“IT’S JUST THE WAY IT IS OUT HERE …”: THE ROLE OF ‘REMOTENESS’ AND ‘CONTEXT’ IN UNDERSTANDING AND PREVENTING RURAL ROAD TRAUMA

Colin Edmonston1, Mary Sheehan2, Victor Siskind2
1Department of Transport & Main Roads; 2Centre for Accident Research & Road Safety – Queensland
email: colin.j.edmonston@transport.qld.gov.au

INTRODUCTION

Road trauma has been a longstanding cause of death and injury in rural and remote areas of Australia, particularly for Indigenous communities. However, it wasn’t until the release of Australia’s Rural Road Safety Action Plan [1] in 1996 that rural and Indigenous populations became a focus on the national road safety agenda.

While 21 percent of Queensland’s population reside in rural areas, 39 percent of the state’s road injuries occur in these areas [2]. In response, the Centre for Accident Research & Road Safety – Queensland (CARRS-Q) and the James Cook University (JCU) School of Medicine embarked on a whole-of-government applied research project to better understand and address the behavioural, environmental, vehicular and cultural factors contributing to road crashes in rural and remote areas. The Rural and Remote Road Safety Study involved an in-depth analysis of 732 serious casualty and 119 fatality crashes (both on and off-road) in the ABS statistical divisions of Northern Queensland, Far North Queensland and North West Queensland, excluding the urban areas of Cairns, Townsville and Thuringowa, between March 2004 and June 2007 inclusive [3]. Central to the analysis were interviews with 404 crash patients admitted to larger health facilities within the region (ie. Cairns, Townsville, Mt Isa and Atherton hospitals) for a length of stay > 24 hours (‘injury severity inclusion criteria’).

To increase the number of Indigenous cases in the sample, an additional 197 crash patients were recruited through smaller health facilities in the Cairns, Cape York, Charters Towers, Innisfail, Mt Isa, Tablelands, Townsville, and Torres Strait and Northern Peninsula Area Health Service Districts over an 18-month period ending August 2008. Note, these additional cases were not required to meet ‘injury severity inclusion criteria’ and form the basis of a National Health & Medical Research Council PhD project comparing the unique and shared characteristics of crashes involving Indigenous and non-Indigenous people in rural and remote areas of North Queensland.

Patient interview data was supplemented with information from official road crash, hospital, Coronial and emergency response databases to provide more accurate prevalence comparisons.

METHODS

In the larger health facilities, bedside interviews were conducted by researchers after the patient was deemed ‘suitably fit to participate’ by nursing staff and written consent was obtained. Cases identified through the smaller health facilities were given a brief overview of the research by nursing staff and a free-call 1800 number to contact if they wanted to discuss their crash in a confidential phone interview.

Interview protocol: Of the 601 patients interviewed, 90 (15%) identified as Indigenous. Interview length ranged from 35 minutes to nearly two hours, depending on the participant, with many patients acknowledging the therapeutic benefits of the process. Patients were specifically asked about their:

- Crash experience in narrative form;
- Background and demographics;
- Potential risky or illegal behaviour prior to the crash (unlicensed, alcohol/drug use, speeding, etc.);
- Use of protective equipment (eg. seatbelts, helmets);
- Trip characteristics (purpose and duration of journey, periods of fatigue and monotony, distractions, etc.);
- Vehicle characteristics and maintenance;
- Self-reported crashes and traffic offences;
- Individual and community road safety attitudes and practices, including those around enforcement and specific countermeasures;
- Characteristics of where they live and local cultural influences.

While the content and intent of the interview were similar, the questioning style was modified for patients recruited through smaller or more remote health facilities to increase understanding. For example, like the Kimberley Aboriginal Health Promotion Project [4], geographic concepts were to measure specificity (ie. circles of different sizes to indicate different levels of agreement).

Data analysis: Based on the RRaMA classification system [5], comparisons were made between four groups: Indigenous (remote/very remote); Other (remote/very remote); Indigenous (rural); and Other (rural) to identify between-group similarities and differences. The ‘crash site’ (and its RRaMA classification) is the geographic variable for comparisons.

This paper is restricted to a discussion of the findings from an analysis of the ‘crash narrative’ component of the interview. Crash narratives were analysed using a ‘grounded theory’ approach [6], whereby analytical categories or themes were identified as they merged from the data. A ‘constant comparison method’ [6] - searching for similarities and differences by making systematic comparisons across units of data - was used to compare the four groups.
RESULTS AND DISCUSSION

In summary, Indigenous cases were more likely to present at the health facility closest to their home (irrespective of injury severity) and typically presented later (often not on the same day as the crash) than non-Indigenous cases. This may support the claim that Indigenous people are more reluctant to utilise organised health and treatment services [7] or may simply reflect a delay in presentation to avoid detection for possibly illegal behaviour contributing to the crash [8].

Consistent with previous research [9], Indigenous casualties were more likely to be a passenger or pedestrian, while non-Indigenous casualties were more likely to be drivers or riders. Indigenous crashes were also more likely to occur at night, while non-Indigenous crashes were most prevalent in the afternoon. Typically more than one behavioural risk factor was identified by both Indigenous and non-Indigenous cases.

“It’s just the way it is out here … We all do the same things. We risk it with drink driving, speeding and overloading because we’re not likely to get caught and don’t have much choice. You have to get around and we have less option … If the roads were better though, there wouldn’t be as many crashes” (Male, non-Indigenous, Rider).

CONCLUSIONS

Given that 26.5% of Indigenous Australians live in ‘remote or very remote’ areas, compared to 2.0% of non-Indigenous Australians [10], it is not surprising that Indigenous people are over-represented in road trauma. However, qualitative analysis of 601 patient interviews from North Queensland indicates that the rural and remote context influences road user behaviour and subsequent crash profiles, irrespective of ethnicity. This suggests that significant gains could be made through the development of rural road safety policy and practices that directly address the context in which the behaviour occurs.

Given the difficulty in changing an individual’s behaviour and the relative ineffectiveness of road safety public education campaigns as a stand-alone countermeasure [11], it is argued that rural road safety might be better addressed through a multi-method ‘risk minimisation’ approach which separates road use from other risky practices which are engrained in rural culture. For example, the drink driving problem in remote areas might be better tackled through a combination of local alcohol management plans (which are already proving effective) [12], suitable diversionary options and support services and multi-purpose community vehicles running as a courtesy bus during high-risk alcohol times. Similarly, speeding might be better addressed through a combination of reduced speed limits on gravel and unsealed roads in rural areas [13], regulated (rather than advisory) speed limits, community education regarding driving to the conditions, crash mapping and local knowledge to identify high-risk locations, prioritised road treatments and innovative enforcement regimes.

REFERENCES

5. AIHW. *Rural, regional and remote health: A guide to remoteness classifications*, 2004
13. Tasmanian Government Communications Unit. *Initial results from the Kingborough Safer Speeds demonstration*, 2008