

Conduct of road surveys providing policy-relevant data on prevalent risks for road crashes in Fiji

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Abstract

While road traffic injuries are common in many Pacific Island nations, epidemiological studies from the region informing current policies are sparse. The Traffic Related Injuries in the Pacific project - a collaboration involving the Fiji National University, University of Auckland, and the Ministries of Health in Fiji, Samoa, and Palau, aimed to address this gap in knowledge - to describe the design and conduct of a survey of four-wheeled motor vehicle drivers in Fiji providing data on the prevalence of risk factors for road traffic injury.

Using a two-stage cluster sampling study design, we recruited drivers from roadside surveys identifying a sample of four-wheeled motor vehicles representative of driving time on public roads in Viti Levu. Drawing from Fiji land transport authority databases, we identified eligible roads that were classified as main, secondary, country or residential, based on pre-determined criteria relating to road length, traffic counts, and geographic location. We conducted 50 roadside surveys over 12 months beginning July 2005, randomised by travel direction, day of week, and time of day (excluding 2am to 5am). Fiji Police assisted the research team to ensure compliance with local traffic management protocols. The surveys recruited 752 of 892 drivers of eligible vehicles selected in the sampling process, representing an 84% response rate. A structured interviewer-administered questionnaire sought self-report information on driver characteristics either on site or at a subsequent time nominated by drivers. The broad range of data captured by the structured questionnaire included demographic, lifestyle and motor vehicle characteristics, driving experience, and road behaviours. The successful conduct of this survey demonstrates the feasibility of undertaking population-based epidemiological surveys of road users in Pacific Islands to provide context-specific data on prevalent risk factors that can inform priority-setting as well as monitoring of road safety strategies and policy.

Full paper not submitted