QUANTIFYING THE USE OF SEATBELTS AND CHILD RESTRAINTS IN THREE MEXICAN CITIES

doi:10.1136/injuryprev-2012-040580e.2

1R. Pérez-Núñez*, 1A Chandran, 1,2M Híjar, 1A Celis, 1,3MS Carmona-Lozano, 2JC Lunnen, 2AA Hyder. 1Centro de Investigación en Sistemas de Salud, Instituto Nacional de Salud Pública, México; 2International Injury Research Unit, Johns Hopkins Bloomberg School of Public Health, USA; 3Fundación Entornos, México; 4Centro Universitario de Ciencias de la Salud de la Universidad de Guadalajara, México; 5Facultad de Medicina de la Universidad de Guanajuato, campus León, México.

Background Seatbelts and child restraints can effectively reduce deaths resulting from road traffic crashes, and are one of the risk factors being targeted by the Mexican RS-10 project. This study quantifies restraint use in two intervention sites (Guadalajara-Zapopan and León) and one comparison site (Cuernavaca) in the initial 2 years of RS-10.

Objective To quantify the prevalence of seatbelt and child restraint use in three Mexican cities in the context of ongoing road safety intervention programs.

Methods Three rounds of roadside observations were conducted from November 2010 to January 2012. Two rounds of hospital surveys were administered to all road traffic injury (RTI) victims presenting at a tertiary hospital in each city.

Results The overall prevalence of seatbelt use was 45.0% in all three cities (95% CI = 44.3-45.7) in passengers aged ≥10; Cuernavaca showed the highest prevalence (52.9%; 95% CI = 51.5-54.4) followed by Guadalajara-Zapopan (43.5%; 95% CI = 42.4-44.5) and León (40.0%; 95% CI = 38.6-41.4). Child restraint use in children <10 was 17.4% (95% CI = 13.5-22.0) in Guadalajara-Zapopan, 10.6% (95% CI = 6.7-15.8) in León, and 7.9% (95% CI = 3.7-14.5) in Cuernavaca. Women, drivers, those aged ≥10, those traveling by taxi and those in a car with running headlights had higher restraint use prevalences. Hospital surveys revealed RTI victims had lower seatbelt use than the general population (31% vs 42%, p = 0.037).

Significance Child restraint and seatbelt use is low in these Mexican cities. This study shows an opportunity for further intervention and enhanced enforcement to encourage greater use of these highly efficacious devices.