

07

KAVA USE AND RISK OF CAR CRASH INJURY: A POPULATION-BASED CASE CONTROL STUDY IN FIJI

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Background The contribution from kava (a commonly consumed drink with sedative and anaesthetic properties) to the relatively high rates of road crashes in Pacific Island nations has received minimal research or policy attention.

Aim/Objectives/Purpose To quantify the relationship between kava use before driving and car crash injuries in Viti Levu, Fiji.

Methods A population-based case-control study was designed to include all cars involved in crashes where at least one occupant died or was hospitalised (case vehicles) and a random sample of cars being driven on roads in Viti Levu, Fiji (control vehicles). The drivers or their proxies in 154 case and 752 control vehicles were administered structured questionnaires eliciting data on putative risk and protective factors including kava use.

Results/Outcomes After adjustment for major confounders including alcohol use, consuming kava within 12 h of driving was

associated with a five-fold increase in the odds of crash involvement (OR=5.23, 95% CI 2.16 to 12.7). Almost 20% of car crashes in Viti Levu could be attributed to the acute consumption of kava (Population Attributable Risk 19%, 95% CI 15% to 23%).

Significance Kava use by drivers is a major contributor to serious injury-involved road crashes in Fiji and should be an explicit target in road safety strategies. While further studies are required to identify concentrations of kava and patterns of use that pose the greatest risk, this study illustrates the importance of investigating context-specific factors that account for a substantially greater burden of road crashes in some less-resourced settings than currently appreciated.