Road Trauma Reduction and Injury Prevention Participation in Rural Communities

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GENERAL PRACTITIONERS – KEY PLAYERS IN INJURY TREATMENT AND PREVENTION

Rural doctors play a vital role in the effective treatment of trauma. In their role as generalist practitioners, they also have considerable experience in preventative medicine. Since 1993 the Federally funded Divisions of General Practice Program has provided the resources to enable generalist medical practitioners to extend these skills and experiences into developing new ways of improving Australian health. These experiences can be shared with others, and extended into other areas of public health, including injury prevention and trauma reduction.

Injury Prevention

Throughout history, extensive effort and resources have been dedicated to curing disease with significant effect in the reduction and severity, and in some cases, the elimination of disease. By comparison, injury prevention has received far less attention, and yet it remains a major contributing factor in the cause of death and impairment of health.

South East of South Australia Division of General Practice Inc. Projects

Injury is predicable, preventable and avoidable. Through Divisions of General Practice, doctors and other medical personnel have the opportunity to be involved in projects which promote injury prevention. The South East of SA Division of General Practice has been promoting injury prevention relative to road safety and farm safety for several years, most recently through the Road Trauma Awareness and Reduction Project and Statewide SA Major Trauma Project. The Major Trauma Project has several objectives:

- providing additional training for rural GPs and nurses in dealing with trauma;
- the development of Medical Emergency Plans for the Division; and
- the development and distribution of injury prevention resources.

The Road Trauma Awareness and Reduction Project has provided resources, support and promotion of injury prevention to a variety of groups including: schools, local government, the general public and community road safety groups.
COMMUNITY PARTICIPATION IN ROAD SAFETY

Against a background trend of flat or increasing rates of rural road trauma, the Millicent District of SA has achieved significant reductions in its road injury patterns. Partnerships in Millicent in the last four years and eight months have produced some encouraging preliminary data. Based on ambulance conveyance data to the Millicent and District Hospital (serving a population of approximately 10,000) we have observed a decrease to 61 per cent of the total number of injuries, and an observation that these injuries are less severe including a drop to only 35 per cent of the number of predicted fatalities.

This could be a model for other communities, and provides cause for reflection on conventional road safety strategies. Injury prevention will be advanced when complementary risk management occurs.

GPs and other health professionals need to do some intellectual rollovers. In the under 65 year age group injury accounts for more potential life years lost than the effects of cancer and cardiovascular disease combined.

We need to apply more of our skills and leadership to injury prevention. Our daily practice is rich with experience in risk identification, and with challenges in knowledge, attitude and behaviour change. However we are still gathering confidence applying these basic skills to injury. Perhaps also we have too readily accepted the public and media myths that road injury is an ‘accident’. The term ‘accident’ can imply “an injury without apparent cause.” Improvements in infectious disease control, cardiovascular health, skin and cervical cancer and aviation safety has not occurred by accepting these adverse events as accidents!

ROAD TRAUMA - A DEADLY EPIDEMIC

The Millicent community’s involvement began in January 1994 and was precipitated by a New Year’s Eve crash with three fatalities and two injuries. A popular eighteen-year-old local girl, Kellie Egan, en route to Beachport festivities, was amongst the fatalities. Kellie was a hapless recipient of 1300 kg. of out of control metal and over confident humans. The resultant crash also killed the two oncoming occupants, and tore the car in half, bizarrely joined by a long spiraling strip of roof metal.

Also joined by bizarre and spiralling circumstances was an elderly friend and neighbour, taking emotional shelter and comfort with the Egan parents at their home. New Year’s Eve was a reminder of the pains and loneliness that life had left her. Over twenty years, and in separate crashes, she had lost a sister, her first son, her second son, and then her husband. The wail of an ambulance siren was again to stir emotion with the soon to be realized loss of her friend’s daughter.

The crash also tore the emotional fabric of the town. However rather than the usual disempowering helplessness accompanying such traumas, the community of Millicent determined that it could reduce its road trauma.
At the suggestion of the health and emergency services the Mayor of Millicent called a public meeting which received good media support, and one hundred and seventy people attended with a focus on what positive action can our community do to reduce road trauma.

A widely representative committee was formed from the general public, with local health, hospital, general public education, emergency service, police and council representation. The voluntary community committee has had support from council, and operated on a minimal budget. Activities have included the provision of free buses on New Year’s Eve, driver reviver stops, enhanced council participation in addressing road concerns, courteous driver awards, crash care first aid course, media campaigns, higher levels of traffic enforcement, road safety signage at sporting venues, voluntary breath testing, mock crash displays, school involvement, hospital carnival road safety theme, milk carton advertising, and car bumper stickers.

There has also been a revitalization of the local road safety centre for school children, and enhanced training efforts by local driving instructors.

Figure 1 Comparison of deaths and ambulance conveyances, Millicent SA
The highest profile activity has been the placement of fatality crash marker posts. Sites of fatal crashes since 1984 have been marked with roadside posts painted black to symbolise fatalities and red to represent the associated injuries.

The preceding ten years of ambulance data were used for this purpose. The crash posts were intended primarily as a barometer of fatal injury frequency rather than as a personalised memorial. They are significantly different in this respect to spontaneous memorials, which have become popular in recent times.

We believe this is the first time that there has been a systematic placement of road injury statistics on the roadside in this graphic and systematic form. They have been funded and placed by council, in support of community road safety. Millicent is pleased to note the spread of the idea of roadside crash indicators into other rural areas of South Australia.

With council amalgamations the Millicent committee has now become the Wattle Range Road Safety Committee and is extending its activities into its wider geographic area.

The South East of South Australia Division of General Practice has run a complementary “Road Trauma Awareness and Reduction Project” also conceived in January 1994. It aims to support and encourage road safety in several overlapping areas:

• a school based program providing resources and activities to local schools;
• the project has sought to increase the level of awareness within organisations, and throughout the general community, of road trauma as a reducible and preventable phenomenon;
• local government has been encouraged to continue and extend their traditional roles in road safety and have been praised in their continuing contributions; and
• the project has offered assistance to community groups such as the Wattle Range Road Safety Committee and any other parties.

The fifth and perhaps most challenging aspect has been targeting health professionals. As professionals we are inconsistent in our application of preventative strategies across the range of health issues we deal with. We now accept cardiovascular preventative interventions such as blood pressure treatment, cholesterol lowering and smoking cessation as core business but do not apply similar levels of effort to injury prevention.
This is understandable because we have not yet developed the professional self-confidence and skills to know where and when to productively intervene in an area which is often perceived to be some other authority’s patch. Productive interventions are most likely to develop in cooperative partnerships.

Some examples and suggestions follow:

- in daily practice we should extend our curiosity to not only the physical mechanisms of injury, but also to the cluster of underlying risk factors, contributing risk factors and precipitating factors. Sharing this curiosity with our patients as partners can be enlightening for us both, and does not presuppose that we have to impart a solution. In contrast, known effective interventions may not be being applied. Some at risk groups still don’t use seat belts, a zero cost intervention;
- opportunities can sometimes be constructed in a consultation to remind a person under 45 that their greatest risk of death is from injury, perhaps on the road or in the first months of certain occupations. Health risk assessments, routine or for travel, must not overlook injury. Falls in the elderly create an enormous cost burden. A fifty dollar home visit to assess and reduce domestic hazards may make a significant contribution to reducing hip replacement rates and is a cost efficient complement to the thousands spent on osteoporosis amelioration; and
- a multitude of promotional pamphlets about injury prevention exists; the problem is managing the excesses in the waiting room. The SE of S.A. Road Trauma Awareness & Reduction Project will be trialing dedicated display boards supplied to members’ waiting rooms for Division priorities such as injury prevention and immunisation. Our Division is also proud to supply hardware and software for telephone on hold messages which features road safety amongst more conventional promotions. (Ph. 08 87332200 and ask for hold to sample this 5 minute message loop.)

**FUTURE DIRECTIONS**

Over the next three months the S.E. Division project wishes to validate the initial encouraging data from the local ambulance services, and has contracted Jerry Moller, an external evaluator, to prepare a descriptive report which may help widen participation in other country and perhaps urban areas. Evaluation should also further the argument for “measuring and sharing” some of the enormous cost savings that can occur in injury prevention.

It is very encouraging to see the spread of community participation. In particular several groups have been formed or reactivated in The Hills and Barossa by local GPs involved with the rural Statewide Major Trauma Project. Other areas’ doctors, emergency and police personnel are showing interest. These participating communities must be supported and encouraged.
“Measure and Share” partnerships with the insurance and public hospital sectors could provide powerful impetus for diverse and rapid evolution of effective community injury prevention. This would be an outstanding win/win as there is not a need for major risk capital investment. Rural doctors and Divisions have an established infrastructure of skills and importantly credible local networks to establish and maintain such working partnerships. They are happening now.

Now is the time for support and we look to the stakeholders in health and safety for supportive advocacy. A 50:50 sharing of statistically significant savings would encourage participation, co-operation, diversity, and local evaluation. As a pioneering example Millicent District community (pop. 10,000) is estimated on preliminary data to have saved the Motor Accident Commission between $2,000,000 and $3,000,000 in bodily injury claims alone since 1994. Fifty per cent of this could fund a much needed heated swimming pool complex and propel our community on to further road safety innovations. Whole of society savings are estimated to be $11,500,000.

Road injury has good public and insurance data sets, making it an ideal model to develop for co-operative, rather than competitive, resource sharing.

Many traditional public health preventive programs have been seen as requiring additional resources sometimes in competition with clinical treatment resources. However the measure and share model is a win/win situation in which achieved savings from both the insurance and health sectors should be shared with those participants actually achieving the prevention. This would encourage continuing and wider participation, co-operation, and community based evaluation.

The further development and implementation of such a measure and share phenomenon with health and the wider communities is a challenge for the coming years. The measure and share model is a win/win situation in which achieved savings from both the insurance and health sectors should be shared with those participants actually involved in the prevention strategies. This would encourage continuing and wider participation, co-operation, and community based evaluation.