex social needs among immigrant Latinos where survival needs (e.g., housing, food) compete with health needs. HSPM intervention components were developed to address these identified needs.

HSPM Promotora Model

The use of promotoras in Latin America has a long and successful history to promote health and social change (Arizmendi & Ortiz, 2004; United States-Mexico Border Health Commission, 2004). More recently, public health professionals in the United States have been developing efforts to support and expand the role of promotoras in communities with large Latino populations (Balcázar et al., 2006; Gibbons & Tyrus, 2007; Larkey, 2006). Promotoras are indigenous, trusted, and well-respected members of the community who receive training to provide health education and services and linkages to needed health and social services (Centers for Disease Control and Prevention, 1994).

The promotora model used in HSPM is based upon their successful use in Mexico, where they are funded as integral members of the public health workforce. The majority of Healthy Start Latinas (85%) have migrated from

Mexico and most come from the state of Guanajuato. Since promotoras have been used in Guanajuato for years, (R. E. V. Ugalde, personal communication, Department of Public Health Promotion, Guanajuato, Mexico, May 22, 2005) it was assumed that a replication of the promotora model would provide a culturally competent approach to both recruit Latinas and deliver services in Pennsylvania.

Promotoras are recruited by word-of-mouth, advertisements and networking with Latino service agencies. Women are eligible to serve as promotoras if they are bi-lingual, bi-cultural, have an interest in maternal and child health, and have a GED, high school diploma, or higher level of education. To ensure that HSPM promotoras have the requisite skills, they must successfully complete a comprehensive 115 hour training program. Their major job duties and programmatic roles are displayed in Table 1. When the program first began in 1995, there were two HSPM offices staffed by four promotoras. Since then it has expanded to five locations, and a staff of 11 promotoras, who are supervised by bi-lingual case managers.

Program Component Interventions

Program components for HSPM (Table 1) were developed through formative research and community-based partnerships with community members, promotoras, and health care providers. Subsequently, additional components have been added to enhance the program, such as perinatal depression screening/services in 2003 (in response to federal Healthy Start mandate). HSPM consists of four major program components: (a) outreach, (b) home visits and links to perinatal care and support services, (c) case management and care coordination (including risk assessment, depression screening, and referral), (d) and health education. Emotional support and guidance is provided to enrolled women and their children (up to age two).

Promotoras use a variety of outreach strategies to encourage pregnant Latinas to enroll in needed services to include neighborhood canvassing, development and distribution of culturally appropriate outreach materials (flyers and brochures in English and Spanish), enrollment incentives (gift bags for the mother and child), outreach

Table 1

HSPM Program Component Descriptions and Promotora Duties/Roles

Program component	Component description	Promotora duties/roles
Outreach & client recruitment	Outreach to pregnant Latinas, low-income, undocumented	Neighborhood canvassing & outreach to community Case finding
Home visits	Visit and enroll clients in home, assess needs & develop service plan	Service plan assessment & care plan development
Linkage to prenatal care & other needed services	Assess need for linkages to health care & support services	Link to prenatal care & support services
Facilitating services	Assess need for health insurance, medical interpreting, and transportation	Enroll & link to health insurance, provide medical interpreting, arrange for transportation
Health education & information	Provide individual perinatal health education in home Prenatal classes in community	Educate one-on-one on perinatal health Enroll in HSPM Spanish speaking group prenatal/parenting classes in community
Risk assessment	Assess health risks to include drug usage, depression, & other needs	Link to referrals for substance abuse and mental health counseling
Emotional and social support	Provide emotional/social support for positive health behaviors & needed services	Emotional & social support Health coaching Health advocacy for services

events, and mobilization of helping networks. Promotoras provide support via home visits to identify the needs of each woman and her family (based upon a standardized risk level assessment) and develop an individualized service plan to meet those needs. In addition to linking women to perinatal health and social services, promotoras provide invaluable assistance with medical interpreting and translating, transportation, and enrollment in publicly funded insurance programs.

Promotoras help pregnant and parenting women and their children (up to 2 years of age) with multiple needs access and utilize the full range of community services available to them, such as referrals to the Women Infants and Children (WIC) nutritional support program; referrals for high risk pregnancies to the Title V public health nurses; coordination and follow-up of services, health education, counseling and guidance to reduce health risk behaviors such as drug use/abuse, and depression screening using the English or Spanish version of the Edinburgh Postnatal Depression Scale (EPDS) (Cox, Holden, & Sajovsky, 1987). Women with positive screens for depression are referred to mental health services with bi-lingual family therapists.

Based on the educational needs of Latinas in the project area (mean education level of enrollees was eighth grade), HSPM selects low literacy educational materials that are culturally and linguistically appropriate and promotoras provide a plethora of one on one perinatal health information/education. Topics include prenatal health, nutrition, dental health, risk behaviors, and familiarization with the U.S. health care system. Postpartum clients receive information on breastfeeding, family planning, and infant development. Promotoras link women to prenatal and parenting classes conducted in Spanish at accessible community-based locations. The curriculum chosen for the prenatal classes, *Comenzando Bien*, (March of Dimes, 1995) was developed by the March of Dimes in collaboration with the National Alliance for Hispanic Health and has been evaluated successfully with other low income Latina pregnant women (Perrin & Perry-Casler, 2000). The classes are taught in Spanish by bi-lingual nurses and classes meet weekly for two hours over a six-week period and conclude with a tour of a local hospital's maternity unit. The parenting classes are conducted in Spanish by bi-lingual parent educators. The classes, *Padres Aprendiendo Juntos* (Parents Learning Together), consist of a series of four workshops which were based on adapted materials (translated into Spanish) from the Bright Futures parenting curriculum developed at Georgetown University with funding from the Maternal and Child Health Bureau.

As immigrant women who are often separated from their families and support systems, promotoras provide important emotional/social support to women and children in four broad areas: (a) emotional--listening, sharing, trust and concern; (b) informational--providing advice and suggestions; (c) instrumental--practical aid and service; and (d) appraisal--giving positive feedback and support (Heaney & Israel, 2002).

Evaluation Methods

The project team developed a comprehensive evaluation plan to include process, impact, and outcome evaluation. Qualitative and quantitative methods were employed to assess program effectiveness. Process evaluation consisted of tracking the number of enrollees and participation in activities, such as the number of home based health education encounters provided, and number of participants in the community-based prenatal education and parenting classes. Impact evaluation consisted of tracking intermediate changes after the intervention was delivered such as the number of linkages to prenatal care, health insurance enrollment, provision of medical interpreting encounters, transportation assistance provided, and case management services provided.

Qualitative methods used to monitor program development and implementation included focus groups conducted in 1998/99 with providers and clients to identify barriers to care, a client satisfaction survey administered in 2003, two focus groups with clients in 2005, and an open-ended questionnaire with HSPM staff administered in 2005. The outcome component of the evaluation included monitoring preterm birth and low birth weight trends among HSPM participants and a comparison group of non-participant Latinas in the HSPM project area. Data sources included program records and electronic birth record data provided by the Pennsylvania Bureau of Health Statistics and Research (BHSR), Pennsylvania Department of Health (select electronic birth record data from 1996-2005 were provided to Dr. Hock-Long personally by staff in BHSR and in accordance with Pennsylvania state law). The HSPM evaluation was approved by the Family Planning Council and the West Chester University Institutional Review Boards.

Results

Description of Participants

Project data from (1996-2005) have been analyzed to determine program effectiveness in meeting objectives and in measuring program satisfaction and benefits. HSPM was successful at recruiting, enrolling, and linking pregnant Latinas to perinatal care and support services, with an emphasis on undocumented Latinas. As Table 2 shows, 2,053 Latina clients enrolled in the program from 1996-2005, and 70% of them were undocumented. The majority of undocumented clients (85%) were of Mexican origin. Clients had a mean age of 24.6 years and ranged in age from 13 to 44 years. Of the 2,053 clients, 1,704, (83%) had no health insurance at time of enrollment. In addition, 1,853 clients (89%) reported limited English proficiency, and 1,626 (79.2%) had less than 12 years of education.

Table 2

Demographic Characteristics of Latina Healthy Start Participants/Enrollees 1996-2005 (N=2,053)

	N	%
Participants/enrollees		
Undocumented	1,437	70.0
Documented	616	30.0
Mexican origin	1,751	85.3
Puerto Rican origin	166	8.1
Other	136	6.6
Mean age	24.6 (range 13-44)	
No health insurance	1,704	83.0
Medical assistance or public	142	6.9
Private insurance	207	10.1
Limited English proficiency	1,835	89.4
English proficiency	218	10.6
High school graduate or higher	427	20.8
< 12 years of schooling	1,626	79.2

Access and Linkages to Perinatal Health Services and Other Support Services

The program was successful in meeting its objective of increasing access to perinatal health services and other support services. For instance, at the time of program enrollment, approximately 43% of the HSPM clients, 883, had not initiated prenatal care. These clients were subsequently linked to prenatal care—close to 99% (by the next home visit—one/two months later) and continued in prenatal care during their pregnancy. It should be noted that the majority of undocumented Latinas received their prenatal care at a nearby migrant health care center.

At time of enrollment, 83% of the HSPM clients, 1,704, reported that they had no health insurance. After program enrollment, the promotoras helped link 98% of these HSPM clients to publicly funded health insurance programs. For instance, HSPM clients who were eligible for medical assistance were linked to it and obtained it. For those HSPM clients who were undocumented and thus not eligible for medical assistance, promotoras helped them obtain emergency medical assistance to cover labor and delivery costs and medical assistance for the newborn/child up to the first year. Close to 3,000 medical interpreting encounters were provided by the promotoras and 2,994 transportation assistance requests were fulfilled (1996-2005).

HSPM was also successful in linking HSPM clients to other needed case management services. For instance, 1,929 (94 %) of eligible clients received (WIC) nutrition services,

313 (69 %) of the 453 medically high-risk clients were linked with the local Title V public health nursing program.

Health Education (One-on-One and Group)

HSPM achieved its objective of providing culturally appropriate individual and group health education on perinatal health issues. Between 1995-2006 (inclusive) promotoras provided one on one, in-home health education to all clients. From 1998-2006, prenatal classes, Comenzando Bien (Healthy Beginnings), were offered at conveniently located community centers and 309 Latinas completed the six-week prenatal education program with an average attendance per week of 14 clients. From 1998-2006, parenting classes, Padres Aprendiendo Juntos (Parents Working Together), were offered at community centers, and 600 parents attended these sessions.

Depression Education, Assessment and Links to Mental Health Counseling

Since 2003, 884 Latinas were screened for depression in the prenatal period and 753 were screened in the postpartum period. In total, 553 clients had positive screens; 345 were prenatal clients and 188 were postpartum clients. A combined total of 330 (62%) of the clients with positive screens were linked to mental health counseling services.

Client Satisfaction Survey of Program

In 2003, a client satisfaction survey was conducted with a convenience sample of former/current HSPM clients (n=478). All participants reported that the program was helpful and that they were satisfied with services. The top five service categories considered to be helpful were: (a) health education and information, (b) referral to health care providers, (c) assistance with health insurance, (d) linkage to community resources, and (e) provision of emotional support.

Focus Groups and Emotional Support and Guidance

In an effort to further assess client satisfaction with the program, a total of 13 HSPM Latina clients participated in one of two focus groups in 2005. The groups were conducted in Spanish by trained bi-lingual program staff who used a common topic guide. Participants were recruited by word-of-mouth by the promotoras, and informed consent was obtained for each participant.

Client focus group data reported elsewhere in the literature (Bill, 2005) and patient satisfaction surveys with clients substantiated the importance of the provision of emotional support to women in the program. Many women reported that they especially valued the emotional support provided by the promotoras in the absence of maternal family support (many of their mothers were in Mexico). A focus group participant expressed this viewpoint:

My promotora is like my mother to me. She is someone who is always there for me and supports me with any questions I face...and I have faced several problems here. It is not easy for immigrant women from Mexico to raise families here [in the United States]. Many of us have limited family here, my mother and sisters are all in Mexico. When my baby needs help or gets sick, I can call her or talk to her [promotora] and she is like a mom to me here. She helps me get through the problems and I thank God for her and her help.

HSPM Staff Responses on Factors Contributing to Program Success

In 2005, key HSPM staff (n=8), completed an open-ended questionnaire to gather information on their views about the factors that led to program success. The factors they identified fell into the following categories: (a) culturally responsive staff; (b) outreach based on personalismo (personal contacts); (c) co-location of project offices with other community-based programs; (d) comprehensive training program for promotoras; and (e) tangible services that women value to include medical interpreting, insurance, transportation, and emotional support.

Outcome Data

As described previously, the two leading causes of infant morbidity and mortality are preterm birth and LBW. Thus, Healthy People 2010 seeks to reduce the proportion of preterm births (<37 weeks gestation) in the U.S. to 7.6% by 2010. (The 1998 baseline preterm birth rate for Hispanic births was 11.4%.) The Healthy People 2010 objective related to LBW (<2,500 grams) is to reduce the LBW rate to 5.0%; the 1998 baseline preterm birth rate for Hispanic births was 6.4% (U.S. Department of Health and Human Services, 2000).

Birth record data were obtained for 96.5% of the HSPM clients (n=1,566) who gave birth between 1996 and December 31, 2005. It should be noted that the number of clients who gave birth was smaller than the total number of enrollees due to such factors as miscarriage, relocation, attrition, and lack of opportunity to monitor birth outcomes, e.g., pregnancy extending into 2006. Three-year rolling average preterm birth and LBW rates for the 1996-2005 period were computed for HSPM client births (n=1,566), births to Latinas who resided in the target service area but did not receive HSPM services in the prenatal period (n=1,209), and births to Latinas nationwide (n=8,298,650). As Figure

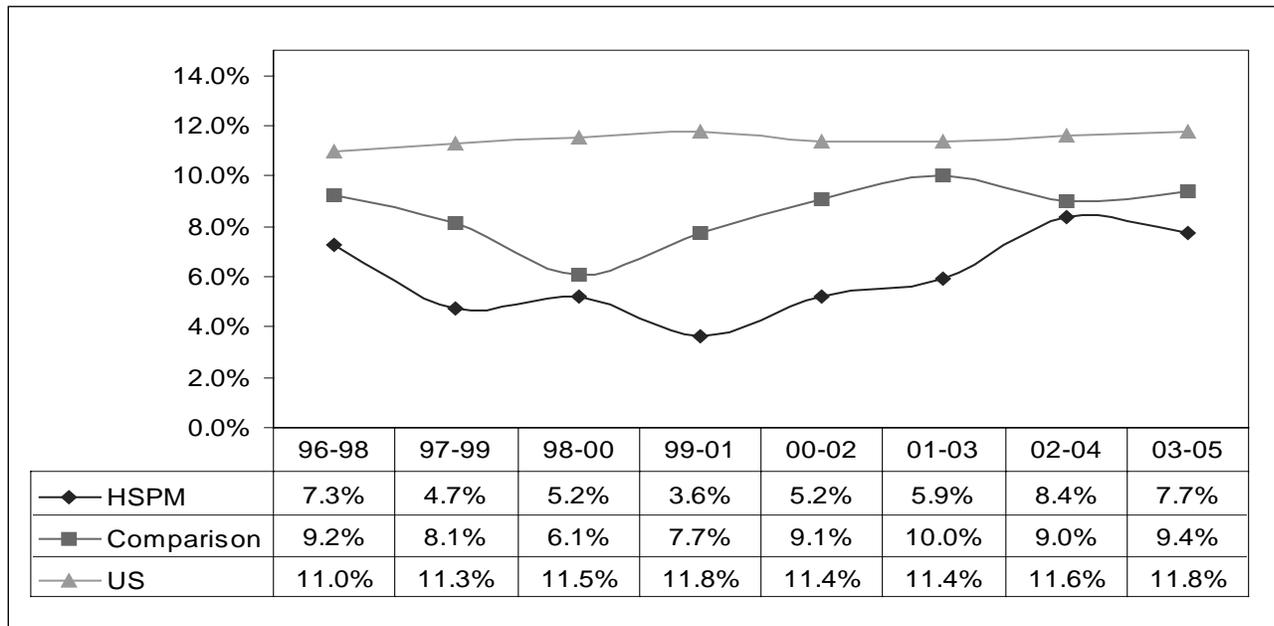


Figure 1. Comparison of three-year average Latino preterm birth trends. Sources: HSPM client and comparison group three-year rolling average preterm birth rates were computed using electronic birth record data obtained from the Pennsylvania Department of Health, Bureau of Health Statistics and Research. These records were provided personally through communications with the BHSR to Dr. Hock-Long and in accordance with Pennsylvania state law. National rates were computed using Centers for Disease Control and Prevention, National Center for Health Statistics, Data retrieved from <http://205.207.175.93/VitalStats/ReportFolders/ReportFolders.aspx> Multiple birth record data tables from 1996-2005 were used in the analysis. Note: Pennsylvania Department of Health, Bureau of Health Statistics and Research disclaims responsibility for any analysis, interpretations, or conclusions based on Pennsylvania birth certificate data used in this evaluation.

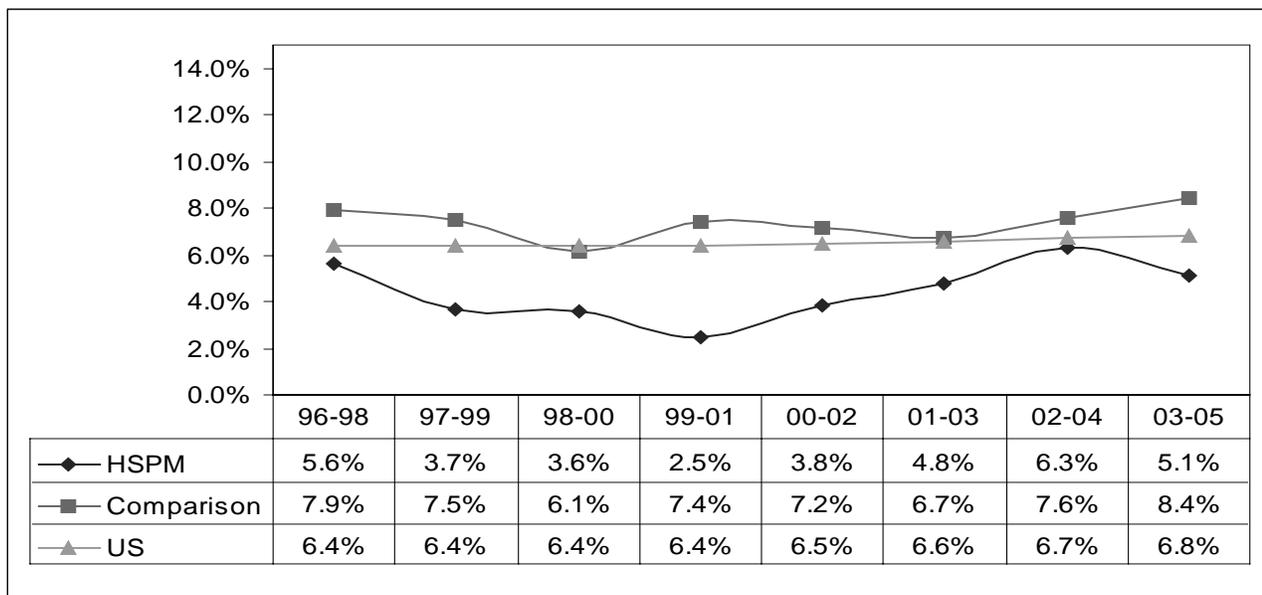


Figure 2. Comparison of three-year average Latino LBW trends. Sources: HSPM client and comparison group three-year rolling average LBW rates are based on electronic birth record data obtained from the Pennsylvania Department of Health, Bureau of Health Statistics and Research (BHSR). These records were provided personally through communications with the BHSR to Dr. Hock-Long and in accordance with Pennsylvania state law. National rates are based on Centers for Disease Control and Prevention, National Center for Health Statistics, Data retrieved from <http://205.207.175.93/VitalStats/ReportFolders/ReportFolders.aspx> Multiple birth record data tables from 1996-2005 were used in the analysis. Note: Pennsylvania Department of Health, Bureau of Health Statistics and Research disclaims responsibility for any analysis, interpretations, or conclusions based on Pennsylvania birth certificate data used in this evaluation.

1 illustrates, the HSPM preterm birth rates fell below the Healthy People 2010 objective of 7.6% in most three-year periods. In contrast, comparison group rates exceeded the Healthy People 2010 objective in most three-year periods and national rates in all three-year periods. While LBW rates (Figure 2) for HSPM Latina clients were lower than the Healthy People 2010 objective of 5.0% in most three-year periods, comparison group and national LBW rates exceeded the objective in all three year periods.

In addition to examining three year average preterm birth and LBW trends, chi-square analyses were conducted to determine the extent to which the proportions of preterm births and LBW differed statistically between HSPM clients and the project area comparison group. These analyses were based on 1996-2005 electronic birth record data obtained from the Bureau of Health Statistics and Research, Pennsylvania Department of Health. (These records were provided personally to Dr. Hock-Long by staff from the BHSR in accordance with Pennsylvania state law and were not available to the public as summary data tables.) Given that twin or higher order multiple births are at increased risk for both preterm delivery and LBW, these analyses were limited to singleton births. With an alpha level of 0.05, the proportion of HSPM clients with singleton preterm births, 5.5%, was found to be significantly lower than the proportion of comparison group members with preterm births, 7.5%, $F(1, 2,704) = 4.48, p = 0.034$. In addition, the proportion

of HSPM clients with LBW births, 3.6%, was significantly lower than that of comparison group members, 6.5%, $F(1, 2,704) = 12.39, p < 0.001$.

In summary, we found that HSPM clients tended to have lower rates of preterm births and infants with LBWs than did their HSPM target area and national counterparts. While these findings are encouraging, they must be interpreted with caution. For instance, we do not have the information necessary to determine if a causative relationship exists between HSPM participation and preterm birth and LBW trends or the extent to which such factors as the Latino paradox account for differences in client and non-client outcomes. For instance, Latinas of Puerto Rican origin tend to have higher preterm birth and LBW rates than do Latinas of Mexican origin. Since 85% of HSPM clients are of Mexican origin, compared to approximately 67% of the comparison group, the Latino paradox may underlie differences in preterm birth and LBW.

Discussion

In this article, we report the 10-year findings (1995-2006) of a home visiting perinatal promotora outreach and education program for low-income pregnant Latinas. Using multiple methods for evaluation, both qualitative and quantitative results show that the promotora approach utilized in the program was successful at enrolling, and

linking pregnant women to perinatal health care, health education, support services, and decreasing socio-cultural barriers to care. Outcome electronic birth record (1995-2006) data indicate that HSPM client births had significantly lower preterm birth and LBW rates, when compared to births in a non-participant group of Latina women in the HSPM target community. Qualitative data (focus groups, patient satisfaction survey) and feedback from clients and program staff reveal the program was valued by women and demonstrated the need for medical interpretation services, transportation assistance and insurance assistance to help these women access timely prenatal care.

The use of bi-lingual and bi-cultural promotoras to reach Latinas was a very successful component of the program offerings. Promotoras were effective at reaching at-risk pregnant Latinas, and establishing the trust necessary for undocumented women to enroll in the program. This approach was based upon a time honored Mexican tradition and appears to be culturally relevant and acceptable to Latinas in the community. In this study barriers to prenatal care were substantiated and reflected much of what the previous literature has reported (Torres, 2005). In addition, women were encouraged to discuss the most helpful and beneficial aspects of the program, an area that we know much less about in the research literature. Women indicated that promotoras provide four helpful services they valued: (a) perinatal health education and information, (b) linkages to perinatal health and support services, (c) education and linkages to health promotion services, and (d) emotional guidance and support. The provision of practical and emotional support by women who were similar to them and familiar with their sociocultural world views appears to enable them to feel comfortable seeking perinatal care services, health education, and other support services.

Limitations

Comparisons of participant and non participant preterm birth and LBW trends must be interpreted cautiously given the fact that the study did not randomly select and assign individuals to these groups, thus limiting the causal effects of program findings in this area. In addition, another limitation of the outcome evaluation was its reliance on birth record data and the problems inherent in such secondary analyses. As a result, we were unable to measure the extent to which individual, programmatic, and/or environmental factors contributed to the differences in preterm birth and low birth weight outcomes. The findings are not intended to be generalizable to Latino communities; instead, they are meant to provide insight and knowledge about what a promotora-led perinatal intervention program may achieve in a community-based setting.

Conclusion and Implications for Practice/Research

This article discusses and demonstrates the value of using a home visiting promotora outreach and education

program for addressing perinatal health disparities and improving access to care, education and support services for low-income, pregnant Latinas. Future research is needed to study the effects and impact of supporting promotora approaches in improving access to prenatal care, education, and other health outcomes. Health educators can benefit by better understanding how this type of culturally competent model and approach can be implemented in Latino communities, and by collaborating with promotoras, indigenous community change agents, in the design and delivery of community-based health promotion programs to improve the health and welfare of Latino mothers and children.

The authors wish to thank the promotoras and Latino families who participated in the HSPM project. Funding was provided in part by Grant No. 93-926 from the Healthy Start Initiative, Maternal and Child Health Bureau, Health Resources and Services Administration, Department of Health and Human Services.

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