Family Support and Pregnancy Behavior among Women in Two Border Mexican Cities

Apoyo familiar y comportamiento durante el embarazo entre mujeres de dos ciudades mexicanas fronterizas

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ABSTRACT

Given that, on average, immigrant Mexican women in the United States have relatively low socioeconomic status, researchers have sought explanations for their favorable pregnancy outcomes. Strong family support in the Mexican culture has been proposed as a contributing factor that is protective of maternal and child health. However, family support may not be determined exogenously. Complex associations may exist between family support, the circumstances of a pregnancy, and whether the pregnancy was planned or welcomed.

In this article, we present findings from a qualitative exploratory study among pregnant women in two Mexican border cities. The goals of this article are to examine the extent to which family and partner support are provided to pregnant women in the Mexican culture, whether such support appears to influence their health-promoting behaviors during pregnancy, and the circumstances under which such support is denied to women. Findings suggest that women who do not cohabit with the baby's father predating their pregnancy are less likely to welcome the pregnancy and to receive family support. The influence of family support on maternal behavior and health was stronger among *primiparous* women than among women who have had a previous pregnancy.

Keywords: 1. Mexico, 2. U.S.-Mexico border, 3. unintended pregnancy, 4. family support, 5. pregnancy behaviors.

RESUMEN

Dado que, en promedio, el nivel socioeconómico de las mujeres inmigrantes mexicanas en Estados Unidos es relativamente bajo, investigadores han tratado de explicar el alto porcentaje de nacimientos que presentan. Se ha propuesto que la presencia de un fuerte apoyo familiar en la cultura mexicana es uno de los factores que protegen la salud materna e infantil. Sin embargo, es posible que el apoyo familiar no se genere de forma exógena. Pueden existir asociaciones complejas entre el apoyo familiar, las circunstancias en que ocurre el embarazo, y si éste fue planeado o bien recibido. En este artículo presentamos los resultados de un estudio cualitativo exploratorio que se condujo entre mujeres embarazadas en dos ciudades fronterizas mexicanas. Los objetivos de este artículo fueron examinar hasta qué punto la familia y la pareja proporcionan apoyo a mujeres embarazadas en la cultura mexicana, si tal apoyo parece influir en comportamientos que pudieran afectar la salud durante el embarazo, y las circunstancias en que ese apoyo se les niega a las mujeres. Los resultados sugieren que las mujeres que no cohabitan con el padre del bebé antes del embarazo tienen menor tendencia a desear el embarazo y reciben menos apoyo familiar. La influencia del apoyo familiar sobre el comportamiento y la salud materna fue más fuerte entre las mujeres primíparas que entre las mujeres que han tenido embarazos anteriormente.

Palabras claves: 1. México, 2. Frontera México-Estados Unidos, 3. embarazos no deseados, 4. apoyo familiar, 5. comportamientos de salud durante el embarazo.

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INTRODUCTION'

A substantial number of studies with various populations report that social support exerts a positive impact on a pregnant woman's psychological well-being, as well as on the health of her newborn (Carmichael et al., 2003; Dunkel-Schetter et al., 2001; Feldman et al., 2000). In particular, regardless of ethnicity, age, and socioeconomic status, support from the baby's father has been associated with use of prenatal care, reduced substance abuse, a positive attitude toward the pregnancy, and, in general, less stress, anxiety, and depression in the mother-to-be (Landale and Oropesa, 2001; Gutiérrez, 1999; Wiemann et al., 1997; Zambrana et al., 1997; Albrecht et al., 1994; Giblin et al., 1990). Support from parents and siblings has also been associated with reduced depression during pregnancy, but these findings appear to be most significant for teenagers and ethnic minorities, particularly women of Mexican origin (Torres, 2005; Dunkel-Schetter et al., 2001; Zambrana et al., 1997; Sherraden and Barrera, 1996; Turner et al., 1990).

These findings, coupled with the characterization of the Mexican family as unconditional providers of support for its members, particularly during pregnancy, have been credited with contributing to the unexpectedly and consistently favorable pregnancy outcomes of socioeconomically disadvantaged Mexican immigrants in the United States (Page, 2004; Winston and Oths, 2000; Gutiérrez, 1999; Kalofonos and Palinkas, 1999; Zambrana et al., 1997; Balcázar et al., 1996; Sherraden and Barrera, 1996; Scribner and Dwyer, 1989). Moreover, the fact that U.S.-born women of Mexican origin have higher rates of low-birth-weight babies and infant mortality compared with Mexican immigrants has been associated with weakened family ties in the presence of downward assimilation into impoverished urban communities in the United States (Zambrana et al., 1997; Sherraden and Barrera, 1997; Portes and Zhou, 1993).

Recent studies, however, suggest that support within Mexican families may not be as pervasive as had previously been reported (Clark, 2001; Guendelman *et al.*, 2001). In particular, Clark (2001) found that in a sample of pregnant Mexican immigrants in the United States, only one half reported experiencing the cultural

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ideal of strong family support. That is, rather than a cultural trait, family support to pregnant Mexican women may depend on variables yet understudied, possibly including the circumstances of the pregnancy and whether the pregnancy was intended or welcomed by the mother-to-be and/or her kin. Family support, after all, involves actors whose exchanges are colored by gender norms and expectations, as well as a history of previous interactions that are not necessarily all harmonious.

In this study, we present findings on family support during pregnancy from a small exploratory study conducted in two cities located on the Mexican side of the U.S.-Mexico border. Our goals are to examine the extent to and circumstances under which family support is provided to low-income pregnant women in high-migration border areas in Mexico, which are likely to be similar in terms of the population dynamics and social contexts found in many of the communities in the United States in which recent Mexican immigrants live and reproduce.

In section I, we discuss our measures of social support and planned pregnancy and describe respondents' characteristics. Section II presents the cultural context and access to health care in the border communities in the study; findings are presented in Sections III and IV. Section V is devoted to summary and discussion of findings.

I. CONCEPTS, METHODS, AND SAMPLE CHARACTERISTICS

Social support

Social support refers to emotional, informational, or material resources provided by others and perceived by the recipient as positive or helpful (Clark, 2001; Wills and Fegan, 2001). Although both the quality of available resources (functional measurements) and the number of social network connections (structural measurements) have been associated with positive health outcomes, in this study we focus exclusively on the former concept (Wills and Fegan, 2001). Our rationale is that previous studies have identified family support during pregnancy as a key factor in explaining the favorable birth outcomes of women of Mexican origin in the United States. Specifically, in this article we concentrate on the resources provided to the pregnant woman by her family of origin and the baby's father.

During the interviews, we explored three dimensions of social support: emotional (someone to talk to about personal matters or concerns); instrumental (ma-

terial/tangible resources and assistance with chores), and informational (advice or guidance). Each participant was asked the following: whether there was anyone in particular in whom she confided to talk about private matters; whether and how her relationship had changed with her partner and family members since they learned of the pregnancy, and whether, by whom, and what type of (a) advice, (b) assistance with housework, and (c) economic help were provided to her by partner and family members.

Respondents were also asked about their own behavioral changes associated with the pregnancy in a broad range of activities that could potentially influence her and her baby's health. We refer to these throughout the paper as "health-promoting behaviors" and mention a specific behavior when relevant. These health-promoting behaviors included changes in housework and other physical activities as a result of the pregnancy, changes in nutrition, timing and frequency of prenatal care, whether she was complying with medical advice, and changes in smoking and alcohol consumption.

Pregnancy Intendedness

In order to understand the context of the pregnancy, respondents were asked whether they had planned their current pregnancy, when and how they had become aware of it, what their first reaction was to the news, how the baby's father reacted to the news, and why, and how the respondent's parents, friends, and relatives reacted to the news and why. Although these questions capture the concept of "pregnancy intendedness," we did not specifically ask questions concerning the timing of the pregnancy or whether it was desired at all, yet in all cases the information was offered during the conversations, as will be evident later.

While the study focuses on family support, as the fieldwork progressed it became increasingly evident that whether the pregnancy was planned or not by the mother-to-be was a crucial factor that impacted and was influenced by family support.

Current constructs of pregnancy intendedness are derived from a series of questions on whether a pregnancy was desired at the time it occurred, would have been desired at a later time but not when it occurred, or was not desired at all. Unintended pregnancies include those that (a) are *mistimed* because they occurred earlier than desired, and (b) those that are *unwanted* because the mother did not want any (more) children. Studies have found that unintended pregnancies that

are carried to term are associated with higher risks of maternal detrimental behaviors during pregnancy that may impair the well-being of mother and child (Kost, Landry and Darroch, 1998; Brown and Eisenberg, 1995).

Pregnancy intendedness is best conceptualized as a continuum that ranges from deliberately planned to severely mistimed and unwanted pregnancies (Zabin, 1999; Bachrach and Newcomer, 1999). In the case of mistimed pregnancies, birth mistiming by more than 2 years are associated with higher risks of low birth weight and less breastfeeding than those mistimed by a shorter time (Pulley et al., 2002). Furthermore, mothers carrying unwanted pregnancies have been associated with delayed prenatal care, smoking during the pregnancy, and having a low-birth-weight infant (D'Angelo et al., 2001).

In the United States, and most probably worldwide, unintended pregnancies are not uncommon. Using data from the National Survey of Family Growth (NSFG), Finer and Henshaw (2006) estimate that in 2001 approximately one half of all pregnancies in the United States were unintended. This estimate includes pregnancies terminated by abortion or miscarriage. Considering only pregnancies resulting in births, about 35% of all births in 2001 involved unintended pregnancies. This is consistent with estimates of about 30% in 1995 provided by other authors (Pulley *et al.*, 2002).

There is, however, increasing recognition that pregnancy intendedness is an elusive concept that involves multiple dimensions and that it may change with situational circumstances and over time. For example, a Moroccan demographic survey in which the same women were interviewed 3 years apart found that 43% of the same unwanted pregnancies in 1992 were reported as wanted in 1995, and another 19% had changed from unwanted to mistimed (Bankole and Westoff, 1998). Another study using data from the National Longitudinal Survey of Youth found that 16% of women changed their answers about the same pregnancy between 1990 and 1992 (Joyce et al., 2000). Moreover, studies have found that women's assessment of whether a pregnancy was planned changes even during the pregnancy. In a study conducted by Poole et al. (2000), low-income women with high-risk pregnancies were interviewed in the second trimester and then again in the third trimester of their pregnancy. Among the women who reported their pregnancy as intended in the first interview, 22% changed to unintended in the second interview, and 12% of the women who had said their pregnancy was unintended, switched their answer to intended (Poole et al., 2000).

Critics of the construct to measure unintendedness point out its limitations: First, unintended pregnancies are not always unwelcome ones. Sable and Libbus

(2000) studied a sample of women who presented in clinics to obtain pregnancy tests. Among the women who said that if they were pregnant, their pregnancy would be unintended, about one half said they would be happy about a pregnancy. Trussell et al. (1999) also report that about one third of pregnancies in women using contraception (most likely inconsistently) in the 1995 NSFG were in fact intended pregnancies based on the women's answers to question concerning the timing of the pregnancy. Second, pregnancy intendedness may not be a meaningful concept for women who are ambivalent about avoiding a pregnancy or for whom pregnancy is not a deliberate or conscious decision (Zabin, 1999, Sable, 1999). From this perspective, a pregnancy is the result of multiple social and cultural influences that include gender inequality, ideals about relationships with a partner, and expectation from kin and peers (Santelli et al., 2003; Zabin, 1999). Moreover, Zabin (2000) note that partners are likely to influence a woman's intentions, especially in settings where a woman's power to negotiate is weak and where women's desire for children is strongly tied to meeting the needs of a partner. This is consistent with findings by Guendelman et al. (2001) that Mexican women view parenting and domesticity as their primary responsibility, and that there is limited articulation of personal plans or expectations outside family needs. They also reported that the husband or male partner makes decisions on contraception, and that women mainly perceived themselves as possessing little control over their fertility (Guendelman et al., 2001). In our sample, nearly one half of the women (n=11) stated that they did not plan their pregnancy; four of these women experienced user or contraceptive failure, and three were not using modern contraceptive methods immediately prior to conception.² Women who said their pregnancy was not planned, however, did have a different attitude toward their pregnancy, and also revealed differences in health-promoting behaviors and family support dynamics compared with women who mentioned that they planned their pregnancies.

²Two women were using intrauterine devices (IUDS), two said they forgot to take their pill, and three used withdrawal, condoms, or no method. At the time of the study, abortion was not legal in Mexico. Women who desired to terminate a pregnancy could conceivably obtain one in the U.S., where the procedure is not illegal. Therefore, the women in the sample who said they did not plan their pregnancy may differ in their views, access to abortion-related information, resources to pay for an abortion, or other socioeconomic characteristics from those who would choose to terminate an unplanned pregnancy, possibly resulting in few behavioral differences between respondents who planned their pregnancies and those who did not.

Respondents' Characteristics

Twenty four pregnant women residing in two Mexican border cities, Ciudad Juárez, Chihuahua, and Matamoros, Tamaulipas, participated in the study as part of a convenience sample. Although we do not claim that the results of this study are generalizable to all Mexican women, we suggest that the border population and family dynamics are likely to be similar to those of many destination communities in the United States in which Mexican immigrants concentrate.

The women interviewed lived in low-income neighborhoods and were contacted through referrals from local clinics, community organizations and from other respondents. Overall, respondents were between 18 and 39 years of age, with a median age of 23 years. One half of the women in the sample were born in the city where the interview was conducted; 21% had lived in the city for 5 or more years, and 29% had arrived from the interior region of Mexico within the last 4 years. Median number of years of schooling completed was 9, ranging between 2 and 12 years.

Fewer than one half of the women were employed at the time of the interview, but only one of the respondents had never worked. Among the women currently working, one ironed clothes for pay, two sold items from their homes (beauty creams and homemade decorations), and the remainder worked in foreign-owned, export processing plants known as *maquiladoras*. At the time of the interview, earnings of *maquiladora* employees ranged between US\$27 and US\$66 per week (median earnings, US\$53 per week). The remaining three respondents who were working had median earnings of US\$22 weekly. Household income ranged from US\$42 and US\$137 per week, with a median of US\$72 weekly.

In terms of living arrangements, the majority of the women in the study (18 of 24) lived in nuclear households with only their partner or husband, and children if they had any. Four of the five women living with a partner in an extended household arrangement resided with members of their own families of origin (only one woman lived with her mother-in-law and her partner).

Respondents were asked to choose the time (and place) that they could talk to the interviewer privately. At the beginning of the interview, each participant received a copy of a consent form, which was also read to her and explained by the interviewer, describing the purpose of the study, the reasons she was selected as a potential participant, and that her participation was voluntary. The majority of interviews took place in the respondent's home, lasted about 2 hours, and were audio-recorded.

In compliance with Institutional Review Board (IRB) confidentiality assurance, all identifying information was maintained in separate files, and tapes were identified by a number. The names of all respondents are pseudonyms to preserve their anonymity. All tapes were transcribed in Spanish and selected segments were translated into English by our team.

In compliance with grounded theory guidelines, transcripts were reviewed as the interviews progressed, and any topics emerging unexpectedly were followed up in subsequent interviews. Interviews continued until no new themes emerged. In the final analysis, our research study team coded pre-defined categories and recurrent new themes, and developed hypotheses about the manner in which these factors influenced each other. The main pre-defined categories included the various types of support provided to respondents prior to and during their pregnancy by their partner and family members and the use of prenatal care and changes in diet. Analytical coding of new themes included the frequent mention of how women dealt with their pregnancies when they were unplanned, and how family support fitted into these situations. The investigators compared their codes and hypotheses and resolved any discrepancies prior to final analysis (Strauss and Corbin, 1990).

We present findings by women's parity. The opinion and support of female relatives appeared to provide the context within which primiparous (women experiencing their first pregnancy) assessed their health and how the pregnancy was evolving because they had no previous experiences with which to compare their present pregnancy (Sherraden and Barrera, 1996). In contrast, *multiparous* (second or higher-order pregnancy) women were more knowledgeable concerning pregnancy care and assessed their health by comparing their symptoms with those in previous pregnancies.

II. CULTURAL CONTEXT AND ACCESS TO HEALTH CARE

In the Mexican culture, the construction of gender identities focuses on women's roles as mothers and wives. In the past, married women were expected to center their lives on the well-being of their husband and children. To this end, women were expected to refrain from working outside the home so as not to neglect their children and household duties (Livingston, 2004; Fuller, 1995).

In the last few decades, Mexican women's labor force participation has increased substantially. However, the extent to which such employment may reflect

more egalitarian roles between the genders varies by social class and has not been conclusively linked with greater equality within the household (Tiano and Ladino, 1999; Salles and Tuirán, 1996). Moreover, various scholars note that it continues to be the case that women's employment is only appropriate when the husband gives permission, and that the concept of motherhood has been transformed to include economic responsibility for children in addition to childrearing and household chores, which reinforces the women's domestic sphere, rather than challenges patriarchal gender roles (INEGI, 2005; Livingston, 2004; Módena and Mendoza, 2001; Tiano and Ladino, 1999; Salles and Tuirán, 1996; Kopinak, 1995).

In terms of access to prenatal care, the delivery of health care in Mexico is characterized by multiple systems that serve different populations. Employees in government or the formal private sectors access health care services through clinics and hospitals financed by employers' and employees' payroll taxes plus federal government contributions. Health care providers for these workers and their dependents include the Mexican Institute for Social Security (IMSS), the government workers social security system (ISSSTE), the oil-industry workers system (PEMEX), and an entity serving the military and their dependents (Barraza-Lloréns et al., 2002; Frenk et al., 1994).

About one half of the Mexican population, however, lacks health insurance. The uninsured population comprises those in the informal labor market, the unemployed, and the rural poor. These individuals have access to care through the Ministry of Health and IMSS-Solidarity Program (in rural areas), which are financed by general tax revenues and small user fees (Barraza-Lloréns et al., 2002)

In addition, there is a large private healthcare provider sector that is paid out-of-pocket by users. The estimate that one in five social security beneficiaries obtained private physician services the last time they sought ambulatory care suggest that people perceive these services as better than those provided by the government (Brown *et al.*, 2005). About one half of the respondents in the study (13 of 24) were receiving prenatal care at the IMSS, where they planned to deliver their babies. Seven women said they were accessing prenatal care services through public clinics for the uninsured or low-cost (non-profit) community clinics. Two respondents stated that they were receiving care and planned to deliver in a hospital or clinic on the U.S.-side of the border (both women had lived in the United States in the past). Finally, two women did not know where their baby would be born, although they had received at least some prenatal care.

While delivery costs are covered for IMSS members, patients in public and non-government low-cost clinics are charged a fee per consultation plus they are required to pay for delivery of their baby. Based on respondents' information, the cost for vaginal delivery quoted in low-cost clinics was about US\$115 (about US\$320 for a Cesarean section), which for many of our respondents represented 2 to 4 weeks of household earnings.

III. PRIMIPAROUS WOMEN, THEIR HEALTH-PROMOTING BEHAVIORS, AND FAMILY SUPPORT

The presence of family support among *primiparous* women who said they planned their pregnancy was evident by its frequent mention throughout the interviews. Family support was instrumental (helping with housework, presents for the baby and mother, cooking, money, rides) and emotional (company, advice). Mothers and mothers-in-law were the first to provide advice to the inexperienced mother-to-be, to tell her about the processes that take place during pregnancy and thereafter, and to offer their help with meal preparation, laundry, and household chores. Some respondents also mentioned that their mother or mother-in-law planned to remain with them for a few weeks after delivery.

For families that lived in another city, this was an opportunity to have their daughters back at home. For example, a 28-year-old woman in the 18th week of her pregnancy said her mother and siblings, who live several hours away, were very excited and had asked her to go home, "they say that they will take care of me, protect me so I am not alone [during the rest of her pregnancy]." She had warned her family several months prior to the pregnancy that she was ready to become a mother whether married or not. During the interview, she expressed satisfaction concerning the fact that she had married the baby's father shortly after the pregnancy was confirmed. In this respect, we found no behavioral or family support differences between legally married and cohabiting women.³

³Consensual unions in Mexico often precede formal marriage, and in this regard, it is a strategy for family formation (Ojeda, 1992). A report by the Mexican National Population Council (Conapo) estimates that the proportion of couples living in consensual unions has increased from 21.5% in the 1987-1991 period to 26.7% in the period from 1992-1996. Although these unions have a higher termination rate than legally sanctioned marriages (30% of consensual unions end within 1 year compared with 10-12% of legally sanctioned marriages), nearly one half of couples living in consensual unions for over 1 year will end in getting married within 5 years (Conapo, 1999; Ojeda, 1992). Consensual unions take place in every social class, but they are more widespread among low-income groups. In our study, 10 of the women were legally married and 13 lived in a consensual union.

Partners appeared to grow closer emotionally to the mother-to-be, as evidenced by their reported increased attentions, more time spent with them, and even taking over some household chores. For example, upon learning about the pregnancy, some male partners took over the responsibility for cleaning the bathrooms, bathing pets, or doing the grocery shopping.

These women were eager to become mothers, and having their first child was perceived as marking the welcomed transition between living with a male partner and the creation of their own families. One of the women who migrated to the border with her husband 1 year ago, shortly after their marriage, said,

There was a void and now it will be filled... Because always in all couples there must be children... Always the home has to be opened, the family... and a home with no children is no home.

Moreover, some respondents reported that delays in pregnancy had already caused concern among their mothers and sisters.

Ever since I got married, my sisters wanted me to get pregnant right away. They wanted me to have a baby, and I did not want to. They wanted me to get pregnant because they all have babies. They did not believe I was taking contraceptives [que me estaba cuidando], and they would tell me, "you can't have children" or "It's been a long time since you got married." And they would tell me to go to a doctor and get a treatment. When I told them I was pregnant, they were very happy because they thought I wasn't going to have any.

It was not unusual to hear that these women talked, sang, played music, or read to their unborn babies. Few thought that the baby would make their lives more difficult, and even then, they would quickly add that the difficulties would be more than compensated for by the positive things a child would bring to their lives.

In terms of health-promoting behaviors, these women reported that their prenatal care appointments began in their first trimester and that they had kept their appointments. Our findings in this respect are consistent with previous reports that after the initial consultation, subsequent prenatal care appointments are automatically scheduled by the physician, who takes responsibility for treatment and follow-up (Brown *et al.*, 2005; Torres, 2005; Macklin, 1999).

Although some of the women first sought prenatal care at their family's suggestion, most sought it on their own, either because of their symptoms or to mo-

nitor the baby's growth. For example, one woman mentioned, "I always thought that at the very least one had to have a check up, I mean, because of the things one sees [in other pregnant women]." She was referring to her concern about having a baby born ill or underweight.

With the baby's health in mind, the majority of respondents in this group also made deliberate changes in their diets and daily activities. Drinking more water, taking vitamins and minerals, and increasing their consumption of milk, fruits, and vegetables were common among them. For example, a 23 year-old woman mentioned that she now makes an effort to get up early so that she can fit in three square meals a day, whereas she used to skip meals previously. Another respondent describes the changes she has made since she found out she was pregnant,

Now I eat better because before I almost never ate vegetables, I don't like most of them. But now that I am [pregnant] I make the effort to eat vegetables every day or at least three days a week, vegetables and a lot of fruit... milk. My mother-in-law said that when I have nauseas I should eat melons, watermelon, or mango... In the mornings I eat one egg and ham and beans, and four or five tortillas and two milkshakes [banana and milk blend]. I take vitamins too [...] Also, I don't carry anything heavy, I don't get upset as often [ya no hago tanto coraje], and when I don't feel well, I go to see the doctor to see what it is I have...so the baby is born well, healthier.

The majority of respondents in this group believed that a good diet was crucial to ensure a healthy baby. An 18 year-old woman close to term summarized the relationship between maternal diet during the pregnancy and the health of the newborn as "there are many [babies] that have to stay in the incubators because they are underweight due to a lack of nourishment [por falta de alimentación], that is the reason I eat so much."

In terms of changes in daily activities, although all the women interviewed continued to do housework, most spaced their chores as the pregnancy progressed. Among employed women, work was also modified. A respondent who worked as housekeeper said,

From the time I realized I was pregnant, I told [my employer] that I no longer could fumigate [the employer's house], or wash the bathroom with strong chemicals and they told me it was fine. I only continued to clean and things like that. But recently, when they noticed more my stomach and that I had a hard time leaning over and walking, they asked me to do only the ironing.

Although some of the respondents experiencing their first pregnancy had at least one parent who smoked at home when they were growing up, none smoked during their pregnancy and only one smoked prior to becoming pregnant. This latter mother-to-be quit 3 months before getting pregnant; as she put it, "I had a pack of cigarettes and I quit smoking because I thought, 'tonight I am going to make my child." Similarly, few reported ever drinking alcohol, and during their pregnancy only one reported drinking a half a glass of beer weekly because "[my husband's] aunt told me that it helps me produce more breast milk." The majority of women said they do not smoke because they dislike the smell of cigarettes. In addition, the opinion of relatives was a factor—some mentioned that their husband, mother, or mothers-in-law—would be upset if they smoked.

To varying degrees, the majority of women in this group said their relatives were more attentive than before their pregnancies. However, they also mentioned that their families, especially their mothers, had always been willing to help them. Moreover, family assistance was expected to continue after the birth of the baby. More than one half of them said that they were counting on their mother or mother-in-law to teach them how to care for the newborns, and later, to help take care of the baby.

In sum, among the *primiparous* women in the sample who planned, welcomed, and celebrated their pregnancies, mothers and siblings shared in their joy and were at hand in the majority of cases to facilitate the work of mothers-to-be during the pregnancy, with the implicit promise that they would continue to support them throughout the post-partum period, and if necessary, with babysitting later. Assistance came in the form of meal preparation, household chores, money, presents, company, encouragement, and advice at every stage of the pregnancy. These women were concerned about their diet, did not smoke or consume alcohol, and attended prenatal care.

It is likely that their positive attitudes and behaviors were inextricably linked with the positive reception of the pregnancy by their families, which in the majority of cases derived from established harmonious relationships between the mother-to-be, her family of origin, and her male partner. This is consistent with observations by Sherraden and Barrera (1997:621) that "high levels of support from the family of origin appear to be sustained in the women's relations with husbands and boyfriends."

However, not all of the respondents in our sample received such treatment. The *primiparous* women who were not in a cohabiting relationship with the baby's father, prior to or as a result of the pregnancy, received considerably less family

support. This was the case for three respondents: Carmen, who had just been fired from her *maquiladora* job for refusing to work overtime; Diana, who was about to begin working at a different *maquiladora*, and Anita, who was considering returning to school. Previous studies report that unintended pregnancies are more likely to occur among women under the age of 20 years, among the never-married, and among low-income women because they may be less able to negotiate their sexuality with their partners compared with women in more advantaged situations (Williams *et al.*, 1999; Pulley *et al.*, 2002; Finer and Henshaw, 2006). For these young women, their pregnancy was unwanted and could not have happened at a worse time.

Carmen, 19, and in the 5th month of her pregnancy at the time of the interview, recalls that she was afraid to tell her mother about the pregnancy. Carmen was living with her mother and her mother's partner at the time. Carmen had been fired from her *maquiladora* job a few weeks before she realized she was pregnant, and she knew that other *maquiladoras* would not hire her before the baby was born. To make matters worse, while Carmen was coming to terms with her situation, her mother separated from her partner and the two women were left without housing. They moved in with relatives.

It was one of these relatives who suspected that Carmen was pregnant, confronted her, and denounced her to Carmen's mother. According to Carmen, "I felt anguish, I mean, what my mother would think, and I would not be able to make it on my own [...] because I was not working." After her initial anger, however, Carmen's mother agreed to help her during the pregnancy and she paid for her daughter's expenses whenever her resources allowed it.

The budget was very tight. Yet Carmen's mother accompanied her and paid for one doctor's visit in the 16th week of her pregnancy. Carmen remained worried about losing her mother's support, because "She does not tell me anything about anything."

The only advice she received from her mother was to go out for walks instead of staying in bed all day, which is what Carmen reported doing at the time of the interview, "as soon as I learned that I was pregnant, I stopped feeling like going out the way I used to." Carmen skipped meals and mentioned that she had felt dizzy. She was told by the doctor that she might be anemic, but lack of money prevented her from having the recommended lab tests and ultrasound. She worried about not knowing where the baby would be born because this would depend upon "how much money my mother has at the time [...] we don't know." Carmen planned to go to a second doctor's appointment when, and if, her mother saved sufficient money for it.

Diana, 22 and in her 25th week at the time of the interview, came to the border a year ago. She and two of her sisters migrated to find work in the city at their mother's insistence. She was between jobs when the personnel staff at the *maquiladora* where she was about to begin working told her they could not hire her after all because her medical examinations indicated that she was pregnant. Diana found herself unemployed, stunned, and scared. When she told her sisters about the pregnancy, they asked her to move out immediately. She recalled the conversation:

[My sisters] asked me to leave [the house] because I had done wrong [porque había salido mal] [...] I told them, I don't know why I did it, maybe because I am dumb [...] maybe because I did not go to school, but it is because I love him, and at first I said "no," and then I said "yes." They said I was a loose woman [una cualquiera] because all my sisters left the house in a white dress, all of them married, but not me. I left without marrying.

In her desperation, Diana first sought support from an aunt living in the same city, who advised her to contact the baby's father. The next day, she moved in with him. Diana's first doctor's visit was during the 5th month of her pregnancy. A woman neighbor befriended her and told her that she needed to see a doctor to make sure the baby was developing normally. This neighbor took her to a low-cost clinic for prenatal care. From then on, Diana was scheduled to go monthly. According to her, she did not seek a doctor earlier because, "my husband told me that he would take me [to the doctor], but he doesn't have time."

Similar to Carmen's behavior, and in contrast to that of the women who planned their first pregnancy, Diana made no efforts to improve her diet. The doctor told Diana that her baby appeared to be too small for its gestational age, but she was afraid that a large baby would have trouble at birth; therefore, she was deliberately restricting her food intake:

If I were to eat a lot, I think, then the baby will grow more and [...] my neighbor tells me that it does not matter if the baby grows and gains weight, but I tell her that he will not be able to be born [no va a poder nacer] [...] I don't know, but what if he grows [too much] inside.

Diana's parents had not visited her since her sisters threw her out of their house, and her mother sent the message that she did not want to hear from her. Diana was hurt and angry about her mother's rejection and her sisters' lack of support. During the interview, she mentioned that her mother had never been sufficiently interested in her needs.

What about the fathers of the expected babies? As in other patriarchal societies, gender roles encourage active sexuality among males, but passivity and submission among females (Baird, 1993). Recent studies continue to find that young Mexican women exhibit limited power to negotiate their sexuality, even in the presence of increases in education and urbanization (Theodore *et al.*, 2004; Steward *et al.*, 2001). Martínez-Donate *et al.* (2004) argue that these gender norms and expectations discourage females from seeking information on sexuality or conveying their sexual preferences to their partners, including asking him to use condoms. Additional values that reduce women's ability to negotiate protected sexual intercourse refer to trust and fidelity. Asking their partner to use a condom would imply mistrust or suspicion of infidelity on his part, or suggest that she is sexually active outside of the relationship (Martínez-Donate *et al.*, 2004; Theodore *et al.*, 2004; Rodríguez *et al.*, 1995).

Carmen and Diana dated their baby's fathers for at least 1 year prior to their pregnancies. Admittedly, they knew they could become pregnant, but did not use contraceptives. Carmen, in particular, said she heard that pills have negative health effects. Instead, she and her boyfriend practiced withdrawal. At some point, according to Carmen, "he must have stopped watching out for me." In conversations prior to the pregnancy, as well as when told about it, her boyfriend said he would help her, so it is possible that she may have been ambivalent about getting pregnant. But the last time she looked for him, he had left town. Although she believed she could track him down, neither she nor her mother had attempted to contact him. In Carmen's view, "this is what men do." She commented that:

I knew full well that he would not help me [...] He used to tell me that if I were to get pregnant, he would help me and everything, but no [...] they all say the same, and it's not true [...] Right now I would not want to get married because I like to go "here and there and everywhere" [...] and married I could not do this. But yes, I wanted him to help me in whatever I needed [...] in the things that my mother is doing for me now, pay for everything and [...] pay for the delivery.

In the case of Diana, her partner, although living with her, did not take an active interest in her pregnancy. Moreover, according to Diana, he became irritable, frequently yelling at her, and had forbidden her to talk to the neighbors.

The interviews with Carmen and Diana suggest that family support during pregnancy, said to arise from the Mexican cultural valuation of motherhood, may be mediated by whether the pregnancy is perceived of as taking place under appropriate circumstances and whether the pregnancy is welcomed, and these factors may influence each other. A pregnancy may be more likely to be welcomed, even if not planned, when there is strong family support that will aid the women in dealing with the emotional aspects and material needs that a pregnancy entails.

In contrast to the women who celebrated their pregnancies, Diana and Carmen did not have relatives preparing special meals for them or helping with the grocery shopping. Neither had read about baby care nor talked or sang to their baby. Their behaviors are consistent with previous research that associates unwanted pregnancies with delaying prenatal care and other negative health behaviors detrimental to the mother's and baby's well-being. (Pulley *et al.*, 2002; D'Angelo *et al.*, 2001).

Lack of family support appeared to affect the health-promoting behaviors of the expecting mother in several ways. First, lack of family interest and affection, particularly from the woman's mother, may have contributed to feelings of loneliness, vulnerability, and depression. Second, mothers-to-be did not seek or receive prenatal care information from more experienced women because they tended to isolate themselves, which placed them at greater risk because health conditions would not be detected early in the pregnancy.

We found no evidence that the simple fact of pregnancy alone elicited unconditional family support, nor did relationships become better through pregnancy (Gutiérrez, 1999). Family support appeared to last as long as women abided by established cultural norms. While the birth outcomes are unknown, from these interviews it was evident that those least likely to receive family support were also in the least favorable conditions to raise a child on their own.

The following case study illustrates the positive impact that family support may have on maternal behavior and attitude, even in the case of an unwanted pregnancy. As mentioned earlier, the feeling toward a pregnancy may change over time, and it appears that strong family support may play an important role.

Anita was only 18, already in her 6th month of pregnancy, and lived with her parents. Initially, she did not want to have her baby and recalled her reaction to the news of her pregnancy:

[It was] very bad, terrible. All I did was cry [...] I could not believe I was pregnant. I used to be agitated from constantly thinking [about my family's reaction to the news]. My dad accepted it [...] he told me he would support me if my boyfriend at the time did not respond. And my mom [reacted] a little badly because they had given me a lot of schooling. Since she had given me so much advice [...] since she had not expected

that I would have a pregnancy so suddenly [...] at first she did not accept it [...] little by little she changed. My mother and father are fine now. But some of my father's relatives still can't accept that I am pregnant. They tell me that I should give [the baby] away, or to them, and that I should continue my life as a single young woman.

Unsuccessfully, Anita tried to convince her mother to help her abort the baby:

My mother started to tell me that I could not abort. Why would I do that, if it was not [the baby's] fault? And I was also going to the clinic, and they also told me that it was not my baby's fault [...] and that I had to have him, that I had to accept him because everything I said about him —cursing him [...] sometimes I even would hit my womb— everything I was doing against him [...] he also felt, and he would get even more depressed than me. And they made me understand that I had to have my baby. And that maybe I would be able to continue with my plans even if he came into this world, and I think this is the way it will be.

Under her mother's guidance and supervision, Anita received regular prenatal care and even agreed to breastfeed the baby:

I did not want to [breast feed], but my mother told me that it is good for [the baby]. I did not want to because I was thinking "as soon as I have the baby, as soon as I recover [cumpla mi dieta], I will go to work." So, I did not want to be dripping milk or having to come back home in a hurry to feed him. But my mother said that I have to [...] I have accepted it [...] I think I will breast feed for 3 or 4 months.

As Anita put it: "everything I know about having a baby, I know because of my mother." At night, Anita and her mother had long conversations about the delivery and how the baby will be cared for after its birth. At the time of the interview, Anita did not plan to move out of her parents' home after the baby's birth. She was counting on her mother to teach her how to care for the baby and to help take care of the baby after she found a job. Her mother provided the emotional and financial resources to facilitate a healthy pregnancy. In addition, her mother's promise of future support positively influenced Anita's feelings toward her pregnancy and enhanced behaviors that could benefit the baby's health –timely and frequent prenatal care, compliance with medical prescriptions, and a good diet supervised by her mother.

IV. MULTIPAROUS WOMEN, THEIR HEALTH-PROMOTING BEHAVIORS, AND FAMILY SUPPORT

The association between pregnancy intendedness, family support, and health-impacting behavior during pregnancy was not as evident among study participants who were in their second or subsequent pregnancies. Of the 12 interviews with *multiparous* women, four said they planned their pregnancy, and eight said they did not, which represented different degrees of welcoming feelings for the baby, but did not appear to influence the extent or nature of their health-related behavior. It may be that it is easier to become reconciled with the idea of an additional child in a family that already has at least one. Attitudes toward the pregnancy and health-related maternal behavior during the pregnancy appeared to vary more by the women's prior pregnancy experiences and by their particular current circumstances, than by whether families and partners provided instrumental or emotional support.

Three of the four *multiparous* women who said their pregnancy was planned received substantial family and/or partner support, including care of the other children, help with household chores, meal preparation, and pleasing mother-to-be cravings. However, regardless of the existence and extent of family and/or partner support, previous pregnancies played an even more important role in informing women's behavior during pregnancy in terms of their diet, use of prenatal care, and smoking and alcohol consumption. These findings are consistent with other studies that report no association between social support and smoking or drinking before or during the pregnancy (Giblin *et al.*, 1990; Landale and Oropesa, 2001).

Celia, 27 and in her 4th pregnancy, said that her relatives and husband tried to grant her every desire. According to her, she was not concerned about the baby's health since her children "are always born healthy;" hence, she continued to smoke during her pregnancy, albeit fewer cigarettes, and she followed a less-than-optimal diet even if she said she felt guilty about it: "I don't drink milk because I don't like it. Nor corn flakes. I don't like anything containing vitamins [...] but I said I would eat everything so that my baby is born healthy, right? What do I want a sickly baby for? I am thinking about eating all those things."

Similarly, Alma, 31 and in her 3rd pregnancy, smoked and delayed her first prenatal care appointment until the 4th month, arguing that she felt fine. Alma's first baby was born when she still lived with her parents. Two years after the first baby was born, she was pregnant again and moved in with her partner, leaving her first-born with her mother. She recalls that:

[When her first baby was born] Mother took care of her and everything she needed. I would go to school, and come back very tired and [...] in the evenings I took care of her, right? But she did it most of the time [...] I thought it would be bad [to take her away]. Also [...] she was very small, my daughter, she was 2 years old [...] I mean, it seemed very difficult to me that I was going to have a baby and also the other baby. And, how I would be able to raise them both? And that is the reason I left her with my mother.

The second baby, however, was born prematurely and died within 72 hours. Alma thinks her smoking during that pregnancy contributed to the baby's death. Yet she continues to smoke during the current pregnancy because as she compares her current health to how she felt during her last pregnancy, she feels much healthier, which for her means that this baby is doing well:

Yes, [smoke] harms the baby, right? But I continue to smoke. Sometimes my conscience says, "I'm so mean!!" [¡Cómo soy mala!]. Because in the other pregnancy I smoked, and smoked a lot, and the baby girl was born a little small. I mean, because I have that experience, right?... With that experience, I tell to myself, "no, this time it will not be the same." But now, I tell myself the baby is fine because I have gained a lot of weight.

After her previous baby died, Alma waited for 5 years before attempting to become pregnant again. Two years ago, she and her partner decided it was time to try again, and even though their relationship had deteriorated over time, she did not take contraceptives. By the time she became pregnant, she had decided that this pregnancy was a sign that God had granted her another baby. Alma's parents and in-laws have expressed discontent about her pregnancy, pointing out the fact that she and her partner neither get along well nor have the means to support a baby. However, Alma's mother has agreed to stay with her for a week after the baby is born to teach Alma how to take care of her newborn.

Unlike Celia and Alma, who said they planned their pregnancies yet continued to smoke, none of the *multiparous* women who said they did *not* plan their pregnancies smoked. In addition, some modified their diets and took vitamins when they could afford them. The family support they received varied by whether they were in a stable cohabiting relationship with the baby's father or not. Six of these women had been in their current relationship for at least 3 years, and two, Hilda and Teresa, were in relatively new relationships into which they had brought children from a previous cohabiting relationship. Both were having difficulty making ends

meet. According to Hilda, 20, in her 3rd pregnancy and not using contraceptives at the time she became pregnant, contraception took on a new urgency:

I mean, after my youngest child, I was not [taking contraception], and the man I was with before this one, he would take care of me. And with this one, I was careless [me descuidé] [...] what can I tell you [...] I have resigned myself [...] I was already alone, and [my children] only have me [...] because I do not get any help from their father. I mean, you can imagine another baby, and they are still so young. I can barely make it [...] Even though I don't like [to take pills], if there is no other way, I will have to take care of myself because it is difficult to have so many children, and now another one.

Hilda had little contact with her family of origin, who she initially dismissed as being "busy with their own lives." She was hurt by their lack of support, however, and mentioned that when she told them the news of the baby, her parents were upset and had not even made an effort to meet the baby's father.

Similarly, Teresa's first husband abandoned her and her two children nearly 3 years ago. During the last 2 years, her current partner has provided her with a fixed allowance. However, her parents have objected to this relationship and to the current pregnancy because he is married to someone else. Teresa said she did not plan the pregnancy:

There is nothing I can do now [ya ni modo]. The doctor told me that I was underweight. And he told me that it was because the pills were affecting my health, and that I should stop taking them for a while [...] and I stopped taking them [...] and I got pregnant.

Teresa worried that the additional expenditures brought about by another baby would force her to cut back on necessities for her other children. Although Teresa and her mother constantly fought over Teresa's relationship with a married man, her mother provided food and cash assistance for years and continued to provide economic support when needed, while withholding emotional support.

As was the case with *primiparous* women, poor family relationships established long before the current pregnancy were not repaired with the expectation of a baby. As a group, women in a second or higher-order pregnancy accepted an unplanned pregnancy and adopted or continued healthy pregnancy behavior in the presence of various levels of family support and while dealing with their own feelings concerning an unwelcomed pregnancy. According to some of them, their partners were not upset, although some were not happy either.

Consistent with reports by Guendelman *et al.* (2001), there appeared to be a lack of communication about the desire for a pregnancy between women and their male partner. Some of the women said that their husband "said nothing" or that they could not remember their reaction to the news. For example, when Sara, 30 and in her 4th pregnancy, told her partner —who works as a day laborer on the U.S.-side of the border—that she had forgotten to take her pill and was pregnant, he appeared to be worried about their financial situation, but said "It is done, what can we do? [Ya está hecho, ¿qué le vamos a hacer?]."

V. SUMMARY AND DISCUSSION

Favorable pregnancy outcomes among Mexican women in the United States, given their relatively low socioeconomic status, have been attributed to cultural factors that are protective of maternal and child health, including strong family support. This article reports on an exploratory study of family support in a small sample of pregnant women in two Mexican border cities. The intention is to better understand the extent and type of support provided by Mexican families in border communities, which are likely to resemble the population dynamics present in many U.S. communities favored as destinations by Mexican immigrants. We also examine whether such support is associated with health-impacting behaviors during the pregnancy, regardless of whether the pregnancy was welcomed or not.

Our findings call into question the assumption that family support during a woman's pregnancy is a culturally established and unconditional practice among Mexican families. In addition, and consistent with other studies, when family support was offered, such positive exchanges were usually established long before the current pregnancy (Sherraden and Barrera, 1997). Specifically, we found evidence that family support is associated with the circumstances of a pregnancy. Women who were not in a cohabiting relationship with the baby's father (whether married or not) predating their pregnancy were least likely to receive family support, while at the same time these women were in the most vulnerable economic and emotional situation because they viewed their pregnancies as unwanted. Among all the aspects of family support reported here—instrumental, advice, and emotional—for women experiencing an unwanted first pregnancy, the lack of familial emotional involvement and acceptance of the expecting mother and her baby, particularly from the woman's mother, appeared to exert the most impact on

women's attitudes and behavior. Women who were rejected by their families because they were experiencing an unwanted pregnancy were the least likely to seek prenatal care, adopt a healthier diet, or look forward to the birth of their baby.

Further research is needed to understand the reasons that some women experiencing an unwanted pregnancy were not using contraception at the time of conception. While this study did not elicit information about the factors that sexually-active women consider when making a decision whether to use contraception, previous findings indicate that the decision to avoid a pregnancy may not be a meaningful concept for some women, and that others may be ambivalent about avoiding it (Zabin, 1999, 2000; Sable, 1999).

We do not mean to imply in any way that younger women are better able to plan a pregnancy than older women. Our sample is not randomly selected and cannot capture distribution of pregnancy intendedness by age. Contrariwise, studies have found that younger women are more likely to face unintended pregnancies than older women. Instead, our findings merely point to the marked differences in behaviors found between first and subsequent pregnancies (that is, the relevant factor is not age, but parity). It is likely that the process of learning involved in a first pregnancy is not repeated in later ones; thus, primiparous respondents were more likely to identify changes in their behaviors than multiparous women, for whom these behaviors are not new, such as nutrition and use of prenatal care.

Among *multiparous* women, family support played a more marginal role. The behavior of women expecting a second or higher-order child varied more due to the women's experiences during their prior pregnancies and due to their particular circumstances than due to whether families and partners provided support. Health-impacting behaviors of *multiparous* women did not appear to be affected by whether a pregnancy was intended or not. Unintended pregnancies, although not necessarily welcomed, appeared to be accepted and incorporated into the lives of these women without strong negative feelings.

Qualitative studies such as this open a window on the complexity of emotions and the content of interactions involving pregnant women and their families, allowing for the exploration of the associations between family support, the mother-to-be's feelings toward the pregnancy, her health-promoting behaviors, and potential health outcomes. These findings can serve to develop more structured inquiries and more complete models of the factors that enter into the production of maternal and child health.

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