

Long-term needs of motor vehicle accident victims: are they being met?

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Abstract

This paper uses the context of a longitudinal rural study, which examined the extent of psychological trauma and predictors of that trauma following road accidents, to highlight issues for road accident survivors. It then outlines what counselling and psychological services are currently offered to road accident victims by the insurance companies and by a voluntary agency, the Road Trauma Support Team. Overall it appears that psychological and emotional needs of survivors are not always acknowledged or provided for.

Introduction

Motor vehicle accidents are the largest cause of trauma related admissions to Australian hospitals and the annual Australian road accident costs are estimated at \$15 billion (based on 1996 figures). Each serious injury accident costs \$408, 000 and a minor injury accident costs \$14,000 (Bureau of Transport Economics 2000). The costs of road accidents are significant to the community, not just in terms of monetary costs, but also in terms of pain and suffering, disability, lost employment opportunity and emotional costs.

As background to an examination of the services available for the psychological needs of road accident victims, it is important to have an idea of the numbers of people affected. In Victoria in 1999, there were 2,920 people with major injury from road accidents who required hospital admission, 8,606 with serious injury who required medical treatment and 13, 542 with minor injury who complained of soreness (Operation Countdown 2000). There were also 272 people killed and this number of deaths was already exceeded by the end of September 2000. Recent Australia wide figures are difficult to obtain, but in 1999, 1760 people were killed and in 1997 21, 531 people were hospitalised following road accidents (Australian Transport Safety Bureau 2000). The number of these people (or their relatives) who suffered any emotional or psychological symptoms would not be assessed or recorded. Some may never come to the attention of health providers. In the author's clinical experience, there are people psychologically traumatised after accidents who may not have been physically injured.

This paper aims to outline and evaluate the provision of services and treatment options for road accident victims offered by insurers and by a voluntary agency, using the background of a longitudinal study undertaken in Central Victoria that identified predictors of trauma. The prospective research has been reported elsewhere and is not presented here in detail (Jeavons 1999; Jeavons 2000; Jeavons & Greenwood 2000). A three-and-a-half year follow up has been conducted recently.

The longitudinal study followed a group of rural road accident victims for a year, looked at PTSD diagnosis patterns three, six and twelve months post accident, using the Posttraumatic Stress Disorder Interview (PTSD-I) (Watson et al. 1991), a self report measure. It identified factors, assessable shortly after the accident, which enabled prediction of subsequent trauma.

The 72 participants (38 men, 34 women) aged 18-62 (M=32) were consecutive attendees at a regional hospital following road accidents. Sixty-two people responded to three and six month follow up and 58 to twelve month

follow up. A three and a half year follow up was also conducted which yielded 32 brief responses, but only 14 people completed the full questionnaire.

Many studies have used samples of self-selected or only seriously injured participants. Clinical experience indicated that people with only mild injuries or even those uninjured in accidents could still be emotionally traumatised by the experience, thus it was important to contact everyone who attended the hospital over the time period, even if they were not admitted

Procedure

The researcher contacted all accident victims attending hospital over a four-month period. The questionnaires were completed soon after accidents, three, six, and twelve months later as well as a three-and-a-half-year follow up.

The trauma questionnaires included the previously mentioned PTSD-I, the Impact of Event Scale (IES) (Horowitz et al. 1979) and the General Health Questionnaire (GHQ-28) (Goldberg & Hillier 1979). For the three-and-a-half year follow up the PTSD Checklist (PCL) (Blanchard et al. 1996) was substituted for the PTSD-I as it followed the DSM-IV diagnostic criteria. The coping scale was Endler and Parker's (1990) Coping Inventory for Stressful Situations which has subscales of emotion-focussed, task-oriented and avoidance coping. A structured interview for demographic and subjective experience information was also conducted.

As the participants had not previously consented to the three and a half year follow up, the Ethics Committee required that an initial letter be sent requesting that they consent to receiving the questionnaires, though it did allow three general questions to be asked in the initial letter. The response rate was poor, some people could not be contacted and, as responding twice was required, some people who consented to answering the questionnaires did not send them back despite reminders.

Analysis

First, PTSD diagnosis was examined over time. Second, stepwise multiple regression was used to determine predictors (available after the accident) of longer-term trauma. Due to the ratio of variables to participants, groups of conceptually related variables were entered (Demographic, Accident related, Responses to the accident, Experience at the moment of the accident, Coping) and significant ones re-entered into a final model. Only limited analysis was possible on the three-and-a-half year data due to small numbers.

Results/Discussion

The subsyndromal PTSD category was used following the work of Blanchard et al. (1995) and has also been referred to in the literature as partial PTSD. Whilst data is given for the initial contact, participants cannot be diagnosed with PTSD within a month of the accident. When this study was commenced, the Acute Stress Disorder category was not included in DSM-IIIIR. Thus the term posttraumatic stress (PTS) is used. Initially after the accident 23.6% of participants had PTS, 11.5% at three months, 9.7% at six months and 7.0% at twelve months. Between 5% and 8% had subsyndromal PTS (Sub S) on each occasion. Patterns of PTSD diagnosis are reported in detail elsewhere (Jeavons & Greenwood 2000). This was a very mildly injured sample and so it can be seen that there are clinically significant numbers of people reporting symptoms although recovery has occurred over time. As response rates had dropped by 12 months, it is not possible to say whether there was a self-selection bias in favour of those with or without symptoms.

At three and a half year follow up, two of 14 respondents reported PTS, one of whom was never previously classified with PTS or Sub S. Thus focussing on PTSD alone may not be sufficient to indicate emotional distress in this population. Some other qualitative studies on these people would be useful. The responses to the brief questions are presented below in Table 1. Half of the sample still reported some emotional effects, the nature of which were unspecified, long after the accident. Physical effects were also still experienced by half the respondents and other effects may have included factors such as financial or legal matters.

Table 1 Brief Responses for 3¹/₂ Year Follow-up (n=32).

Effects	Emotional	Physical	Other
Nil	16	16	22
Mild	12	9	4
Mod.	4	4	2
Severe	0	2	2
Total	32	31	30

There was a significant ($p=.01$) correlation of $r =.6$ between the reported physical and emotional effects of the accident in this follow up sample. Thus the persistence of pain and disability may be a constant reminder of the accident, with consequent emotional impact. It must be remembered that these emotional effects are not necessarily all negative.

Stepwise multiple regression showed emotion focussed coping (ie, reacting emotionally rather than doing something constructive following the accident); believing one's life was threatened, thinking one may have died, a history of previous psychiatric treatment, and distress at the scene of the accident were able to predict up to 77% of variance on trauma measures (Jeavons 2000). Thus 'cognitive appraisal' variables appear to be important for the first 12 months, rather than severity of accidents or extent of physical injury. There have been a number of studies reported in the literature dealing with predicting who is vulnerable to PTSD, and results have not always been consistent. Blanchard and Hickling (1996) reported history of depression; extent of injury; fear of dying and litigation; Mayou, Bryant and Duthie (1993) horrific intrusive memories; Ehlers et al. (1998) dissociative symptoms, fear of dying, female gender, previous emotional symptoms, litigation; Bryant and Harvey (1998) presence of initial acute stress disorder. Overall, these results emphasise the importance of victims' subjective responses after the accident in relation to subsequent trauma symptoms.

When correlations between the variables that were indicators of trauma in the first year post accident and the three and a half year follow up trauma measures were calculated, the only significant result was between self rated injury and Impact of Event Scale score ($r =.58, p<.05$). Females scored consistently lower on the three trauma measures, which is contrary to other research findings (Blanchard & Hickling 1999; Ehlers et al. 1998). The differences were non-significant and it must be remembered that the sample size was very small. This type of data does not tell us enough about the long-term experience of road trauma survivors and qualitative research would be a useful addition.

The awarding of the NSW 2000 Eureka Prize for Scientific Research to Richard Bryant for his research into trauma recognised the importance of identifying predictors of trauma and of early intervention. The citation said: "This work has tracked the immediate psychological reactions to trauma and determined the relationship between immediate responses and longer term adjustment ... led to tools that help us identify people after trauma who need psychological assistance ... opened up opportunities to prevent psychiatric disorders in people who are at risk by giving them early intervention after the trauma" (Quantum 2000).

This award adds weight to the view that the availability of counselling is important, even if there has been only minor injury. The survival rates after accidents have increased due to improvements in medical care, thus more survivors need excellence in rehabilitation, including psychological counselling and attention to their emotional needs. This need for psychological treatment is not restricted to those who require major physical rehabilitation and therefore attend rehabilitation centres that have multidisciplinary teams including psychologists. Those from minor accidents with minimal injuries may still be psychologically traumatised, but may be unaware of the significance of their symptoms or the availability of psychological treatment. As has been shown (Jeavons 2000), psychological trauma is not related to severity of injury but factors such as emotion focussed coping and perceived threat to life.

The incidence of posttraumatic stress disorder can be greatly reduced. Studies such as Bryant et al. (1999) have shown that early intervention can reduce the occurrence of PTSD in those initially symptomatic with Acute Stress Disorder (ASD). Bryant et al.'s study investigated the prevention of PTSD by providing either cognitive

behaviour therapy with prolonged exposure and/or anxiety management or supportive counselling to 45 trauma survivors (road trauma and non sexual assault) with ASD. Results showed that PTSD can be effectively prevented with an early provision of cognitive behaviour therapy and indicated the benefits from early detection and treatment of psychological trauma symptoms. It is important that counselling be tailored to individual's needs as Mayou et al. (2000) found the provision of standard psychological debriefing was not an appropriate treatment for trauma victims.

What are motor vehicle accident insurance agencies offering victims emotional needs? An Internet search for the policies in the two most populated states of NSW and Victoria indicated the following.

Victoria uses the Transport Accident Commission (TAC), which was founded in 1986 and is a compulsory Third Party Insurer. Its objectives are to (1) provide medical treatment and rehabilitation; (2) to provide compensation, and (3) to reduce the incidence and cost of transport accidents. Unfortunately it appears that it does not do this by prioritising prevention or early intervention of psychological services. Also a \$443 excess applies to treatment unless a person has been hospitalised for a day or more. This provides a bias against less seriously physically injured victims who may require counselling.

In relation to their policy towards psychological treatment, the TAC will pay the cost of "reasonable" psychology treatment for injuries as a result of a transport accident. However patients cannot come directly as a referral by medical practitioner is needed and the counselling cost is accepted by the insurance company at their discretion. Counselling is offered following "major injury" and the treating psychologist must provide a report to the TAC rehabilitation officer. This requirement may compromise client's rights to confidentiality (TAC 2000).

In NSW, the Motor Accident Authority (MAA)(Act of Law 1999) oversees ten insurance companies offering a compulsory fault based (ie., cause of accident) compensation scheme. The insurer pays for "reasonable and necessary" treatment, no excess applies. Individual companies may differ with respect to their policies and treatment guidelines.

No compensation or rehabilitation is available for the at fault driver. There may also be legal argument about the responsibility for the accident and the need for treatment (MAA 2000).

An attempt to improve services for accident victims has been made with the setting up of the Victoria Trauma Foundation (VTF) by the Transport Accident Commission. It provides funding for research projects "prioritised according to their capacity to deliver immediate and measurable improvements in the state's trauma service". The current priorities are generally worded, with no direct mention of psychological research. At the time of writing, these included: Resuscitation and clinical care of trauma patients in pre-hospital and emergency department settings; Methods to identify and rectify errors in the clinical management of trauma patients; Emergency retrieval, transport and triage of trauma patients (Victoria Trauma Foundation 2000).

Thus it appears that whilst services are available to those requiring counselling following accidents, there are definite gaps in the system and potentially traumatised people, such as family of victims or witnesses to accidents, who do not qualify. The voluntary sector has attempted to rectify this. The Road Trauma Support Team (RTST) is a voluntary agency, initially set up in 1989 in Launceston, Tasmania, by Colleen Hall. She was herself a road accident victim and had lost family members close to her through road trauma. RTST uses a model of a paid co-ordinator with volunteer "befrienders" who are available to assist accident victims, families and witnesses to accidents with practical or emotional support and counselling. The volunteer 'befrienders' used in this agency are generally themselves recovered road accident victims.

The history of the branches of the Road Trauma Support Team set up in different areas has always been one of difficulty with funding. There have been both government grants and some corporate support, but this has not persisted long enough to maintain a consistent service using paid co-ordinators in most areas. The Northern Tasmanian group has lasted longest but currently has a major funding crisis and may not continue. A grant enabled a very successful Canberra group to operate for two and a half years but this also lost funding. Victoria had a number of regional voluntary committees in the mid 1990s, but difficulties maintaining a secure volunteer base and publicising the service resulted in some teams ceasing to operate. Funding was received in 1998 to set up a Melbourne office. Regional teams also operate in Swan Hill and Warnambool.

The RTST-Victoria office in Melbourne has two part time/job share co-ordinator/ counsellors. The clientele are anyone affected by a road accident, including witnesses to accidents, family and friends of those killed or injured. They offer an after hours crisis telephone service; assessment; counselling; assistance; public education; research; self help groups (i.e., bereavement); out of hours crisis carers and network in regional areas. ‘Crisis carers’ are volunteers who are willing to assist with support immediately after an accident. This may involve going to a hospital to be with families of those injured.

Befrienders are volunteers who generally have personal experience of road trauma. At present there are 25 working with clients and six in other capacities, such as administrative tasks. The training is 28 hours over two weekends. ‘Befrienders’ may also assist with practical support such as helping injured victims go shopping, make contact as anniversaries of the accident approach, or attend inquests with victims’ families. They are interviewed for suitability before being accepted into the training and participate in ongoing updates to their training.

For a largely voluntary agency, the Road Trauma Support Team in Melbourne has achieved a lot. They have not restricted their activities to ‘one to one’ client work, but have done a lot of networking both in Melbourne and regional areas. As shown in Figure 1, in 1998/99 this agency assisted 251 new clients, an increase of 109% on the previous year. Networking visits were made to hospitals, rehabilitation centres and regional areas. A close working relationship was formed with police and other agencies. Referral sources were largely the coroner’s office, hospitals, police, self and family, media, medical practitioners, ambulance and other agencies. They are endeavouring to fill in the gaps in service provision left by the insurance companies and medical health care providers.

The following graphs show the numbers of new referrals received by the organisation, the ages of the clients, their presenting problems and the type of client in relation to their involvement in road accidents.

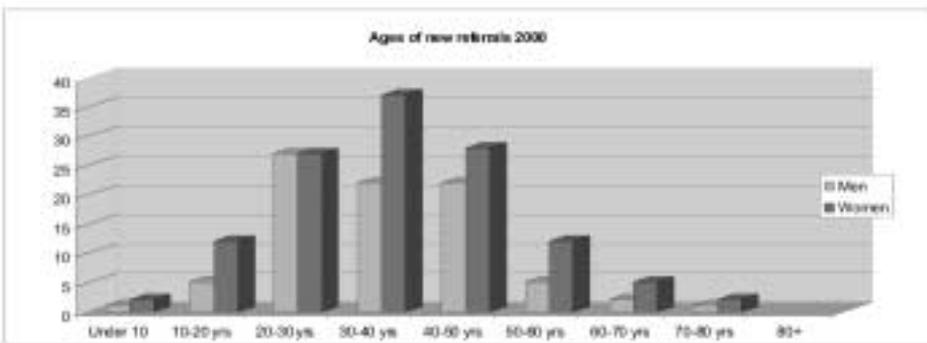
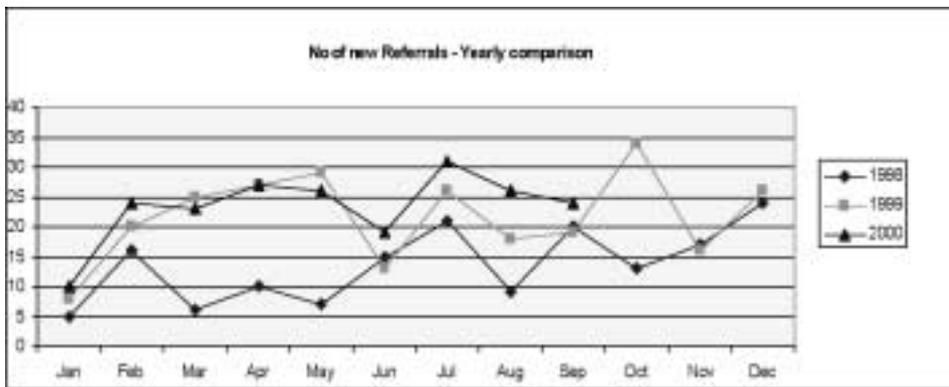


Figure 2. Ages of new referrals, 2000.

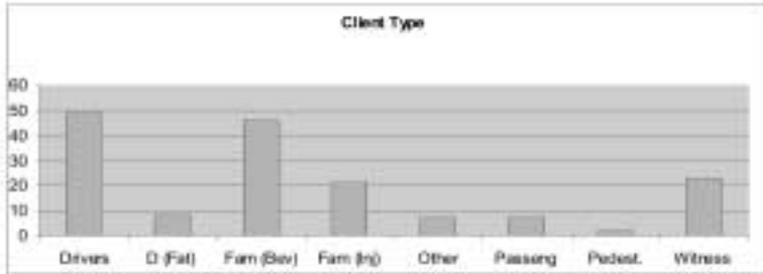


Figure 3. Presenting problems of new referrals.
 Note: categories refer to drivers involved in accidents; drivers from fatal accidents; family members who are bereaved; family members of those who are injured; passengers in accidents; pedestrians in accidents; witnesses to accidents/1st on scene.

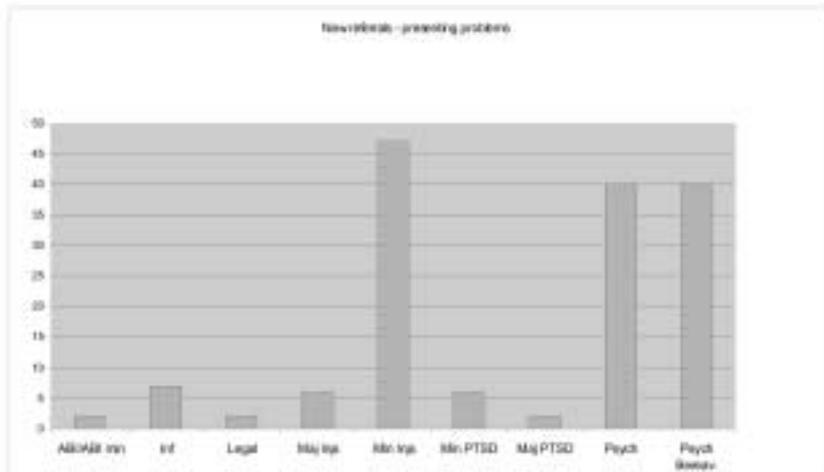


Figure 4. Type of client contacting RTST for support, 2006.
 Note: categories are Acquired brain injury distinct from major or minor injuries (could be sufferer, carer, treating professional); people requiring information; inquiries about legal advice; major or minor injuries (could be sufferer, carer etc); major or minor PTSD symptoms (depending on length of therapy); psychological/emotional difficulties relating to their own or other's accidents; bereavement/grief/loss.

These graphs show that this organisation is seeing a wide range of clients from all age groups and the demand for their service is increasing. As the families and carers of victims are included this is an important facility not available from insurance companies.

Conclusion

Overall it can be seen from the figures cited at the beginning of this paper that road accidents create a huge monetary cost to our community. They are also responsible for great personal suffering as a result of loss and grief, pain, disability and emotional and psychological distress. Research such as that by Bryant et al. (1999) has shown that treatment is possible and helpful for these people. My study also established that there is not a direct link between severity of injury and psychological trauma. Insurance companies go some way towards

offering services for the psychological and emotional needs of road accident victims. A very useful service has been created by the voluntary sector in the Road Trauma Support Team and the response to their service shows that there is an unmet need in the community for assistance following road accidents. Funding problems mean that the existence and expansion of this worthwhile organisation remain precarious. Early identification of those at risk and provision of treatment aimed at prevention of subsequent psychological trauma remains the greatest challenge for the health system. One of the respondents to this research summed it up very well: 'I think the physical side of trauma is well taken care of, but there is no facility made available to talk about the emotional/mental impact the accidents may have'.

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