Drink Driver Rehabilitation and New Developments

Gavan Palk[a], Michelle Fitts[a], Hollie, Wilson[a], Mary Sheehan[a], Darren Wishart[a] and Susan Taylor[a]

[a] Centre for Road Safety Accident Research and Road Safety – Queensland

Abstract

Drink driving continues to be a major public health concern. Significant reductions in road fatalities have been achieved due largely to the Safe Systems Approach to road safety. However, serious injury due to road trauma has increased in most Australian jurisdictions. Some subgroups of drink drivers such as young drivers and Indigenous drink drivers are vulnerable to road trauma and have been less responsive to countermeasures based on the deterrence philosophy. Drink driving rehabilitation programs that use a combination of deterrence, education and social control models have been moderately successful in reducing recidivism. However, most of these programs do not adequately address alcohol related health concerns or the needs of drink drivers in remote and rural areas. Scant attention has also been given to the use of brief online drink driving interventions. The 'Under the Limit' (UTL) drink driving rehabilitation program has recently been revised to ensure that its content is contemporary, relevant and evidenced based. CARRS-Q has also developed a brief online program that targets first time convicted drink drivers who have a BAC under 0.15g/100mL and a culturally sensitive program that targets Aboriginals and Torres Strait Islanders living in rural and remote areas. These new developments will be discussed in the context of the most effective road safety educational policy and practice.

Overview

During the last decade (2003-2013) traffic fatalities have decreased by 23% (BITRE, 2014) in Australia. The reduction in road fatalities has been broadly accredited to a national road safety strategy (NRSS) that encourages State jurisdictions to adopt a Safe System Approach in plans that reflect a vision that no person should be killed or injured on Australian roads. This approach is one that aims to develop a safe road transport system that accounts for road user behaviour by improving road conditions, vehicular technology and enforcement of traffic laws (ATC, 2011).

Targeting seat belt usage, reducing speed through camera programs and drink driving through random breath testing (RBT) has significantly contributed to the reduction of road fatalities (BITRE, 2010). However, based on the BITRE (2014) road toll figures over a decade, approximately 14,000 people have died due to a road related trauma. Approximately 32,000 people suffer a road related serious injury requiring hospitalisation (ATC, 2011) annually and in most jurisdictions serious injures due to traffic crashes increased between 2000 and 2009 (AIHW, 2012). Subgroups including: young drivers aged 17-25 years; older drivers in the 65+ age group; and drivers who identify as an Aboriginal or Torres Strait Island (ATSI) person are more vulnerable to serious injury or death on the roads (ATC, 2011, AIHW, 2007) through road trauma. Young Australians comprise 25% of the victims (ATC, 2011) and Indigenous Australians are 3 times and 1.4 times more likely to suffer a serious injury or death, respectively on the roads compared to their non-Indigenous peers (Harrison & Berry, 2008; Moller, Thomson & Brooks, 2003).

The health, social and economic costs of road trauma is about $18 billion annually (ATC, 2008) and has motivated researchers to identify the risk factors associated with drink driving anticipating this will enable the development of effective countermeasures. Drink drivers tend to be aged less than 35 years and drivers with a high BAC range (≥ 0.15g/100ml) are slightly older with a history of alcohol problems and other driving and non-driving offences (Leal, King & Lewis, 2008). Approximately 15% - 30% of drivers continue to drink and drive in spite of road safety measures (Leal et al., 2008; Owens & Boorman, 2011).

Repeat drink drivers appear to be less responsive to drink driving countermeasures (Freeman & Liossis, 2002; Harrison, Newman, Baldcock & Mclean, 2003) underpinned by the theory of specific and general deterrence (Homel, 1988; Homel, 1993). Specific deterrence measures, in particular which include such sanctions as fines, license disqualification and, in some cases incarceration have failed to impact significantly in reducing the extent of drink driving among Indigenous peoples (RTA, 2008).
A study by Freeman and Watson (2009) revealed that punitive sanctions only account for a portion of the deterrent effect and therefore other factors may play a role in motivating drink drivers to separate drinking and driving. Intervention programs have attempted to address some of the psychological and situational factors that contribute to drink driving. These legally coerced interventions combine punishment, education, rehabilitation and probation supervision and seem to be most efficacious in reducing recidivism among drink drivers (DeYoung, 1997; Wells-Parker, Bangert-Downs, McMillen, & McWilliams, 1995). Although there is debate about the effectiveness of coercing people with general substance dependence into treatment some clinical experience and outcome studies suggest coercion is fundamental to positive treatment outcomes (Klag, O'Callaghan, & Creed, 2005; Miller & Flaherty, 2000). In light of this research a variety of drink driving education and/or rehabilitation programs have been implemented in Australia based on a multi component approach combining both educational and punitive measures. Table 1 depicts an overview of the nature, focus and effectiveness of these programs.

Table 1: Australian Drink Driving Rehabilitation Programs

	Queensland	**New South Wales & ACT**	**Northern Territory**	**Victoria**
Name	Under the Limit Drink Driving Rehabilitation Program (UTL)	Traffic Offender Program (TOP) - Sober Driver Program (SDP)	Drink Driver Education Program	Drink Driver Education Program
Focus and Length	Education, Rehabilitation & Assessment, based on CBT principles Fees apply Weekly sessions (1.5hr) over 11 weeks Aimed at repeat offenders	TOP - Education - Weekly sessions (2hr) over 8 weeks Fees apply SDP - either 9 weekly 2 hour or 6 weekly 3 hour sessions	Education - 1st session (10hours); 2nd session (4 hours) for repeat/ high range BAC Fees apply	Assessment & Education - 8 hours alcohol problems – not all components Are compulsory Fees apply
Legislation and Support after program	Part of sentencing system – part of an optional Court ordered Probation Order	TOP – pre-sentence diversionary – Optional SDP – part of sentencing system completed as part of an optional Court ordered Probation Order	part of sentence system - requirement prior to re-licensing for drink drivers disqualified from driving	Independent of the sentencing system but a an administrative requirement prior to re-licensing for some offenders
Target	Urban; Regional	Urban; Regional	Regional	Urban, Regional

Audience				
Evaluation	Outcome: Siskind, et al. (2001) – reduced recidivism of 55% for high risk, serious repeat drink drivers	Outcome: TOP –RTA (1999) – reduced recidivism of 25% SDP - Mazurski et al. (2011) – recidivism reduced by 44%	Outcome: Dwyer & Bolton (1998) – re-offending rate of 12.85% within 2 years following re-licensing	Process: Hennessy (1998) – good to very good; Sheehan et al. (2005) – 23 recommendations made to improve the program

Australian Drink Driving Rehabilitation Programs

The majority of these interventions have been informed by theoretical frameworks such as the theory of planned behaviour (Ajzen, 1991; Ajzen & Fishbein, 2005), trans-theoretical stages of change (Prochaska, DiClemente, & Norcross, 1992), elements of deterrence theory (Homel, 1993; Homel, 1988) and social control models (Sheehan, 1994). The deterrence aspect of the interventions includes the loss of licence, fines and coerced participation in drink driving education programs. Drink drivers are co-opted into participating to avoid a more serious consequence.

The educational and rehabilitation component of the interventions are generally informed by the theory of planned behaviour and stages of change theory. For instance, in regards to the theory of planned behaviour the content is delivered in a manner to facilitate a change in attitude toward drink driving behaviour. Additionally, it is expected that participants increased knowledge and social skills will change their subjective evaluation of the risks and benefits and so result in a behavioural intention to self-control, resist social pressures and rationally act to avoid the repetition of drink driving.

A key aim is to motivate drink drivers toward an action based stage of change based on Prochaska's (1994) stages of change model that involves five discrete stages: pre-contemplation; contemplation; preparation; action; and maintenance. The model encompasses the idea that individuals can relapse and move between the five stages, allowing individuals to recycle through the stages between pre-action to action. Drink driving programs facilitated in Queensland and Northern Territory utilise components of the stage of change model to effect change amongst offenders.

Some Australian drink driving educational interventions have been available since the early 1990s though they vary in length, content, delivery style and costs across jurisdictions. New South Wales (NSW) for example, offers the Traffic Offender Program (TOP) for all traffic offenders and the Sober Driver Program (SDP) for repeat drink drivers. The TOP is available on a voluntary basis to persons who plead guilty to any traffic offence and traffic offenders are referred to the program as part of a diversionary pre-sentence process. General road safety information is provided by a variety of accredited providers or government agencies on a fee basis over 8 sessions of 2 hours duration each. An evaluation of the Mt Penang TOP indicated recidivism could be reduced by 25% (RTA, 1999).

The Sober Driver program (SDP) targeted more serious repeat drink drivers. This program aimed to reduce recidivism through educational and cognitive behavioural therapy offered in groups. The SDP is made available to repeat drink drivers post sentencing as part of a good behaviour bond and delivered by probation officers. The program can be undertaken by attending either a nine weekly sessions of 2 hours duration or three weekly sessions of 6 hours duration. An evaluation of the SDP involving a comparison group and recidivism

rates over 2 years indicated that individuals who completed the program were 43% less likely to re-offend (Mills, Hodge, Johansson, & Conigrave, 2008).

In Victoria persons convicted of a drink driving offence are required to undertake an 8 hour driver education program and possibly an assessment before they can be re-licensed. The driver education programs are provided by private or non-profit agencies and the content provides information to encourage a change in the drink driver's drinking behaviour and patterns of individual and community drinking. A process and formative evaluation was undertaken by Hennessy (1999) and participants generally rated the programs as good to very good. However, Hennessy (1999) noted there were inconsistent standards of teaching across programs and some facilitators lacked specialised knowledge. Additionally, there was a need to audit the quality of the programs. A review by Sheehan, Watson, Schonfeld, Wallace and Partridge (2005) suggested making relicensing a condition of education and assessment was not the most effective approach. The review additionally noted there was a need to ensure the program meets best practice and addresses issues for high risk drink drivers.

A Drink Driver Education Course has also been conducted in Northern Territory since 1995 and uses a systems approach, including punitive measures, social learning principles, harm minimisation, motivational interviewing and the stages of change model (Dwyer & Bolton, 1998). A systems approach encourages drink driving to viewed and addressed having regard to the contextual factors that may facilitate or impede drink driving such as the liquor industry, police, health authorities, educational bodies, politicians, insurance companies, clubs and community agencies. This approach will encourage the development of more realistic protective factors to reduce drink driving and how to avoid risk factors associated with drink driving.

There are two modules to the Northern Territory drink driver education program. Offenders with high BACs or repeat offences have to complete both modules. The program has also being tailored to meet the needs of the general population and customised for Indigenous people. The course content is research-based but is delivered in a manner to utilise participants' life experiences. The course provides participants with knowledge about drinking, plans to avoid drink driving and controlled drinking strategies. An evaluation of 321 participants indicated that 41(12.8%) had committed a further drink driving offence and offenders who were required to complete the two modules recorded a higher re-offence rate (Dwyer & Bolton, 1998). The authors suggested that the higher re-offence rates for those who completed the two modules may reflect a lifestyle that maintains or encourage alcohol consumption. The authors also acknowledged the evaluation was limited due to lack of pre-course reoffending rates, law enforcement variations, bias that may have occurred in selecting participants for the intervention modules as well variations in data entry.

Under The Limit Drink Driving Rehabilitation

The Queensland 'Under the Limit drink driving rehabilitation program' (UTL) was initially trialled in the early 1990s and has been operating in excess of 20 years. Over 12,000 drink drivers have completed the UTL. The program has been reviewed and modified throughout this time to reflect contemporary evidence and relevance. While the UTL is available State wide to people with or without a drink driving record and prior to sentencing, the program is largely used as a post-sentencing option for high range (BAC ≥ 0.15g/mL) first offenders and repeat drink drivers. Drink drivers must voluntarily agree to be admitted to a probation order and attend the UTL for a fee. If the drink driver agrees to participate in the UTL Magistrates have the discretion to reduce or waive the fine.

The original UTL program comprised eleven sessions of 1½ hours duration conducted in groups of 8 to10. The aim of the UTL is to provide education about the impact of drink

driving, address drinking problems and situational factors that lead to driving after drinking and change attitudes towards drink driving. During the program sessions participants learn to track their level of drinking, develop a plan to manage their drinking and learn assertion skills and strategies to assist them to avoid future drink driving. Attendance at UTL sessions is monitored and enforced by a probation officer. Probation supervision also offers the opportunity for the drink driver to address serious alcohol concerns through other agencies such as the Department of Health.

For a number of years the UTL was offered in a distance education mode so that individuals living in rural or remote areas could participate. However, there were a limited number of individuals who opted to partake in the UTL distance program and it was too cost prohibitive to continue. The program has also been offered to Indigenous persons convicted of drink driving but the UTL was found to lack cultural sensitivity and has not been particularly successful for indigenous drink drivers. The use of alcohol ignition interlocks was also trialled in conjunction with the UTL and legislation provides that some drink drivers may be subject to an ignition alcohol interlock program.

An evaluation of the UTL completed by Ferguson, Schonfeld, Sheehan and Siskind (2001) suggested that over time, the program did appear to impact on offenders' intentions to change their driving behaviours to avoid a future drink driving offence, with a subsequent decrease in self-reported drink driving being seen among the UTL group relative to the control group. The UTL did not impact on other lifestyle areas such as mental health, social support, knowledge, attitudes and alcohol consumption profiles. Successful completers had an overall reduced recidivism of 15% compared to controls but there was no difference in recidivism rates been the UTL and control groups for the first offender's group with a BAC lower than 0.15g/100mL (Siskind, Sheehan, Schonfield, & Ferguson (2000). When the impact of the UTL was examined more closely, offenders with a high BAC (≥ 0.15g/100mL) and prior drink driving offence achieved a reduced recidivism rate of 55% compared to controls.

New Developments in Queensland

Despite the moderate success of the UTL and some similar programs in other jurisdictions there are a number of concerns that could be addressed to ensure adherence to best practice. These include catering for the needs of different offender groups such as younger and older offenders, less serious versus more serious drink drivers as well as Indigenous offenders. While some of the existing programs attempt to assess for serious alcohol problems and recommend referral for more in-depth treatment none of them really consider wider alcohol-related health issues. Most programs except perhaps for the Northern Territory program do not consider the cultural context of drivers and have been essentially designed to meet the needs of an urban non-Indigenous population. The value of brief online interventions for first time drink drivers with low BACs appears to have also been overlooked in most Australian jurisdiction. The reason for this is not clear and the efficacy of a brief online drink driving intervention for first time offenders needs to be established in the Australian context. Drink driver education/rehabilitation programs also need to be informed by a sound theoretical framework and be delivered in a high quality and consistent manner. The lack of this approach in some jurisdictions creates difficulties for outcome evaluation studies.

Over the last 12 months the Centre for Accident and Road Safety Research -Queensland (CARRS-Q) has been revising UTL and designing and trialling other drink driving educational programs that target specific groups such as first time drink drivers and Aboriginal and Torres Strait Islander people living in rural and remote areas. The revision seeks to ensure that its content is contemporary and aligns with current evidence based practice. CARRS-Q staff has considered concerns raised by some Magistrates and Probation Officers regarding the program's length and cost and its suitability for rural and remote parts

of Queensland. The revised program is designed for delivery across 6 by 2 hour sessions and the fee has been reduced. The program remains informed by aspects of the theory of planned behaviour, stages of change model, deterrence theory and social control models. In addition, it has incorporated some components of the Health Action Process Approach (HAPA) and addresses motivational, planning and maintenance issues.

The HAPA model connects the motivational, behavioural enactment models and multi-stage models, including stages of change model, social cognitive theory and theory of behavioural change (Armitage & Connor, 2000; Schwarzer, 1992). It also expands on planned behaviour theory and social cognitive theory that are not developed to explain and predict health behaviour. The basic assumption of the HAPA model is that the initiation and maintenance of health behaviour must be considered as a process consisting of at least two stages: a motivational phase and a volition phase. The latter is further subdivided into a planning phase and a maintenance phase.

The revised UTL includes most of the previous content, though updated and additional material that addresses motivational issues and self-efficacy to encourage maintenance of positive changes. Material has been incorporated which reflect current learning, technology and relevance. The key content of the revised UTL includes providing participants with information about standard drinks, how to monitor alcohol consumption through a drink tracker diary, assertion skills, the dangers of drink and drug driving, options to stop drink driving and the impact of alcohol on health. Importantly, participants learn how to self-assess the risk level of their drinking and/or problem and develop a plan and strategies to reduce drinking and avoid drink driving. Participants engage in group activities that assist them to build self-efficacy and confidence to maintain a low risk drinking lifestyle thereby avoiding drink driving. The revised UTL is currently being trialled through a number of Magistrates courts and will be available as both a pre-sentencing and post-sentencing option.

CARRS-Q is also trialling a brief online intervention, The "Steering Clear First Offender Drink Driving program" (SCP) for first time drink driver offenders. This intervention responds to findings that most convicted drink drivers do not re-offend though about 30 to 40% self-report drink driving following the first offence (Leal et al., 2008; Owens & Boorman, 2011; Wilson & Sheehan, 2013). A brief intervention provides the opportunity for first time drink drivers to become more aware of the impact of drink driving and the factors associated with their drink driving episode. This knowledge may assist them to strengthen their resolve not to become a repeat drink driver. The effectiveness of brief interventions conducted largely in hospital accident and emergency rooms for patients presenting with alcohol related problems has been established through meta-analytic studies which demonstrate a reduction of hazardous alcohol consumption (Bertholet, Daeppen, Wietlisbach, Fleming, & Burnand, 2005).

The SCP developed by Hollie Wilson and a CARRS-Q research team is a new brief, step by step 2 hour program which is undertaken using the internet at home, mobile phone or tablet. It is designed for first time drink driving offenders who have a BAC under 0.15g/100mL and to educate drink drivers about the impact of alcohol on driving and to get them to think about strategies to avoid future drink driving. Participants also have ongoing access to a mobile friendly app that they can be used to monitor alcohol use and make plans to avoid drink driving. A certificate of completion can be tendered to the Magistrate. The program is currently being trialled in a number of Magistrates Courts in Queensland.

A culturally sensitive Indigenous drink driving rehabilitation program, 'Hero to Healing' (HTH) has recently been developed by Michelle Fitts with the support of Indigenous Community Elders and leaders as well as professionals who provide alcohol programs in remote Indigenous communities (Fitts & Palk, 2015ab). It has been trialled in two Far North Queensland communities and a Northern New South Wales community. The HTH program is based on components of the community reinforcement approach (CRA) and the findings from

research conducted with regional and remote communities in Far North Queensland and regional New South Wales (Fitts & Palk, 2015ab). The CRA is based on the belief that the environment can positively reinforce substance abuse behaviour and treatment includes eliminating the factors that encourage substance abuse as well as learning new coping behaviours with the support of significant others (Miller, Meyers, & Hiller-Sturmhofel, 1999).

The HTH program is conducted across 4 sessions of 2 hours duration each and participants discuss the social and psychological impacts of drink driving in the context of kinship pressure, risk taking, pre-colonial Indigenous values, general alcohol problems and alcohol and cannabis education. Significant others particularly community Elders participate in the program and issues are discussed in the light of story-telling, yarning, visual media and cultural activities. Upon completion of the program it is envisioned that drink driving will be discouraged by the wider community through local meetings. Funding is currently being sought to implement the HTH in a number of remote Indigenous communities and to evaluate its effectiveness. The evaluation will include a process and outcome evaluation that will examine the perception of program facilitators and participants, impact on participants' lifestyle, driving and drink driving recidivism.

Conclusions

Drink driving education/rehabilitation programs that involve a multicomponent approach through coercive techniques, punitive measures, probation supervision and education/rehabilitation appear to be effective in reducing recidivism. However, there are concerns about the ability to evaluate these programs due to the difficulties of controlling for factors such as delivery style, diversity of content, inconsistent policing and lifestyle factors that may influence outcomes. Programs need to be monitored closely to ensure content remains contemporary and based on best practice evidence and delivered in a high quality and consistent manner. Most current programs fail to cater for various subgroups of drink drivers, particularly Indigenous drivers. Scant attention has also been given to the value of brief online interventions that may be suitable for first time convicted drink drivers, most of whom are unlikely to re-offend.

Although there is debate about the effectiveness of coercive treatment some research seems to indicate that coercion is fundamental to the treatment of resistant substance users. Coercion also may be a key to providing an opportunity for repeat drink drivers to be exposed to education about their alcohol patterns to address lifestyle factors that encourage a reduction in drinking and skills to avoid drink driving. While education and assessment of risk levels of alcohol consumption are important components of a drink driving program, lifestyle and alcohol-related health concerns also need to be addressed. Repeat drink drivers in particular need to gain the confidence and motivation to maintain a plan that includes reducing alcohol consumption and strategies to avoid future episodes of drink driving.

The Queensland HTH program attempts to address drink driving concerns in a culturally meaningful way for Indigenous people living in remote and rural areas. The content and delivery style of the program was developed after extensive consultation with Elders and community members in Indigenous communities. Feedback from participating trial communities about the content and delivery style has been positive and effectiveness will be explored in the program's next planned phase. The online SCP was developed following consultations with drink drivers and professionals involved with delivering rehabilitation services to offenders. This program is currently being trialled and its efficacy is not known at this stage. The revised UTL program has been implemented and an evaluation framework for this program is being developed.

It is also important that best practice evaluation frameworks be established to examine the effectiveness of the various types of drink driving education and rehabilitation interventions. Previous evaluations of these types of programs have often lacked an adequate comparison

group and have been marred by inaccurate data, variations in law enforcement and a failure to control for the influence of extraneous variables (e.g., road safety campaigns and other road safety strategies being implemented simultaneously). It is acknowledged that it is difficult to isolate drink driving rehabilitation interventions from other road safety strategies but evaluation frameworks must strive to limit the impact or account for the influence of extraneous variables. Ideally, an adequate evaluation framework should include a random sample of drink drivers subjected to a rehabilitation intervention compared with a control group that has been randomly selected after matching of driver characteristics and offence history. It would also be very valuable to obtain the prior drink driving history and other criminal events for the intervention and control group. The evaluation should not only consider recidivism rates but the impact of the program on other life style factors such alcohol consumption, safer driving and prosocial attitudes.

To some extent the new developments in Queensland drink driving rehabilitation programs address the needs of drink drivers in a targeted manner. Future drink driving rehabilitation programs need to be designed to meet the specific needs of subgroups of drink drivers that may be more vulnerable to road related trauma taking into account age, gender alcohol-related health concerns and culture. Serious consideration by all jurisdictions needs to be given to legislating for drink driving/rehabilitation programs to become mandatory as a pre-sentencing bail condition and/or as part of a post-sentencing Court ordered bond or probation condition.

References

Armitage, C.J., & Conner, M. (2000). Social cognition models and health behaviour: a structured review. *Psychology and Health, 15*, 173-189.

Australian Institute of Health & Welfare (AIHW). (2012). *Trends in serious injury due to land transport accidents, Australia 2000-01 to 2008-09. Injury research and statistics series no. 66.* Cat. no. INJCAT 142. Canberra: AIHW.

Australian Institute of Health & Welfare (AIHW). (2007). *Injury of Aboriginal and Torres Strait Islander People Due to transport, 1999-00 to 2003-04.* Canberra: AIHW.

Australian Transport Council (ATC). (2011). *National Road Safe Strategy 2011-2020.* Australian Transport Council. Canberra: ATC.

Australian Transport Council (2008) *National road safety action plan 2009 and 2010.* Canberra: Australian Transport Council.

Ajzen, I. (1991). The theory of planned behaviour. *Organizational Behavior and Human Decision Processes*, 50, 179-211.

Ajzen, I. & Fishbein, M. (2005). The influence of attitudes on behavior. In D. Albarrac, B. T. Johnson, & M. P. Zanna (Eds.), *The handbook of attitudes* (pp. 173-221). Mahwah, NJ: Erlbaum.

Bertholet, N., Daeppen, J., Wietlisbach, V., Fleming, M., & Burnand, B. (2005) Reduction of alcohol consumption by brief alcohol intervention in primary care: systematic review and meta-analysis. *Archives of Internal Medicine, 165*(9), 986-995.

Bureau of Infrastructure, Transport and Regional Economics (BIRTE). (2014). Road Deaths Australia: 2013 Statistical Summary. Canberra, Cth of Australia.

Bureau of Infrastructure, Transport and Regional Economics (BITRE). (2010). *Effectiveness of measures to reduce road fatality rates, information sheet 39.* Canberra, Cth of Australia.

De Young, D.J. (1997). An evaluation of the effectiveness of alcohol treatment, driver license actions and jail terms in reducing drunk driving recidivism in California. *Addiction,* 92 (8), 989-997.

Dwyer, B. & Bolton, K. (1998). *Dying for a drink: Drink driver education as part of the Northern Territory's response to road crashes involving alcohol.* Presented at the Road Safety Conference, Research Policing and Education Wellington, New Zealand.

Fitts, M., & Palk, G. (2015a). *Development of a drink driving program for regional and remote Aboriginal and Torres Strait Islander communities: Final Report.* National Drug Law Enforcement Research Fund (NDLERF) Monograph Series No. 55.

Fitts, M., & Palk, G. (2015b). Drink driving among Indigenous people in Far North Queensland and Northern New South Wales: A summary of the qualitative findings. Proceedings of Australasian Road Safety Conference, 2015.

Freeman, J., & Liossis, P. (2002). Drink driving rehabilitation programs and alcohol ignition interlocks: Is there a need for more research. *Road and Transport Research 4*: 3-13.

Freeman, J., & Watson, B. (2009). Drink driving deterrents and self-reported offending behaviours in a sample of Queensland motorists. *Journal of Road Safety, 40*(2), 113-120.

Ferguson, M., Schonfeld, C., Sheehan, M. & Siskind, V. (2001). *The impact of the 'Under the Limit' drink driving rehabilitation program on the lifestyle and behaviour of offenders.* Report to the Federal Office of Road Safety. Report No. CR 187. Canberra, Australia: Federal Office of Road Safety.

Klag, S., O'Callaghan, F., & Creed, P, (2005). The use of legal coercion in the treatment of substance abusers: an overview and critical analysis of thirty years of research. *Substance Use Misuse, 40*(12):1777-95.

Harrison & Berry, 2008; Injury of Aboriginal Torres Strait Islander people due to transport: 2002-02 to 2005-06. Cat No. INJCAT 120. Canberra: AIHW.

Harrison, W., Newman, S., Baldock, M.R.J., McLean, A.J. (2003). *Drink driving enforcement: Issues in developing best practice*. Sydney: Austroads.

Hennessy M 1998. *Process Evaluation of the Victoria Drink Driver Program.* A report prepared for the Drug Treatment Services Unit, Aged, Community and Mental Health Division, Department of Human Services. Melbourne (AUST): Department of Human Services.

Homel, R. (1993). Random Breath testing in Australia: Getting it to work according to specification. *Addiction 88*, 27S-33S.

Homel, R. (1988). *Policing and Punishing the Drinking Driver. A study of General and Specific Deterrence.* Springer-Verlag, New York, Inc.

Leal, N., King, M., & Lewis, I, (2008). Profiling drink drivers in Queensland. *Journal of Australasian College of Road Safety, 19*(2), 47-54.

Mills, K., Hodge, W., Johansson, K., & Conigrave, K. (2008). An outcome evaluation of the New South Wales Sober Driver Programme: a remedial programme for recidivist drink drivers. *Drug and Alcohol Review, 27*(1), 65-74.

Miller, N.S., & Flaherty, J.A. (2000). Effectiveness of coerced addiction treatment (alternative consequences): a review of the clinical research. *Journal of Substance Abuse, 18*(1), 9-16.

Miller, W.R., Meyers, R.J., & Hiller-Sturmhofel, S. (1999). The Community Reinforcement Approach. *Alcohol, Research & Health, 23*(2), 116-121.

Moller, J., Thomson, N. & Brooks, J. (2003). *Injury Prevention Activity Among Aboriginal and Torres Strait Islander Peoples, Volume 1:* Current status and future directions, CRCATH, Darwin.

Owens, K.P., & Boorman, M. (2011). *Evaluating the deterrent effect of random breath testing (RBT) and random drug testing (RDT): The driver's perspective.* Monograph Series No. 41 Canberra. Nation Drug law Enforcement Research Fund.

Prochaska, J. O., Velicer, W. F., Rossi, J. S., Goldstein, M. G., Marcus, B. H., Rakowski, W., & Rossi, S. R. (1994). Stages of change and decisional balance for 12 problem behaviors. *Health Psychology, 13*(1), 39-46.

Prochaska, J. O., DiClemente, C. C., & Norcross, J. C. (1992). In search of how people change: Applications to addictive behaviors. *American Psychologist, 47*(9), 1102-1114.

Road and Traffic Authority (RTA). (2008). *An Investigation of Aboriginal Driver Licensing Issues,* Sydney, New South Wales Government, RTA.

Road and Traffic Authority (RTA). (1999). Traffic Offender Program (TOP) evaluation. Road traffic Authority of NSW. http://www.trafficoffenders.com.au/rtaevaluation.htm

Sheehan, M. (1994). *Alcohol, Controls and Drink Driving: the Social Context.* Federal Office of Road Safety, Commonwealth of Australia.

Schwarzer, R. (1992). Self-efficacy in the adoption and maintenance of health behaviors: Theoretical approaches and a new model. In R. Schwarzer (Ed.), *Self-efficacy: Thought control of action* (pp. 217-243). Washington, DC: Hemisphere.

Siskind, V., Sheehan, M., Schonfeld, C. & Ferguson, M. (2000). *The impact of the 'Under the Limit' drink driving rehabilitation program on traffic safety: An outcome evaluation of 'Under the Limit'.* Report CR 186. Canberra, Australia: Australian Transport Safety Bureau.

Wells-Parker E, Bangert-Drowns R, McMillen R, & Williams M. (1995). Final results from a meta-analysis of remedial interventions with drink/drive offenders. *Addictions: 90*(7), 907 – 926.

Wilson, H., & Sheehan, M. (2003). A follow up sample of first time drink driving offenders: how many drink drive post offence? In *20th International Conference on Alcohol and Drugs and traffic Safety Conference, 25-28 August 2013,* Brisbane Convention and Exhibition Centre, Brisbane, QLD.