142 PREGNANCY OUTCOMES ASSOCIATED WITH INFECTIOUS HEPATITIS KEISHA REDDICK[1], RAVI JHAVERI[2], MIHIR GANDHI[3], ANDRA JAMES[1], GEETA SWAMY[1], [1]Duke University, Department of Obstetrics and Gynecology, Durham, North Carolina, [2]Duke University, Department of Pediatric Infectious Diseases, Durham, North Carolina, [3]Duke University,, North Carolina

OBJECTIVE: Pregnancy complicated by Hepatitis B and C virus (HBV and HCV) raises concern with regards to maternal health and fetal transmission. Previous studies suggesting an association with poor pregnancy outcomes were limited to HBV+ Asian women or HCV+ women in the US. Our objective was to examine the effects of both HBV and HCV during pregnancy.

STUDY DESIGN: Data was obtained from the Nationwide Inpatient Sample (NIS) from 1995-2005. NIS is a de-identified registry of discharge encounters from 1,054 US hospitals. The NIS was queried for all pregnancy-related discharges. Controlling for maternal age and race, logistic regression was used to examine the association between HBV, HCV, or HBV+HCV co-infection and hepatitis-associated complications as well as pregnancy complications including, gestational diabetes (GDM), preeclampsia, preterm birth (PTB), fetal growth restriction (FGR) and hemorrhage.

RESULTS: Of 376,816 pregnant women available for analysis, 1,467 had a diagnosis of HCV, HBV or HCV+HBV. Women with either HBV or HCV had an increased risk for liver cirrhosis, odds ratio (OR) of 77.5 and 198.1, respectively. HBV and HCV were also associated with thrombocytopenia (OR 3.2 for both). High risk behaviors, such as smoking, alcohol and substance use were higher in women with both HBV and HCV. Co-infection with HBV+HCV had an increased risk for HIV infection (OR 12.2, CI [2.03, 73.8]). With regards to pregnancy-related complications, any hepatitis infection was associated with PTB (HBV (OR 1.9, CI [1.5, 2.3]), HCV (OR 1.7, CI [1.3, 2.2]) and HBV+HCV (OR 2.3, CI [1.2, 4.3])). FGR was significantly increased for HCV patients (OR 2.0, CI [1.1, 3.6]) but not for HBV patients. There was no association between any hepatitis infection and GDM, preeclampsia, or hemorrhage.

CONCLUSION: Women with hepatitis infection are at increased risk for PTB and FGR. In a US population, there does not appear to be an increased risk for GDM. Women with infectious hepatitis are at an increased risk for hepatitis-associated complications during pregnancy.

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143 THE CONFOUNDING INFLUENCE OF DOMICILE AND ETHNICITY ON INFANT MORTALITY LEANNE DAHLGREN[1], SARKA LISONKOVA[2], PETER VON DADELSZEN[1], LUCY BARNEY[3], LAURA ARBOUR[1], ROBERT LISTON[1], [1]University of British Columbia, Vancouver, British Columbia, Canada, [2]University of British Columbia, British Columbia, Canada, [3]British Columbia Perinatal Health Program, British Columbia, Canada

OBJECTIVE: Infant mortality and stillbirth rates are higher among status Indians (SI) in British Columbia (BC), Canada. Less is known of the effect of domicile on these rates. To examine the confounding influence of domicile on stillbirth and infant mortality (IM) among SI compared to non-SI infants. Domicile characteristics used were A) rural/urban residence (<10,000 inhabitants vs more); B) distance from and C) mode of transportation (road/air/ferry) to a level2/3 hospital. We adjusted for other covariates: prenatal care, parity, multiple births, congenital anomalies, maternal age, marital status, low-income neighbourhood, smoking, alcohol and drug use, obstetric history, and infant's sex.

STUDY DESIGN: Retrospective cohort study including all BC births between 1999-2004. Vital statistics identified SI and deaths. All other fields came from the BC Perinatal database. Postal codes determined domicile categories. We calculated relative risks (RR) and logistic regression adjusted Odds Ratios (adjOR) and their 95% confidence intervals (CI).

RESULTS: Of the 158,136 births, 9199 (5.8%) were SI. Stillborn were 0.71% SI and 0.47% non-SI infants (RR=1.3, CI:1.1-1.6). The IM was 8.7 (SI) and 3.9 (non-SI) per 1000 live births (RR=2.2, CI:1.7-2.7). Prematurity (SI infants) and congenital anomalies (non-SI infants) were the main causes of IM. RR of stillbirth remained similar by domicile. The RR of IM for SI infants changed: 3.2 (CI:2.1-4.8) in rural vs 2.0 (CI:1.5-2.6) in urban areas; 2.1 (CI:1.6-2.8) at 50km vs 2.8 (CI:1.7-4.4) at >50km distance from hospital; and 2.1 (CI:1.6-2.7) for road vs 4.6 (CI:1.4-15.2) for ferry/air transportation. Accounting for other covariates, the adjOR for IM was 1.5 (CI:1.1-2.0), for stillbirth 1.0 (CI:0.8-1.4).

CONCLUSION: SI infants in rural/remote areas have a higher risk of death. Adjusting for domicile decreases but does not remove the increased risk; however, it removes the increased risk of stillbirth. Further research is needed to examine why more SI infants are born preterm.

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144 PARTNER- AND PARTNERSHIP-RELATED RISK FACTORS FOR PRETERM BIRTH AMONG LOW-INCOME WOMEN IN LIMA, PERU KATHLEEN PAUL[1], PEDRO GARCIA[2], LISA MANHART[3], KING HOLMES[4], JANE HITTI[1], [1]University of Washington, Obstetrics and Gynecology, Seattle, Washington, [2]Instituto Nacional Materno Perinatal, Lima, Peru, Peru, [3]University of Washington, Epidemiology, Washington, [4]University of Washington, Seattle, Washington

OBJECTIVE: A woman's partner and the characteristics of their partnership can play an important role in the health of her pregnancy, yet there has been little previous research addressing the associations between partner factors and birth outcomes. We aimed to test the hypothesis that risk factors related specifically to a woman's partner or the partnership itself may increase the risk of preterm birth.

STUDY DESIGN: Between 2003 and 2005, a total of 580 preterm cases (20-36 weeks gestational age at delivery) and 633 term controls (37 weeks) were enrolled from women delivering at an obstetric hospital in Lima, Peru. Each woman completed a structured interview and provided biological specimens within 48 hours after delivery. Multivariate logistic regression was used to assess associations between partner and partnership characteristics and preterm birth.

RESULTS: After adjustment for behavioral, demographic, and obstetric risk factors, ever having had a partner with a history of drug use (OR=1.91, 95% CI 1.22-2.99), ever having had anal sex (OR=1.40, 95% CI 1.07-1.84), having a current partner with a history of visiting prostitutes (OR=1.69, 95% CI 1.22-2.33), and perceiving one's current partner as a "womanizer" (OR=1.34, 95% CI 1.02-1.77) were significantly associated with an elevated risk of PTB when tested in separate models. These four factors were then used to create a composite partnership risk score, which showed an increasing dose-response relationship with PTB risk (OR=1.31 for each additional partner factor, 95% CI 1.16-1.49, p=0.001). Other partner factors including short duration of current relationship, large age difference, and partner prison history were not associated with PTB.

CONCLUSION: Our results highlight the importance of considering a broader set of risk factors for PTB, specifically those related to a woman's partner and partnership characteristics. Partner factors may influence risk of PTB through exposure to sexually transmitted infections and/or maternal stress, although further research is needed to clarify the specific mechanisms.

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145 RANDOMIZED CLINICAL TRIAL OF CERVICAL RIPENING AND LABOR INDUCTION USING ORAL MISOPROSTOL WITH OR WITHOUT INTRAVAGINAL ISOSORBIDE MONONITRATE JUSTIN COLLINGHAM[1], KATHERINE FUH[1], AARON CAUGHEY[2], KRISTIN PULLEN[1], DEIRDRE LYELL[1], MAURICE DRUZIN[1], ELIZABETH KOGUT[1], YASSER EL-SAYED[1], [1]Stanford University, Obstetrics and Gynecology, Stanford, California, [2]University of California, San Francisco, San Francisco, California

OBJECTIVE: To determine the efficacy of the addition of intravaginal isosorbide mononitrate (IMN) to an established protocol of oral misoprostol (miso) for cervical ripening and labor induction.

STUDY DESIGN: A prospective, randomized trial was conducted. Women scheduled for labor induction between 32 and 42 weeks and with unfavorable cervices (Bishop score ≤ 6) were randomized to receive miso every 4 hours up to 4 doses with or without IMN every 6 hours up to 2 doses. A strict ripening and induction protocol including timing of oxytocin use and amniotomy was used. Subjects were evaluated for side effects 6 hours after study initiation. The study was powered to detect a primary endpoint of a change in time to vaginal delivery (VD) of 4 hours (α=.05 and β=.20). Student t, Chi-square, Fisher's exact and Mann-Whitney tests were used where appropriate with $p < .05$ deemed significant.

RESULTS: 155 women were randomized; 2 were excluded after randomization. 78 women received miso, and 75 women received miso with IMN. There were no demographic differences between groups. Results are shown in the table. There was no reduction in the primary outcome of time to VD with the addition of IMN to miso. Cesarean delivery (CD) rates were similar in both arms, as were rates of contraction abnormalities and fetal heart rate abnormalities (abnl FHR). Subjects receiving miso with IMN experienced similar rates of nausea, diarrhea, flushing and dizziness as those receiving miso alone but reported headache more often.

CONCLUSION: The addition of intravaginal IMN to oral miso for cervical ripening and labor induction did not significantly reduce time to VD and was associated with a greater incidence of headache.

Miso +/− IMN Outcomes

	Miso	Miso with IMN	p-value
Median hrs to VD	17.8	18.8	.69
CD	18 (23%)	22 (29%)	.31
Tachy-systole	8 (10%)	6 (8%)	.31
Abnl FHR	28 (36%)	37 (49%)	.09
Headache	12 (15%)	52 (69%)	<.001

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