HHS Public Access

Author manuscript

J Interpers Violence. Author manuscript; available in PMC 2023 November 29.

Published in final edited form as:

J Interpers Violence. 2011 April ; 26(6): 1157–1175. doi:10.1177/0886260510368154.

Unintended Pregnancy and Intimate Partner Violence Before and During Pregnancy Among Latina Women in Los Angeles, California

Kathryn R. Martin[1], **Lorena Garcia**[2]

[1]University of California, Los Angeles

[2]University of California, Davis

Abstract

The purpose of this paper was to examine the relationship between unintended pregnancy and intimate partner violence (IPV) before and during pregnancy among Latinas. A cross-sectional interview measuring pregnancy intent, IPV, and acculturation, using the Acculturation Rating Scale for Mexican Americans (ARSMA-II), was conducted among Latina women in their 2nd or 3rd trimester of pregnancy at clinics in Los Angeles (n = 313). Overall, 44% of women reported an unintended pregnancy. The prevalence of physical (any) and emotional (only) abuse 12 months before pregnancy was 11% and 22%, respectively. Although both types of IPV decreased during pregnancy (10% and 19%, respectively), most reports of physical IPV during pregnancy (53%) were among women who did not report physical abuse before pregnancy. After adjusting for other factors, physical IPV before pregnancy was not associated with unintended pregnancy (adjusted OR = 0.92; 95% CI = 0.40, 2.16). The prevalence of unintended pregnancy was highest (76%) among highly acculturated Latinas. However, when an unintended pregnancy occurred among less acculturated Latinas, who comprised the majority of the sample (n = 270), it was associated with greater risk of physical IPV during pregnancy (unadjusted OR = 2.57; 95% CI = 1.06, 6.23); although the confidence interval included one after adjusting for other factors (adjusted OR = 2.79; 95% CI = 0.98, 7.92). An unintended pregnancy may have a unique impact on relationships in the context of Latino culture, where family and pregnancy are highly valued. Pregnancy often creates an opportunity for providers to discuss issues related to abuse and family planning with women who do not regularly access care. The results from this study may be used to increase the cultural sensitivity with which violence and reproductive health are addressed among the diverse population of Latinas when they connect with prenatal services.

Keywords

Intimate partner violence; unintended pregnancy; Latino; Hispanic; acculturation; reproductive health; Los Angeles; California

Corresponding Author: Kathryn R. Martin, Southern California Injury Prevention Research Center, Department of Epidemiology, School of Public Health, University of California, Los Angeles, Box 951772, Los Angeles, CA 90095-1772 krmartin@ucla.edu.

Declaration of Conflicting Interests

The authors declared no potential conflicts of interests with respect to the authorship and/or publication of this article.

Intimate partner violence (IPV), most often perpetrated against a woman by a current or former male partner, is recognized as a widespread public health issue in the United States (Tjaden & Thoennes, 2000). In addition to physical and sexual abuse, IPV often entails emotional abuse, intimidation, financial control, coercion, threats, and isolation. Undoubtedly, the climate of fear such abuse must create imposes a significant constraint on contraceptive use and family planning, contributing to a number of adverse reproductive health outcomes among women who are victims (Amaro, 1995; Pallitto, Campbell, & O'Campo, 2005; Wingood, DiClemente, & Raj, 2000). Unintended pregnancy is one such outcome, and in turn, a mistimed or unwanted pregnancy could create or aggravate tension in a relationship and be an important determinant of whether abuse continues to occur during pregnancy. Indeed, an association between IPV and unintended pregnancy has been reported in the United States and internationally (Castro, Peek-Asa, Garcia, Ruiz, & Kraus, 2003; Gazmararian et al., 1995; Gessner & Perham-Hester, 1998; Goodwin, Gazmararian, Johnson, Gilbert, & Saltzman, 2000; Leung, Leung, Lam, & Ho, 1999; Martin et al., 1999; Pallitto & O'Campo, 2004; Sahin & Sahin, 2003; Saltzman, Johnson, Gilbert, & Goodwin, 2003).

Family planning and childbearing all too often occur in the context of a violent relationship, as an estimated 5% of pregnant women in the United States report IPV (Saltzman et al., 2003). It is important that health care providers and public health professionals understand the cultural contexts surrounding these relationships when offering care and designing violence prevention and reproductive health programs (de la Torre & Estrada, 2001; Flores-Ortiz, 1993, 1994; Torres, 1987, 1991; Warwick, 1997), especially in California, where more than half of all births occur among the Latina population. Although Latinas are at higher risk for both IPV and unintended pregnancy than other ethnic groups (Chandra, Martinez, Mosher, Abma, & Jones, 2005; Garcia, Hurwitz, & Kraus, 2005; Giachello, 2001; Henshaw, 1998; Jones, Darroch, & Henshaw, 2002; Raine, Minnis, & Padian, 2003; Sangi-Haghpeykar, Ali, Posner, & Poindexter, 2006; Sorenson & Telles, 1991), data on family planning and IPV among Latinas living in the United States are scant, and even fewer studies have examined these issues among subgroups of the Latina population.

Acculturation, for instance, is a strong predictor of health outcomes in Latino populations and has been defined as "those phenomena, which result when groups of individuals having different cultures come into continuous first-hand contact, with subsequent changes in the original cultural patterns of either or both groups" (Redfield, Linton, & Herskovits, 1936, p. 149). Measures of acculturation have been used to identify populations at higher risk of certain health outcomes and to determine how public health programs are designed and best targeted to specific groups. Many public health prevention programs in the United States focus on the individual, as opposed to the family, which may inhibit Latinas who are more family oriented from participating (Champion, 1996; Diaz Olavarrieta & Sotelo, 1996; Flores-Ortiz, 1993; Unger & Molina, 1998). At the same time, highly acculturated Latinas may benefit from existing public health preventative programs in institutions, such as health care facilities and schools. Several studies, for instance, have found that Latinas who are more highly acculturated have higher rates of IPV compared with Latinas who

are less acculturated and who have greater ties to the Latino values of family and children (Garcia et al., 2005; Sorenson & Telles, 1991).

Attitudes and behaviors related to family planning also differ within the Latina population living in the United States. Latina women have higher birth rates and lower rates of contraceptive use than other ethnic groups (Chandra et al., 2005; Giachello, 2001; Henshaw, 1998; Jones et al., 2002; Raine et al., 2003). Researchers have offered explanations for these trends—a culture in which the male is dominant, religious beliefs, lack of access to health care, low self-efficacy in using condoms and birth control pills, and a preference for sons over daughters may all play a role in contributing to low contraceptive use and unintended pregnancy among Latinas (Gibson & Lanz, 1991; Kost, Singh, Vaughan, Trussell, & Bankole, 2008; Ortiz & Casas, 1990; Russell, Williams, Farr, Schwab, & Plattsmier, 1993; Unger & Molina, 1997, 2000). If cultural barriers inhibit contraceptive use, one might expect that highly acculturated Latinas would be more likely to use contraceptives and be at decreased risk of unintended pregnancy. However, the evidence is mixed. Several studies have found greater acculturation is associated with more favorable beliefs about using condoms, more consistent contraceptive use, and a preference for smaller families, suggesting highly acculturated Latinas would be less likely to have an unintended pregnancy (Amaro, 1988; Marin, Tschann, Gomez, & Kegeles, 1993; Norris & Ford, 1994; Romo, Berenson, & Segars, 2004; Sabogal, Perez-Stable, Otero-Sabogal, & Hiatt, 1995; Sorenson, 1985). At the same time, other studies have found greater acculturation is associated with an increase in sexual risk behaviors that lead to unintended pregnancy, particularly among younger populations who engage in other health-risk behaviors, such as drug and alcohol use (Afable-Munsuz & Brindis, 2006). Reproductive health behaviors among Latinas are then complex and are further complicated in the context of a violent relationship.

The purpose of this article is to examine the relationship between unintended pregnancy and IPV before and during pregnancy among Latinas in Los Angeles, California. We hypothesize that women who report IPV before pregnancy are more likely to report an unintended pregnancy and that unintended pregnancy is associated with abuse by an intimate partner during pregnancy. Because the Latina population living in the United States is diverse in terms of acculturation and different groups may require different intervention approaches, we also examine the association of acculturation with unintended pregnancy and IPV around the time of pregnancy, and we assess whether the relationship between pregnancy intent and abuse differs according to level of acculturation. Pregnancy is a time when women connect regularly with health care, creating an opportunity for providers to discuss issues related to abuse and family planning. Therefore, these data will strengthen the evidence base supporting the adoption of IPV screening and referral programs and increase the cultural sensitivity with which these programs address violence and reproductive health among the diverse Latina population.

Method

Study Design

Data for this analysis come from a cross-sectional study conducted between 1998 and 2000 by researchers at the Southern California Injury Prevention Research Center at the

University of California, Los Angeles. The study was initially designed to assess the relationship between acculturation and IPV among Latina women. The methods, described briefly in what follows, can also be found in several prior publications (Castro, Peek-Asa, Garcia, Ruiz, & Kraus, 2003; Garcia, Hurwitz, & Kraus, 2005; Peek-Asa, Garcia, McArthur, & Castro, 2002). The institutional review board of the University of California, Los Angeles, approved the research.

Study Population

All women attending gynecological and obstetrical appointments at five clinics serving low-income populations in Los Angeles were approached to participate in the study. The clinics were chosen because they represented areas with large Latino populations. Each woman who agreed to participate gave informed consent and a trained female bilingual interviewer administered a questionnaire in the participant's choice of English or Spanish. A total of 483 women who were approached and agreed to participate in the study self-identified as Latina/Hispanic. This analysis includes all pregnant women in their second or third trimester who self-identified as Latina/Hispanic and had a current partner (n = 313), all of whom were heterosexual.

Measures

Women were asked about pregnancy intent using the question, "Before you got pregnant, were you thinking of having a baby?" Physical, sexual, and emotional abuses by an intimate partner 12 months before and during pregnancy were then measured using a screening instrument validated among Latina populations (Peek-Asa, Garcia, McArthur, & Castro, 2002). The scale contained 12 questions on types of physical violence (e.g., "Purposely pushed you?" or "Hit you with a hand or fist?"), 13 questions on forms of psychological violence (e.g., "Humiliated or scorned you?" or "Told you that you are unattractive or ugly?"), and 3 questions on sexual violence (e.g., "Demanded sex when you were not willing?"). Women who gave an affirmative response to any item on the physical, sexual, or emotional subscales were categorized as having reported that type of violence. Because sexual violence is a form of physical violence, and because the number of women who reported sexual violence was low, the physical and sexual violence variables were collapsed. Violence before and during pregnancy was then analyzed using a variable with three mutually exclusive categories—any physical abuse with or without emotional abuse, only emotional abuse, and no abuse.

The respondent's level of acculturation was measured using the first scale of the Acculturation Rating Scale for Mexican-Americans-II (ARSMA-II; Cuellar, Arnold, & Maldonado, 1995). Capable of measuring orientation toward Mexican and Anglo culture independently, the ARSMA-II is one of the most comprehensive and widely used validated scales for measuring the process of acculturation in United States. The scale contains 30 questions, from which a continuous score is calculated and categorized into five levels: 1 = *very Mexican oriented*, 2 = *Mexican oriented to approximately balanced biculturally*, 3 = *slightly Anglo oriented bicultural*, 4 = *strongly Anglo oriented*, and 5 = *very assimilated, or Anglicized*. In this analysis the third, fourth, and fifth categories were collapsed because a small number of women were Anglo oriented.

Statistical Analysis

The distribution of variables related to the demographic characteristics of the respondent, her partner, her reproductive history, and reported IPV prior to pregnancy were examined according to reported IPV during pregnancy using cross tabulations and percentages. Next, multivariate logistic regressions in SAS Version 9.1 (SAS Institute Inc., Cary, NC) were conducted to examine the relationship between unintended pregnancy and IPV before and during pregnancy. Acculturation was examined as a covariate in the models, and then regression models were stratified to examine differences according to level of acculturation. Other covariates were evaluated as potential confounders by examining their association with IPV and unintended pregnancy and included in final models on the basis of the degree to which they affected the associations of interest and based on prior knowledge. Odds ratios and 95% confidence intervals were used to interpret the results.

Results

Characteristics of the Study Population

Overall, 30% of the respondents were under 21 years of age, 48% had not completed any high school, 87% reported a monthly household income of less than or equal to $1,500, and 71% were currently married or living with a partner (Table 1). The vast majority of the respondents had partners who were older than 21 years (86%), and most partners (83%) were born outside of the United States. Regarding the women's reproductive histories, 42% had been sexually active with more than one partner, 54% had been pregnant before, and 9% reported having had an abortion.

Violence During and Before Pregnancy

Overall, 10% of the women reported physical abuse during pregnancy and another 19% reported emotional abuse (Table 1). Compared with women who reported no abuse, women who reported physical or emotional abuse during pregnancy were more likely to be younger than 21 years of age (40% and 37% vs. 27%), more educated (73% and 60% vs. 47%), and not married to or living with a current partner (43% and 38% vs. 25%). They were also more likely to have a partner younger than 21 years of age (27% and 20% vs. 10%) who was born in the United States (20% and 25% vs. 14%) and to report having had more that one sexual partner (60% and 53% vs. 36%).

IPV before pregnancy was a strong predictor of abuse during pregnancy (Table 1). Compared with women who reported no abuse during pregnancy, women who reported physical or emotional abuse were more likely to report the same type of IPV before pregnancy (47% vs. 4% and 57% vs. 12%, respectively) At the same time, the majority of women who reported physical IPV during pregnancy did not report they were physically abused before becoming pregnant; in other words, approximately 23% of women reported that violence escalated from emotional abuse before pregnancy to physical abuse during pregnancy, and another 30% reported physical abuse started during pregnancy when no abuse occurred before pregnancy. However, many women also reported an improvement during pregnancy. The majority (56% or $n = 19$) of women who reported physical IPV before pregnancy did not report physical IPV during pregnancy.

Acculturation

The majority of the women fell into the lowest level of acculturation on the ARSMA-II, which corresponds to *very Mexican oriented* (63%; Table 2). One fourth (25%) were categorized into the second lowest level (*Mexican oriented* to approximately *balanced biculturally*). Only 12% of women fell into the highest levels of acculturation, indicating greater orientation to Anglo culture.

Unintended Pregnancy and Violence Before Pregnancy

Overall, 44% of the women reported an unintended pregnancy (Table 2). When we examined physical IPV before pregnancy in relation to unintended pregnancy, the unadjusted odds ratio (OR) was 1.62 (95% CI = 0.78, 3.37), and we did not observe an association after adjusting for the age of the respondent, partner's age, marital status, number of sexual partners, and level of acculturation—the adjusted OR was 0.92 (95% CI = 0.40, 2.16). However, women who reported emotional abuse before pregnancy did differ with respect to pregnant intent after adjusting for these same factors; women who reported emotional IPV before pregnancy were less likely than women who were not abused to report an unintended pregnancy (adjusted OR = 0.50; 95% CI = 0.26, 0.97).

When level of acculturation was examined in relation to unintended pregnancy, the highest acculturated Latinas (ARSMA Levels III-V) were more likely to report their pregnancy was unintended when compared with the least acculturated Latinas (ARSMA Level I; unadjusted OR = 5.54; 95% CI = 2.48, 12.36; Table 2). However, after adjusting for other factors, including the respondent's age, partner's age, marital status, and number of sexual partners, the confidence interval crossed 1 (adjusted OR = 2.24; 95% CI = 0.86, 5.85). It did not appear that moderate acculturation (ARSMA Level II) was associated with unintended pregnancy (adjusted OR = 1.15; 95% CI = 0.62, 2.12). We also examined the association between IPV before pregnancy and unintended pregnancy within levels of acculturation, but no differences were found.

Unintended Pregnancy and Violence During Pregnancy

When we examined unintended pregnancy in relation to physical IPV during pregnancy, the unadjusted OR was 2.12 (95% CI = 0.97, 4.61; Table 3). The association became stronger after adjusting for other factors, primarily due to the addition of acculturation to the model. After adjusting for level of acculturation, as well as age, education, and IPV before pregnancy, women who reported an unintended pregnancy were more likely to report physical IPV during pregnancy compared with women who intended pregnancy (adjusted OR = 2.80; 95% CI = 1.01, 7.73) An association between pregnancy intent and emotional IPV during pregnancy was not observed.

When the relationship between level of acculturation and IPV during pregnancy was examined, physical IPV during pregnancy was more common among women who were highly acculturated (ARMSA Levels III-V; unadjusted OR = 3.19; 95% CI = 1.09, 9.29; Table 3). However, we found no association in the multivariate model, which included the respondent's age, education, and IPV before pregnancy (adjusted OR = 0.81; 95% CI = 0.17, 3.80). The same was true when we examined the relationship between moderate levels of

acculturation (ARSMA Level II) and physical IPV during pregnancy (adjusted OR = 0.94; 95% CI = 0.28, 3.16).

Finally, we examined the relationship between unintended pregnancy and physical IPV within levels of acculturation (Table 4). Among Mexican-oriented women only (ARSMA Levels I-II), unintended pregnancy was associated with greater risk of physical IPV during pregnancy (unadjusted OR = 2.57; 95% CI = 1.06, 6.23); although the confidence interval widened to include one after adjusting for other factors (adjusted OR = 2.79; 95% CI = 0.98, 7.92). In comparison, it did not appear that unintended pregnancy was associated with an increase in the risk of physical IPV during pregnancy among Latinas who were highly acculturated (ARSMA Levels III-V; unadjusted OR = 0.62; 95% CI = 0.09, 4.49), although the number of women falling into this group was small.

Discussion

It has been noted that the climate of fear and control surrounding violent relationships constrains women's agency to use contraceptives, leading to a variety of adverse reproductive health outcomes (Amaro, 1995; Wingood et al., 2000). This may be especially true among certain Latino populations where there is a strong male patriarchy (Pallitto & O'Campo, 2005). Studies have shown that IPV before pregnancy is associated with increased risk of one such outcome, an unintended pregnancy (Gazmararian et al., 1995; Gessner & Perham-Hester, 1998; Goodwin et al., 2000; Saltzman et al., 2003).

In this study, however, physical abuse by an intimate partner before pregnancy was not associated with pregnancy intent after controlling for age, marital status, acculturation, and sexual history. The differences between our findings and past research may be because this study was conducted among a U.S. Latina population, and the majority of the women in our sample were acculturated very little to U.S. culture. Although less acculturated Latinas may come from stronger male patriarchies that inhibit contraceptive use, they may be less likely to use contraception because of other reasons, such as a preference for larger families and religious beliefs (Gibson & Lanz, 1991; Romo et al., 2004). It is also possible some women reported they were thinking of getting pregnant, in spite of abuse, because they place a high importance on having children. At the same time, emotional abuse before pregnancy was associated with a decreased risk of unintended pregnancy. Because few studies have examined emotional abuse, these findings need further evaluation. However, women who are emotionally abused could intend a pregnancy, expecting a child will have a positive impact on their situation.

For many women who reported physical abuse before pregnancy—more than 50%—the violence stopped during pregnancy. At the same time, more than half of all reports of physical IPV during pregnancy indicated the abuse started after conception, which provides further empirical support that batterer behavior often becomes worse during pregnancy. Although little is known about what makes violence stop or start during pregnancy, our results suggest that unintended pregnancy may be associated with the occurrence of physical violence during pregnancy. That an unintended pregnancy could be an important determinant of whether abuse continues to occur or begins during pregnancy has received very little

attention in the literature. Furthermore, the association between unintended pregnancy and physical abuse during pregnancy persisted among the least acculturated women. Although unintended pregnancies were less common among these women, when an unplanned or unwanted pregnancy does occur among women who are more Mexican oriented, it could have a negative impact on their relationship in the context of Latino culture, where family and pregnancy are highly valued.

Understanding unintended pregnancy and IPV around the time of pregnancy in the context of Latino culture is important for developing public health programs that target specific groups of Latina women. For instance, Latinas who are highly acculturated and those who were born or raised in the United States tend to resemble other non-Latina populations, such as African American women. Highly acculturated Latinas may then benefit from existing preventative programs in institutions, such as health care facilities and schools, which tend to use approaches where the individual, as opposed to the family network, is the main focus of the intervention. In comparison, Latinas who have acculturated very little or none at all to the U.S. culture may require slightly different approaches. The family, “la familia,” rather than the individual, are most important (Champion, 1996; Diaz Olavarrieta & Sotelo, 1996; Flores-Ortiz, 1993; Unger & Molina, 1998). Therefore, it is critical that the family or kin group is acknowledged in health promotion programs, through the use of “promotoras” (e.g., peer counselors), for example, to share health information. In this study, unintended pregnancy was less common among less acculturated Latinas, but this issue may be hard to discuss in communities that place a high value on pregnancy and family. As such, it may be even more important that health messages about pregnancy intent and IPV come from a trusted community source, such as a promotora. In addition, during pregnancy many Latinas have more frequent contact with the health care system and those who are less acculturated may not feel particularly comfortable in these settings. It is, therefore, critical that prenatal care providers are also aware of and sensitive to the differences that exist among the Latina population when discussing issues related to family planning and abuse.

Limitations

Although this study has strengths, it also has several limitations. Women sampled at the end of pregnancy may not represent the population of women who received prenatal care from the clinics during earlier stages of their pregnancy. Abused women are more likely to have complications during pregnancy (Boy & Salihu, 2004; Coker, Sanderson, & Dong, 2004). If abuse led to fetal or maternal death or inhibited prenatal care, the population of women sampled in their second or third trimester would contain less abused women than a population sampled earlier during the pregnancy.

Because of the cross-sectional nature of this study, the results should also be interpreted with caution. Although the respondents were asked to report on abuse and pregnancy intent at distinct time points, their answers were subject to recall bias. It is possible that violence during pregnancy could have led women to give less favorable reports on intending a pregnancy than they would have given if they were asked the same question directly after finding out they were pregnant. In addition, our analysis of pregnancy intent is limited by the fact that we lacked information on use of and access to contraceptives, as well as

whether the unintended pregnancy was mistimed or unwanted. Finally, we primarily focused our interpretation of results on point estimates and the magnitude and direction of the associations of interest. However, we recognize that some odds ratios did not reach statistical significance, as some 95% confidence intervals crossed the null value of 1. Therefore, readers may want to interpret nonsignificant results with greater caution.

Conclusions

The results from this study contribute to a better understanding of unintended pregnancy and IPV among Latinas in the United States. Unintended pregnancy was associated with the occurrence of physical violence during pregnancy, and many women who were abused—more than 50%—reported that the physical violence started during pregnancy. Women who were more highly acculturated were at greater risk of unintended pregnancy; however, the majority of women sampled were acculturated very little to the United States, and when an unintended pregnancy did occur among women with stronger ties to Latino culture, it was associated with physical abuse during pregnancy. It is our hope that these results can be used by future studies to further examine family-planning practices in the context of violent relationships and in the context of the beliefs, attitudes, and behaviors that exist among Latino populations living in the United States. It is recommended that violence prevention and reproductive health programs targeted at Latinas are sensitive to the diversity that exists among these women in terms of acculturation.

Financial Disclosure/Funding

The authors disclosed receipt of the following financial support for the research and/or authorship of this article: This study was funded by the University of California, Los Angeles, Southern California Injury Prevention Research Center, Centers for Disease Control and Prevention Grant No. R49/CCR903622. Lorena Garcia was supported by a K12 Building Interdisciplinary Research Careers in Women’s Health award (K12 HD051958).

Biography

Kathryn R. Martin received a PhD in epidemiology from the University of California, Los Angeles, in 2008 and a master’s of public health from the same department in 2005. She began this project as a researcher at the Southern California Injury Prevention Research Center at the University of California, Los Angeles. Her research has focused on injury and violence prevention as it relates to maternal, child, and adolescent health. In addition to this study, she has participated in projects on bed-sharing, sudden unexpected deaths among infants, and media literacy as an approach to violence prevention among adolescents in middle schools across Los Angeles County.

Lorena Garcia received a doctorate of public health from the department of epidemiology at the University of California, Los Angeles, in 2002, and a master’s of public health in epidemiology/biostatistics from Boston University in 1996. Currently, she is an assistant professor in the department of public health sciences in the School of Medicine at the University of California, Davis. She has been engaged in Latino health research since the early 1990s, with a special interest in injury and violence prevention in the Latino community. She has participated in various projects dealing with Latino health, such as health insurance status of Latinas; Latino health care access and utilization; inhalant abuse

among Latino youth; community-based prevention/intervention programs to prevent HIV infection in pregnant women at high risk; U.S.–Mexico border health; community-based health initiatives to address Latino communities; and ethnic and cultural differences in health behavior and health problems, injury, acculturation, and intimate partner violence among Latinas in the United States and Latin America.

References

Afable-Munsuz A, & Brindis CD (2006). Acculturation and the sexual and reproductive health of Latino youth in the United States: a literature review. Perspectives on Sexual and Reproductive Health, 38, 208–219. [PubMed: 17162313]

Amaro H. (1988). Women in the Mexican-American community: Religion, culture, and reproductive attitudes and experiences. Journal of Community Psychology, 16(1), 6–20.

Amaro H. (1995). Love, sex, and power. Considering women's realities in HIV prevention. American Psychologist, 50(6), 437–447. [PubMed: 7598292]

Boy A, & Salihu HM (2004). Intimate partner violence and birth outcomes: a systematic review. International Journal of Fertility and Women's Medicine, 49, 159–164.

Castro R, Peek-Asa C, Garcia L, Ruiz A, & Kraus JF (2003). Risks for abuse against pregnant Hispanic women: Morelos, Mexico and Los Angeles County, California. American Journal of Preventive Medicine, 25, 325–332. [PubMed: 14580635]

Champion JD (1996). Woman abuse, assimilation, and self-concept in a rural Mexican American community. Hispanic Journal of Behavioral Sciences, 18,508–521.

Chandra A, Martinez GM, Mosher WD, Abma JC, & Jones J (2005). Fertility, family planning, and reproductive health of U.S. women: Data from the 2002 National Survey of Family Growth. Vital and Health Statistics, 23(25), 1–160.

Coker AL, Sanderson M, & Dong B (2004). Partner violence during pregnancy and risk of adverse pregnancy outcomes. Paediatric Perinatal Epidemiology, 18, 260–269. [PubMed: 15255879]

Cuellar I, Arnold B, & Maldonado R (1995). Acculturation Rating Scale for Mexican Americans-II: A revision of the original ARSMA Scale. Hispanic Journal of Behavioral Sciences, 17, 275–304.

de la Torre A, & Estrada A (2001). Mexican Americans and health: ¡Sana! ¡Sana! Tucson: University of Arizona Press.

Diaz Olavarrieta C, & Sotelo J (1996). Domestic violence in Mexico. Journal of American Medical Association, 275, 1937–1941.

Flores-Ortiz YG (1993). La mujer y la violencia: A culturally based model for the understanding and treatment of domestic violence in Chicana/Latina Communities. In Alarcón N (Ed.), Chicana critical issues (pp. 169–182). Berkeley, CA: Third Woman Press.

Flores-Ortiz YG (1994). The role of cultural and gender values in alcohol use patterns among Chicana/Latina high school and university students: Implications for AIDS prevention. International Journal of the Addictions, 29, 1149–1171. [PubMed: 7960310]

Garcia L, Hurwitz EL, & Kraus JF (2005). Acculturation and reported intimate partner violence among Latinas in Los Angeles. Journal of Interpersonal Violence, 20, 569–590. [PubMed: 15788555]

Gazmararian JA, Adams MM, Saltzman LE, Johnson CH, Bruce FC, Marks JS, et al. (1995). The relationship between pregnancy intendedness and physical violence in mothers of newborns. The PRAMS Working Group. Obstetrician and Gynecology, 85, 1031–1038.

Gessner BD, & Perham-Hester KA (1998). Experience of violence among teenage mothers in Alaska. Journal of Adolescent Health, 22, 383–388.

Giachello AL (2001). The reproductive years: The health of Latinas. In Aguirre Molina M, Molina C, & Zambrana RE (Eds.), Health issues in the Latin community (pp. 107–156). San Francisco: Jossey-Bass.

Gibson JW, & Lanz JB (1991). Factors associated with Hispanic teenagers' attitude toward the importance of birth control. Child and Adolescent Social Work Journal, 8, 399–415. [PubMed: 12343807]

Goodwin MM, Gazmararian JA, Johnson CH, Gilbert BC, & Saltzman LE (2000). Pregnancy intendedness and physical abuse around the time of pregnancy: Findings from the pregnancy risk assessment monitoring system, 1996-1997. PRAMS Working Group. Pregnancy risk assessment monitoring system. Maternity and Child Health Journal, 4, 85–92.

Henshaw SK (1998). Unintended pregnancy in the United States. Family Planning Perspectives, 30, 24–29. [PubMed: 9494812]

Jones RK, Darroch JE, & Henshaw SK (2002). Patterns in the socioeconomic characteristics of women obtaining abortions in 2000–2001. Perspectives on Sexual and Reproductive Health, 34, 226–235. [PubMed: 12392215]

Kost K, Singh S, Vaughan B, Trussell J, & Bankole A (2008). Estimates of contraceptive failure from the 2002 National Survey of Family Growth. Contraception, 77(1), 10–21. [PubMed: 18082661]

Leung WC, Leung TW, Lam YY, & Ho PC (1999). The prevalence of domestic violence against pregnant women in a Chinese community. International Journal of Gynaecology and Obstetrics, 66(1), 23–30. [PubMed: 10458546]

Marin BV, Tschann JM, Gomez CA, & Kegeles SM (1993). Acculturation and gender differences in sexual attitudes and behaviors:Hispanic vs non-Hispanic white unmarried adults. American Journal of Public Health, 83, 1759–1761. [PubMed: 8259813]

Martin SL, Kilgallen B, Tsui AO, Maitra K, Singh KK, & Kupper LL (1999). Sexual behaviors and reproductive health outcomes: Associations with wife abuse in India. Journal of American Medical Association, 282, 1967–1972.

Norris AE, & Ford K (1994). Condom beliefs in urban, low income, African American and Hispanic youth. Health Education Quarterly, 21, 39–53. [PubMed: 8188492]

Ortiz S, & Casas JM (1990). Birth control and low-income Mexican-American women: the impact of three values. Hispanic Journal of Behavioral Sciences, 12(1), 83–92. [PubMed: 12283504]

Pallitto CC, Campbell JC, & O'Campo P (2005). Is intimate partner violence associated with unintended pregnancy? A review of the literature. Violence, Trauma & Abuse, 6, 217–235.

Pallitto CC, & O'Campo P (2004). The relationship between intimate partner violence and unintended pregnancy: Analysis of a national sample from Colombia. International Family Planning Perspectives, 30, 165–173. [PubMed: 15590382]

Pallitto CC, & O'Campo P (2005). Community level effects of gender inequality on intimate partner violence and unintended pregnancy in Colombia: Testing the feminist perspective. Social Science & Medicine, 60, 2205–2216. [PubMed: 15748669]

Peek-Asa C, Garcia L, McArthur D, & Castro R (2002). Severity of intimate partner abuse indicators as perceived by women in Mexico and the United States. Women and Health, 35, 165–180. [PubMed: 12201506]

Raine T, Minnis AM, & Padian NS (2003). Determinants of contraceptive method among young women at risk for unintended pregnancy and sexually transmitted infections. Contraception, 68(1), 19–25. [PubMed: 12878282]

Redfield R, Linton R, & Herskovits MJ (1936). A memorandum for the study of acculturation. American Anthropologist, 38, 149–152.

Romo LF, Berenson AB, & Segars A (2004). Sociocultural and religious influences on the normative contraceptive practices of Latino women in the United States. Contraception, 69, 219–225. [PubMed: 14969670]

Russell AY, Williams MS, Farr PA, Schwab AJ, & Plattsmier S (1993). Patterns of contraceptive use and pregnancy among young Hispanic women on the Texas-Mexico border. Journal of Adolescent Health, 14, 373–379.

Sabogal F, Perez-Stable EJ, Otero-Sabogal R, & Hiatt RA (1995). Gender, ethnic, and acculturation differences in sexual behaviors: Hispanic and non-Hispanic White adults. Hispanic Journal of Behavioral Sciences, 17, 139–159.

Sahin HA, & Sahin HG (2003). An unaddressed issue: Domestic violence and unplanned pregnancies among pregnant women in Turkey. European Journal of Contraception and Reproductive Health Care, 8(2), 93–98. [PubMed: 12831606]

Saltzman LE, Johnson CH, Gilbert BC, & Goodwin MM (2003). Physical abuse around the time of pregnancy: An examination of prevalence and risk fators in 16 states. Maternity and Child Health Journal, 7(1), 31–43.

Sangi-Haghpeykar H, Ali N, Posner S, & Poindexter AN (2006). Disparities in contraceptive knowledge, attitude and use between Hispanic and non-Hispanic whites. Contraception, 74(2), 125–132. [PubMed: 16860050]

Sorenson AM (1985). Fertility expectations and ethnic identity among Mexican-American adolescents: an expression of cultural ideals. Sociological Perspectives, 28, 339–360. [PubMed: 12267311]

Sorenson SB, & Telles CA (1991). Self-reports of spousal violence in a Mexican-American and non-Hispanic white population. Violence and Victims, 6(1), 3–15. [PubMed: 1859804]

Tjaden P, & Thoennes N (2000). Extent, nature, and consequences of intimate partner violence: Findings from the National Violence Against Women Survey (Publication No. NCJ 181867), Washington, DC: Department of Justice.

Torres S (1987). Hispanic-American battered women: Why consider cultural differences? Response to the Victimization of Women and Children: Journal of the Center for Women Policy Studies, 10(3), 20–21.

Torres S (1991). A comparison of wife abuse between two cultures: Perceptions, attitudes, nature, and extent. Issues in Mental Health Nursing, 12(1), 113–131. [PubMed: 1988377]

Unger JB, & Molina GB (1997). Desired family size and son preference among Hispanic women of low socioeconomic status. Family Planning Perspectives, 29, 284–287. [PubMed: 9429876]

Unger JB, & Molina GB (1998). Contraceptive use among Latina women: Social, cultural, and demographic correlates. Women's Health Issues, 8, 359–369. [PubMed: 9846120]

Unger JB, & Molina GB (2000). Acculturation and attitudes about contraceptive use among Latina women. Health Care for Women International, 21, 235–249. [PubMed: 11111468]

Warwick NW (1997). Patterns of diversity and forms of interpretation: A cultural analysis of immigrant Mexican women who have been battered (Doctoral dissertation, AAT 9714262, University of California, Los Angeles, 1997). Dissertation Abstracts International.

Wingood GM, DiClemente RJ, & Raj A (2000). Adverse consequences of intimate partner abuse among women in non-urban domestic violence shelters. American Journal of Preventive Medicine, 19(4), 270–275. [PubMed: 11064231]

Table 1.

Characteristics of the Study Population According to IPV During Pregnancy

		IPV During Pregnancy, *n* (%)		
	Total, *n* (%) (*n* = 313)	**Physical (*n* = 30)**	**Emotional (*n* = 60)**	**None (*n* = 222)**
Characteristics of the respondent				
Age				
<21	93 (29.7)	12 (40.0)	22 (36.7)	59 (26.6)
≥21	220 (70.3)	18 (60.0)	38 (63.3)	163 (73.4)
High school				
Some	162 (51.8)	22 (73.3)	36 (60)	104 (46.8)
None	151 (48.2)	8 (26.7)	24 (40)	118 (53.2)
Monthly household income				
≤US$ 1,500	256 (86.8)	23 (92.0)	45 (83.3)	187 (87.0)
>US$ 1,500	39 (13.2)	2 (8.0)	9 (16.7)	28 (13.0)
Married, living with partner				
No	91 (29.1)	13 (43.3)	23 (38.3)	55 (24.8)
Yes	222 (70.9)	17 (56.7)	37 (61.7)	167 (75.2)
Characteristics of the partner				
Age				
<21	43 (13.7)	8 (26.7)	12 (20.0)	23 (10.4)
≥21	270 (86.3)	22 (73.3)	48 (80.0)	199 (89.6)
Born in the United States				
Yes	52 (16.6)	6 (20.0)	15 (25.0)	31 (14.0)
No	261 (83.4)	24 (80.0)	45 (75.0)	191 (86.0)
Reproductive history and IPV before pregnancy				
Sexual partners				
>1	130 (41.7)	18 (60)	32 (53.3)	80 (36.0)
1	182 (58.3)	12 (40)	28 (46.7)	142 (64.0)
If >1 pregnancy, prior abortion				
N/A	143 (45.7)	14 (46.7)	31 (51.7)	97 (43.7)
Yes	28 (8.9)	5 (16.7)	6 (10.0)	17 (7.7)
No	142 (45.4)	11 (36.7)	23 (38.3)	108 (48.6)
IPV before pregnancy				
Physical	34 (10.9)	14 (46.7)	10 (16.7)	9 (4.1)
Emotional	68 (21.8)	7 (23.3)	34 (56.7)	27 (12.2)
None	210 (67.3)	9 (30.0)	16 (26.7)	185 (83.7)

Note: IPV = intimate partner violence.

Table 2.

The Relationship Between IPV Before Pregnancy, Acculturation, and Unintended Pregnancy

		Pregnancy Intent, *n* (%)		Odds of Unintended Pregnancy	
	Total, *n* (%) (*n* = 313)	**Unintended (*n* = 137)**	**Intended (*n* = 176)**	**Unadjusted OR (95% CI) (*n* = 312)**	**Adjusted[a] OR (95% CI) (*n* = 306)**
IPV before pregnancy					
Physical	34 (10.9)	19 (14.0)	15 (8.5)	1.62 (0.78, 3.37)	0.92 (0.40, 2.16)
Emotional	68 (21.8)	25 (18.4)	43 (24.4)	0.75 (0.42, 1.31)	0.50 (0.26, 0.97)
None	210 (67.3)	92 (67.6)	118 (67.0)	(reference)	(reference)
ARSMA-II level[b]					
III-V	38 (12.3)	29 (21.3)	9 (5.2)	5.54 (2.48, 12.36)	2.24 (0.86, 5.85)
II	77 (25.0)	36 (26.5)	41 (23.8)	1.51 (0.88, 2.58)	1.15 (0.62, 2.12)
I	193 (62.7)	71 (52.2)	122 (70.9)	(reference)	(reference)

Note: ARSMA = Acculturation Rating Scale for Mexican Americans; IPV = intimate partner violence; OR = odds ratio; CI = confidence interval.

[a] Adjusted for respondent and partner's age, marital status, number of sexual partners, and variables in table.

[b] ARSMA Levels III through V = *Anglo oriented*; Level II = *Mexican oriented, bicultural*; Level I = *Very Mexican oriented*.

Table 3.

The Relationship Between Unintended Pregnancy, Acculturation, and IPV During Pregnancy

		IPV During Pregnancy, %			Odds of Physical IPV During Pregnancy[a]	
	Total, *n* (%) (*n* = 313)	**Physical (*n* = 30)**	**Emotional (*n* = 60)**	**None (*n* = 222)**	**Unadjusted OR (95% CI)**	**Adjusted[b] OR (95% CI)**
Pregnancy intent						
Unintended	137 (43.8)	18 (60.0)	26 (43.3)	92 (41.4)	2.12 (0.97, 4.61)	2.80 (1.01, 7.73)
Intended	176 (56.2)	12 (40.0)	34 (56.7)	130 (58.6)	(reference)	(reference)
ARSMA-II level						
III-V	38 (12.3)	6 (20.7)	11 (19.0)	21 (9.5)	3.19 (1.09, 9.29)	0.81 (0.17, 3.80)
II	77 (25.0)	10 (34.5)	13 (22.4)	54 (24.5)	2.07 (0.86, 4.99)	0.94 (0.28, 3.16)
I	193 (62.7)	13 (44.8)	34 (58.6)	145 (65.9)	(reference)	(reference)

Note: ARSMA = Acculturation Rating Scale for Mexican Americans; IPV = intimate partner violence; OR = odds ratio; CI = confidence interval.

[a] Reference group for the outcome is women who reported no IPV during pregnancy.

[b] Adjusted for respondent's age, education, IPV before pregnancy, and variables in table.

[c] ARSMA Levels III through V = *Anglo oriented* (*n* = 38); Level II = Mexican oriented, bicultural (*n* = 77); Level I = *Very Mexican oriented* (*n* = 193).

Table 4.

The Relationship Between Unintended Pregnancy and IPV During Pregnancy According to Level of Acculturation.

		IPV During Pregnancy, %			Odds of Physical IPV During Pregnancy[a]	
	Total, *n* (%)	**Physical**	**Emotional**	**None**	**Unadjusted OR (95% CI)**	**Adjusted[b] OR (95% CI)**
ARSMA-II Levels I-II[c]	*n* = 270	*n* = 23	*n* = 47	*n* = 199	*n* = 222	*n* = 221
Unintended	107 (39.6)	14 (60.9)	17 (36.2)	75 (37.7)	2.57 (1.06, 6.23)	2.79 (0.98, 7.92)
Intended	163 (60.4)	9 (39.1)	30 (63.8)	124 (62.3)	(reference)	(reference)
ARSMA-II levels III-V[c]	*n* = 38	*n* = 6	*n* = 11	*n* = 21	*n* = 27	
Unintended	29 (76.3)	4 (66.7)	9 (81.8)	16 (76.2)	0.62 (0.09, 4.49)	N/A[d]
Intended	9 (23.7)	2 (33.3)	2 (18.2)	5 (23.8)	(reference)	

Note: ARSMA = Acculturation Rating Scale for Mexican Americans; IPV = intimate partner violence; OR = odds ratio; CI = confidence interval.

[a] Reference group for the outcome is women who reported no IPV during pregnancy.

[b] Adjusted for respondent's age, education, and IPV before pregnancy.

[c] ARSMA Levels III through V = *Anglo oriented* (*n* = 38); Level II = *Mexican oriented*, bicultural (*n* = 77); Level I = *Very Mexican oriented* (*n* = 193).

[d] Unable to estimate due to small sample.