

Impact of Educational Workshops on Laboratory Evaluation of Preeclampsia in La Paz, Bolivia

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Preeclampsia is a hypertensive disorder of pregnancy which is thought to be caused by abnormal implantation of the placenta in the uterine wall, leading to increased risks of both maternal and fetal/perinatal complications. Bolivia, a country in which 2/3 of the population lives at an altitude where the risk of preeclampsia is increased by 33%, has maternal and infant mortality rates more than twice as high as surrounding South American countries. Recent changes in diagnostic criteria for preeclampsia that emphasize symptom and laboratory markers of end organ dysfunction have been recommended, but the degree to which these criteria has been implemented in Bolivia is unknown. Study team members traveled to Bolivia, and in collaboration with leading physicians in Bolivia, conducted an educational workshop to target improvements in implementation of new diagnostic criteria. Chart review of patients categorized by Bolivian physicians as being affected by hypertensive disorders of pregnancy was conducted for pregnancies in the year prior to (n=681) and the 9 months following (n=641) this workshop to evaluate the percentage of these patients for whom the recommended laboratory evaluation was completed. Of note, significant increases in the percentage of patients evaluated for proteinuria (56.5% vs 46.3%, $p < .01$), serum creatinine level (94.2% vs 89%, $p < .01$), and the full complement of recommended labs (53.4% vs 43.6%, $p < .01$) were seen. Additionally, the percentage of patients receiving the full complement of recommended laboratory tests increased over time in the 9 months following the workshop (33.8% in months 0-3 vs 70.8% in months 6-9, $p < .01$). This suggests a notable increase in implementation of recommended laboratory evaluation for preeclampsia in Bolivia, and the additional potential that this effect may be long-lasting.