

Notes From Abroad

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As a small town pediatrician, I have the responsibility of caring for babies born with unexpected problems. Personnel and equipment available to provide care at the time of birth influences the outcome for infants born with perinatal complications and infections. I traveled to Bolivia hoping to see a representative cross section of the facilities that provide care for newborns.

Bolivia is a country experiencing an increase in the percent of births occurring with the aid of medical professionals. In the recent past the majority of births occurred in the home with no professional assistance. Within the past 10 years the SUMI law was put into effect, providing free prenatal care and hospital deliveries for all women.



The law also includes well-child care and immunizations for children until their fifth birthday. The result of this program has been an impressive drop in maternal and infant mortality rates. However, due to the high percent of families who live in remote areas with poor roads and the unfamiliarity of indigenous cultures with medical professionals, in some areas the percent of home births remains more than 40%.

The facilities where births occur vary from large city hospitals with neonatal intensive care units to small clinic facilities with outpatient deliveries and no supplies to care for sick newborns. As part of my experience, I was able to attend daily teaching rounds in the neonatal intensive care unit in the German Urguidi Hospital in Cochabamba for a three-week period. As expected the pathology was similar to that found in the United States. However even this large city hospital had a very insufficient supply of incubators and overhead warmers. A set of 4-pound triplets spent their first week of life on IV's and oxygen together in the same incubator. Sleeping crosswise, their little feet pushed against the side of the incubator. Although crowded, they did well.

During my time in Bolivia I was also able to see the medical issues of children beyond the newborn period. Infectious diseases remain a challenge when families live in remote locations and do not have money to spend obtaining medical care. Of particular concern in countries with demographics similar to Bolivia is osteomyelitis. In Bolivia I saw several children with badly damaged bones and joints from osteomyelitis that had been untreated or inadequately treated for as long as 6 months.

An unexpected problem that I saw was the effect of contaminated antibiotics given IM. In the German Urguidi Hospital in Cochabamba a child was admitted because he

developed severe tissue damage throughout his foot and leg within minutes of receiving an IM injection of penicillin. It was not known whether the antibiotic was contaminated by a toxin or a vaso-occlusive event occurred. Amputation of the leg was necessary. The senior resident stated that she had seen two similar cases during her residency. In the US I have never known of a similar event.

Malnutrition is also a very prominent concern for children in Bolivia. I saw many examples of young children with malnutrition ranging from iron deficiency to severe protein calorie malnutrition. The high price of infant formula relative to the income of Bolivian families makes it almost impossible for infants to thrive if their mothers are ill or lack sufficient breast milk. Clean water is not available for the vast majority of Bolivian households. The bottles and nipples needed to feed infants who are not breast-fed increase the risk of life-threatening infections.

I enjoyed all aspects of my experiences in the children's hospitals in Cochabamba and Santa Cruz. I was treated with courtesy and respect by Bolivian physicians at all levels of training who took the time to show me the pathology of the Bolivian newborns and children. I want to express my heartfelt thanks to Johnson and Johnson for the opportunity to participate as a Physician Scholar in International Health.