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The feasibility, delivery and cost effectiveness of drink driving interventions: A qualitative analysis of professional stakeholders

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Abstract

Background: Drink driving remains a pertinent road safety issue. As such, many countermeasures continue to be developed in order to reduce the number of drink drivers on the road. Many intervention programs have been designed to decrease the rate of drink driving by altering the behavioural characteristics that may lead a person to drink and drive. However, most programs target high risk and repeat offenders. There is very little research on the feasibility and effectiveness of first offender programs. **Aims:** This project is part of a larger program of research that focuses on first time offenders, in order to reduce the rate of subsequent drink driving which may result in a repeat offence. **Methods:** A number of professional stakeholders were approached and interviewed with a view to capturing and reflecting current drink driving related concerns while developing an intervention in the context of Australian drink driving related legislation. The qualitative interviews involved open ended questioning which led to the themes discussed in the analysis. Included in the interviews were senior representatives from the Magistrates Court, Queensland Transport, Probation & Parole, Queensland Corrective Services, Royal Automobile Club Queensland (RACQ), Intraface Consulting (drug & alcohol EAP), Brisbane Police Prosecution Corps, Queensland Police Service and private practice psychology. Issues such as delivery of interventions, feasibility and cost-effectiveness were discussed, as were potential content and design. **Results:** It was generally agreed that a tailored online intervention imposed as a sentencing option would be the most effective for first time offenders in terms of cost, ease of delivery and feasibility. **Discussion and conclusions:** The development of an online intervention program for first offenders is widely supported by professional stakeholders.

Introduction

Intervention programs to curb drink driving have been on the increase worldwide as a response to the rate of fatalities and injuries to which drink driving contribute. With the wave of technology contributing to the development of new innovative intervention programs there has been a call for the development drink driving programs to cater for this need. Recent research has found that screening and brief intervention for alcohol use can reduce the rate of drink driving offences (Davis, Beaton, Von Worley, Parsons, & Gunter, 2012), while other research has shown that computerised alcohol interventions can be as effective as face to face alternatives (Butler & Correia, 2009; Elliott, Carey, & Bolles, 2008).

In this study, eight professional stakeholders from Queensland were interviewed to gain insight into what this proposed program would entail, including the positive aspects and potential barriers of developing such a program for drink driving offenders.

The themes of the stakeholder interviews were separated into three main groups: *intervention content*, *intervention design*, and *feasibility and cost effectiveness*. These were discussed in depth during the interviews, with key themes arising.

Intervention content

The stakeholder questions were designed to illicit information which would determine the content that could be used in a brief intervention program for first offenders. One element to emerge was that stakeholders favoured an intervention focussed on principal messages. This could be achieved by focussing on a few key take home messages integrated in the intervention. Reporting on the individual's behaviour and the possible harms, as well as educational messages such as standard drinks and reaction times, were seen to be of more importance than reporting on interesting facts such as money spent or weight gained by alcohol use. There was a call to have the intervention focus on mainly drink driving rather than alcohol use with the possibility of screening and referral for those with alcohol use issues.

The following analysis lists the key themes derived from the interviews relating to intervention content. Main suggestions for intervention content for a first offender sample were *standard drinks* (including information on differences in metabolising alcohol, and the current guidelines), *consequences of drink driving* (individual, social and legal) and *reaction times*.

Standard drinks

The first key theme when discussing intervention content was the improvement of education on standard drink measures. Most interviews covered the importance of educating individuals about standard drink measures, calculation of BAC according to gender and weight, and educating about the amount of time it takes for alcohol to be out of the metabolic system.

“Educating the participant on standard drinks is an important component for this type of training.”

While most stakeholders agreed that education regarding standard drinks was in the public arena, it was noted that many drink drivers were confused about how alcohol reacts with the body even if they have the intention to stay under the limit.

“It's more about reaching them about the fact that... you can still have alcohol in your system hours later.”

There was a call for improvement of the current guidelines to stay under the legal blood alcohol content. Interestingly, these are only guidelines and not rules, with most sources (cards, pamphlets etc) indicating “This is a guide only. Some people can manage less.” The stakeholders felt as though this message wasn't getting through to offenders, particularly those who try to stay under the limit and are subsequently apprehended with very low readings for their licence type. Some suggestions for improvement included removing the ambiguity of the current guidelines, and offering revision on the current message to make it more specific, in that it doesn't apply to everyone.

“Where the (standard drink) message removes... ambiguity, the driver may more readily understand they will calculate incorrectly and get caught.”

“Include a message to indicate if you’ve had a big night out, have a big day in.”

Consequences of drink driving

The second key theme of the content questions was that first offenders need to be instructed on the possible impacts of drink driving for themselves and others. This included looking into all the possible consequences of the drink driving behaviour, and the possibility of discussing how individual risk can be quantified.

“What are the likely impacts on families if there’s an injury/fatality either to the person drink driving or to someone else involved in a crash as a result of drink driving?”

“They need to understand... if they don’t (stay under the limit) and they drive, what risks they are taking to themselves and others and how those risks can be quantified, for instance, the slowing down of reaction times...”

Reaction times

The third key theme relating to content was that individuals need to be educated on reaction times, as they may believe they are safe to drive but be putting themselves at risk. It was generally agreed that most drink drivers either do not think about the possibility of their reaction time being slowed, or believe that it is not the case.

“The slowing down of their reaction times, their reduction in observation ability... they are the most important things.”

Intervention design

In terms of intervention design, it was suggested that the key factors above be formed into modules that can be tailored to individuals and delivered in the most effective manner. Discussions about design focussed on *interactivity*, *attention to content*, and *tailored feedback*.

Interactivity

The majority of stakeholders agreed that when using a computer based intervention, interactivity is the key. The main comment was that the program should not be presented in just information form (for example, by PowerPoint presentation) or too game like, but should contain components of both merged in an interactive fashion.

“An interactive presentation would keep the participant interested and they would retain more of the information if they were able to participate interactively.”

“I would want them to be interacting with actual scenarios, real life stuff online, like games.”

Attention to content

There was also the common suggestion that offenders should be given questions throughout the session or at the end to encourage learning and attention to the content.

“If it’s interactive and you are recording the interaction, you already know. So if you can have some sort of interactive component of each section, then you know that they are paying attention because you have got the responses from their interaction.”

Tailored information

There was discussion with all stakeholders regarding the usefulness of tailored information in a brief program for distinct groups such as low risk and high risk drink drivers.

“Perhaps there could be a referral for more detailed treatment/counselling or even further education available after completion of the online program... basically; that its matching low risk, low risk interventions; high risk, high risk, intensive interventions.”

Secondly, personalised feedback was seen to be an important component of an intervention for first offenders. It was suggested that this would act as a key factor in retaining information and assisting the learning process. It was noted that during any feedback, there should be a component where it is reminded that the participant has access to rehabilitation and support networks, and these should be listed. The concept of tailoring feedback to the individual was highly regarded by all the stakeholders.

“Effective feedback would include confirming and repeating for the driver any information they provide which acknowledges the key elements of the message, demonstrates an acceptance for their actions, and identifies an understanding they have to change their patterns and decision making process.”

Feasibility and cost effectiveness

Web based interventions potentially provide a cost effective method of intervention delivery to large numbers of first time drink driving offenders.

Online intervention

It was generally agreed that online intervention would be the best in terms of cost effectiveness and feasibility. This would also the program to cover a broader range of people, although it takes from the value of face to face individual intervention (such as counselling or

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group work). There was extensive discussion about the efficacy of online intervention and cost effectiveness.

“Online would probably be fairly cost effective and able to reach everybody around Queensland... It’s got to be state-wide... online would probably be the most simple way of doing that and cost effective as well.”

“You could get more personalised sort of answers from them and get more information from them using that (internet) delivery as opposed to having a classroom-based thing because people aren’t always going to want to share their personal situation...”

“We supported the idea of it being mandatory. Online is probably the cheapest way to do it.”

“I wouldn’t suggest that you discount the value of having a mandated program coupled with conditions. I think this is probably going to be a very cost effective way of delivering the program, compared to group programs.”

“You are going to have the consistency, the program integrity and certainly the cost effectiveness which are good arguments for computer based training.”

Timing

There was discussion regarding the timing of the intervention, and there were suggestions that the program be undertaken prior to the court hearing, or prior to relicensing. In terms of the process of either method, there would be different processes involved.

“If it was pre-court, they would have to pay to get into the course and it may be given credit or be held in mitigation on the final sentence of the court.”

“It could be ordered by the court as part of a community based order, which is what happens now with the drink driving program.”

There was also mention that the program may be effective as a preventative program, prior to any offences taking place. This was discussed by two stakeholders in comparison to the current Learner driver program, where a package is sent to drivers to educate them about factors relating to driving. They suggested that the intervention should be completed firstly as a preventative approach whereby all new drivers must complete the program.

“The computer based package should be available to all drivers, not just first time drink drivers as there are a significant number of people who are not detected though continue to drink drive.”

“Maybe there’s some justification for running this program which is a very shortened individual intervention program, prior to them being convicted of drink driving.”

Method of Entry

Regardless of the process of either method of delivery (before court or after), there were suggestions as to how these processes may be carried out in the most successful manner.

“Get the courts to impose it as part of the sentencing operation and maybe as an offset they could reduce the amount of disqualification by a shorter period... what we are doing is giving the magistrate another sentencing option.”

Conclusion

The findings of the study suggest there is a potential for a brief computer based program designed to target first time convicted drink drivers. The proposed program should provide education about the harms of drink driving, the calculation of BAC levels, and standard alcohol beverage size as well as information about the effect of alcohol on reaction times. Providing this information via an online web based program appears to be a cost effective way to target a number of first time convicted drink drivers.

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