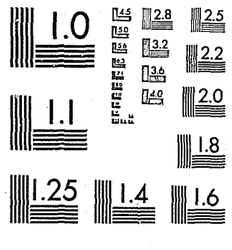

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New South Wales Drug And Alcohol Authority

Intervention Programmes For Convicted Drink Drivers. An Evaluation And Some Suggestions For Future Directions

Robert Bush 1982

Briefing Paper 2

NEW SOUTH WALES DRUG AND ALCOHOL AUTHORITY

INTERVENTION PROGRAMMES FOR CONVICTED DRINK DRIVERS. AN EVALUATION AND SOME SUGGESTIONS FOR FUTURE DIRECTIONS

BRIEFING PAPER NUMBER 2

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1982.

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CONTENT

CONTENTS (continued)

The purpose of this paper is to examine the value of programmes for convicted drink drivers and, having demonstrated some of their limitations, to suggest some guidelines for the future. Since 1975 a body of experience in New South Wales has developed in Community Health, Probation and Parole Services and Magistrates Courts in health intervention programmes of various kinds for drink driving offenders. This has arisen through experimentation with a pre sentence diversion programme in some Sydney Courts [1,2], and elsewhere [3]. The evaluation of these programmes and the experience of overseas research can now be used by health and correctional planners to determine the extent of their resources that could be allocated to such programmes.

In this paper a brief description of programmes is provided. Such an overall description, it should be recognised, necessarily precludes discussions of some of the individual programmes' special characteristics to which programme organisers are often keen to point out makes their's a worthwhile venture. The context within which these programmes exist as one of a number of countermeasures competing for scarce resources is described. Then follows an evaluation in terms of Traffic Safety, Justice and Health Care objectives. Finally, new directions are suggested in terms of the position of programmes in legal "Due Process", and the recognition of the heterogeneity of the convicted population. Encouragement is given to assessment for the identification of the 'High Risk' groups and a variety of intervention modes more suited to the characteristics of these drink drivers is suggested.[4]

1. Description of Drink Driver Programmes.

There is no single body with responsibility for the management of resources for such programmes in New South Wales and, where more recent programmes have commenced, they have done so at the initiative of local Community Health Workers, Probation Officers and a few enthusiastic Magistrates, particularly in country areas. The extent of evaluation of these recent programmes has either not existed or in the main is limited to 'Pre/Post' test questionnaires measuring increased knowledge about Drug and Alcohol matters, attitude change and self-reported decrease in alcohol consumption.

There have been two local exceptions to this trend. First, the Bureau of Crime Statistics and Research Study[5] of the initial Sydney diversion programme (in print) conducted some process evaluation and also examined outcomes in terms of recidivism rates. Second, the Northern Metropolitan Health Region Study[6] which attempted a similar approach within a statistical linear model using recidivism as an outcome measure and having a comparison group of non referred convicted drink drivers. More recent initiatives at the Armidale Dependency Unit,[7] and Chatswood Drink Drive Programmes[8] are evaluating new approaches in psycho social medical assessment of convicted drivers. The Chatswood programme is being partially supported by a Drug and Alcohol Authority grant.

In May 1981 apart from the programmes at Armidale and Chatswood, there were 14 drink driver diversion programmes in New South Wales receiving referrals from 27 Courts of Petty Sessions. Eleven of these Courts were in the Sydney Metropolitan Area. Fifty one percent (27/53) of Courts dealing with more than 100 offenders per year had available to them "diversionary" programmes. We are evaluating again the impact of changes in Community Health resources and policy changes at present, and it seems likely that the number of programmes has been declining.

1.1. Court Liaison

The majority of schemes operate at the pre sentence stage of the criminal justice process, except at Chatswood, where attendance at the programme is a pre-requisite before a driver's licence is reissued after the disqualification period. At Armidale, the programme is also post-sentence but not a requirement of licence renewal.

Some programmes, notably in country centres and in the Northern Metropolitan Region, have set up liaison systems between Magistrates, health professionals and others, using a variety of methods such as a management group and a newsletter. Generally in areas where no such formalised liaison system operates, the poorer the acceptance of the scheme and the greater the misinterpretations of the roles of the various legal and health workers.

1.2. Format of Programmes

The general format is a one night a week session over a number of weeks, the usual length being about six evening sessions. Many schemes are influenced by the educational package developed by Northern Metropolitan Region, but also use local content. Some schemes involve police, solicitors and/or probation personnel with various degrees of satisfaction. Such satisfaction with the programmes functioning seems a matter of person contact rather than researched outcome.

An imaginative approach at Armidale focuses on an assessment using modifications to the Alconfrontation Model[9] - educational programming being the attendance at open community seminars on alcohol use held regularly in the town. The addition of assessment as a primary objective of programmes and the integration of educational interventions into regular community activities has obvious advantages over single stream educational courses run in isolation to other community health programmes. Assessment recognises the variety of persons caught up in the drink driver net.

TABLE 1: Self-Reported Type of Programme

Type	Centre
Education	Caringbah, Chatswood St. Vincent's, Taree Port Macquarie, Wagga Wagga, Langton Clinic, Arncliffe, Botany.
Education and Group Work	Wollongong
Education and/or Counselling	Broken Hill, Griffith, Bankstown.
Counselling	Albury.
Counselling & Group Therapy	Dubbo.
Assessment	Armidale.

Op. Cit. Bush et al 1981.

This trend is also common throughout Australia as The House of Representatives Report noted: "Courses differ in format and presentation, but in Australia most courses consist fundamentally of an educational program extending over several sessions. They cover such subjects as the pharmacological and toxic effects of alcohol, the effects on driving ability, existing legislation in Australia and current legal procedures for renewal of licences, the concern of the community about social and medical costs of drinking drivers and the availability of services in the community to assist individuals with a drinking problem."

"Another approach, which was adopted by the Alcohol and Drug Services Division of the Victorian Health Commission, uses a technique of confrontation whereby an individual is allowed to consume different amounts of alcohol so as to raise his BAC to various levels. His behaviour and performance in a simulator are videotaped and he is confronted by a replay of this tape and the comments of other members of the group participating in the program. Some educational material is also included".

"A third approach could be called the community approach. The participant's peer group is informed about drinking and driving and other aspects of alcohol consumption. Printed materialis distributed during an educational course for court-referred convicted drivers who are then expected to distribute the information more widely to their peer group and acquaintances in the community. This program is associated with a parallel community education program designed to lift general community awareness on how alcohol consumption contributes to serious traffic problems".

A fourth approach described by Brown[12] teaches controlled drinking. He randomly assigned convicted drink drivers referred from an Auckland Court to a traditional educational programme of the sort described above and a controlled drinking group. Both groups were similar in demographic characteristics and Michigan Alcohol Screening Test (M.A.S.T.) scores. Those who received the controlled drinking programme which consisted of such tasks as learning slower consumption, clock watching and avoiding shouts perceived they had received more practical training than the education only group.

1.3. Estimated Number of Referrals in N.S.W.

Variations in methods of collecting numbers referred makes estimation difficult. Generally referrals have decreased in pre-sentence oriented programmes since December 1980 and from regional figures 1,825 in 18,000 convicted drink drivers per annum attend various schemes. This was about 10% of the possible target group in 1980.

2. Convicted Drink Driver Programmes in the Context of Other Countermeasures.

Politicians and others faced with making decisions about which strategy to take to combat the problem of drink driving are presented with a confusing array of evidence from various pressure groups. When considering programmes for convicted drink drivers specifically their information may come from both legal and health advisers. It is therefore worthwhile exploring differences in their advice and that of the possible public view.

The common public response to a community problem such as drink driving when it is described as a health issue is to call for more treatment services.[13] However, Health Administrators invariably express concern about accepting the public answer to the problem because tertiary treatment services are usually based on direct patient (in this case drink driver) health worker contact to overcome the individual's problem, which is expensive and often ineffective except in maintaining a caring supportive service. This is because the intervention is initiated in the late stages of the problem's development. Traditionally, alcohol treatment services[14] have focused at this tertiary level where such psycho social characteristics as denial on the part of the patient make treatment difficult to sustain. The exception in the drink driving context might be young convicted drivers, because they provide a unique opportunity for intervention before the effects of long term alcohol consumption are evidenced. Health administrators, however, are more likely to opt for allocation of resources to primary preventive strategies.

Conversely, where the public identify a community problem such as drink driving as a criminal justice issue, the common response is a call for harsher penalties. The belief behind this approach is that knowledge of or even receiving a harsh penalty will act as a deterrent against the public in general and the individual specifically. It is assumed that the "discomfort" associated with receiving the penalty will outweigh the "enjoyment" of continuing to drive after drinking more than the legal limit.

While penalties do no doubt have some effect on the general public the recidivism rate in N.S.W. was found by Homel to be 22% of a sample of 1,000 convicted drink drivers over a 6 year period.[15,16] This study also showed that a variety of other offences increased for those in the sample who received prison sentences. However, where deterrence is considered in a broader context than penalty only, Gibbs[17] suggests a more positive result is achieved when the perceived probability of apprehension is high and there is a certainty that some punishment will follow. For example, Ross[18] has demonstrated the crash rate can be temporarily diminished by the publicity of police enforcement. (Figure 1)

TABLE 2. Some Possible Conflicting Public and Professional Views on combating Drink Driving Behaviour which relate to the Development of Drink Driver Programmes.

	Issue: Drink Driving	
	as a Health Issue	as a Criminal Issue
Public Response	Call for more treatment Services	Call for harsher penalties
Professional View: Health Advisers	Call for more primary preventive services	
Justice Advisers	Call for drink/ drive programmes	Call for greater publicised police action amongst other measures

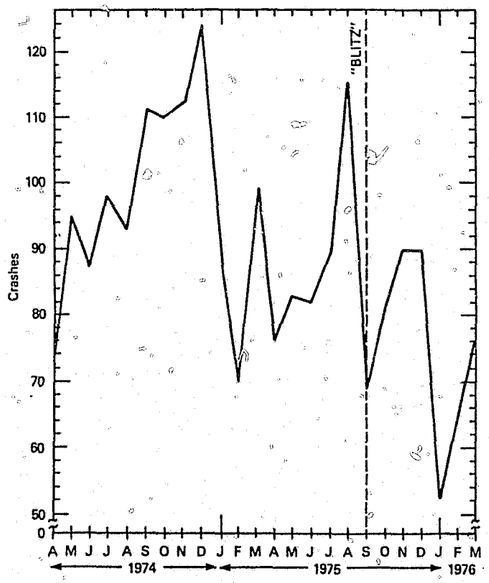


Figure 1 Crashes producing serious or fatal injuries in Cheshire, Eng'

op. cit. Ross.

The variation in advice, it would appear, relates to the differences in knowledge accumulated by different professions. The need for more communication between legally trained persons and health trained persons about what is rationally possible is an obvious conclusion.

It is also important when searching for a variety of counter-measures which can be most cost-effective, to examine drink drive programmes in the context of other measures available. Figure 2 diagrams the links between target groups, counter-measures and their management. The House of Representatives Report[19] identified three target groups which were: potential young drivers, non-convicted drink drivers and those already convicted. The value of the various other counter measures has been dealt with elsewhere in a systems analysis[20] but it becomes apparent from the diagram that convicted drink drivers form only one possible target group, and although arrests have increased (Table 3), it has usually been assumed this group is small when compared with the size of the non convicted group. This belief is based upon the prominent role which the drinking of alcohol takes as an Australian cultural pastime. However, the extent of vehicle trips taken when intoxicated is difficult to estimate accurately as generalisation from post-crash data and arrest data to the general driver population cannot easily be made and also random roadside Surveys are subject to bias according to the geographical site of survey.[21] Duncan[22] using a road side survey found only small numbers of intoxicated drivers, with the highest B.A.L. in the under-30 mostly male group, who were driving at night on the weekends.

Figure Two: DRINK DRIVER COUNTERMEASURES

Population/ Countermeasure Interface

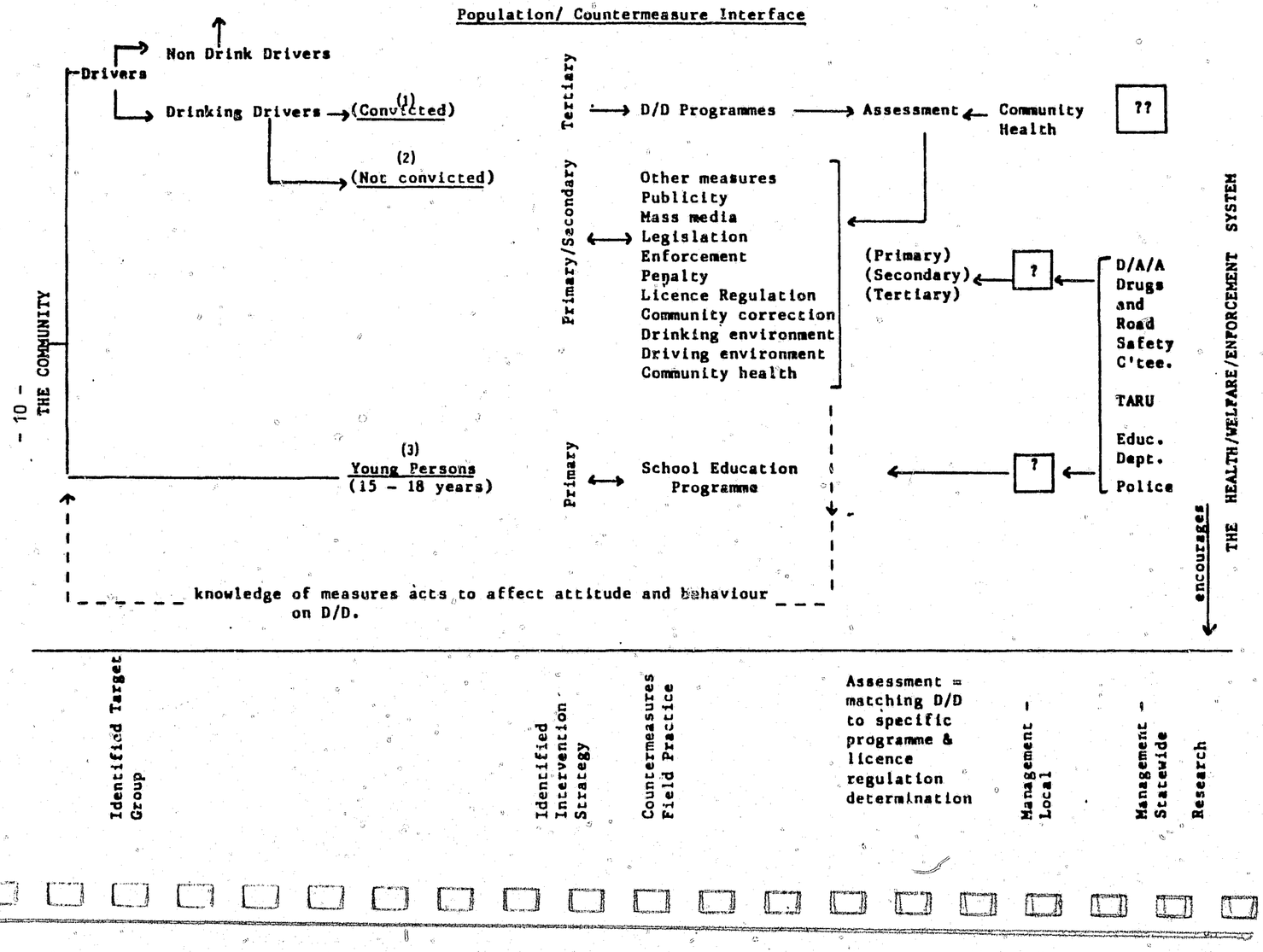


TABLE 3. Comparison of Roadside Analysis and Positive Breathalyser Test Results in New South Wales for Years 1979 and 1981.

Test	Year 1979	Year 1981
Roadside Test	28,023	118,012
Positive Breathalyser Result	18,971	27,136

* Source: Breath Analysis Unit, N.S.W. Police Force.

- In 1980 the legal limit for B.A.L. was reduced to (.05) and Police instructions changed to undertake roadside testing of all 4-point traffic violations and also at traffic crashes.

- Since conviction is almost certain to follow arrest when breath analysis is used in evidence, Positive Test results are a good estimate of the size of the convicted population.

The relative merits of drink driving programmes will need to be examined in the light of what is known about these target groups as potential or actual traffic safety risk and their likely response to the variety of commonly proposed counter measures.

3. What are the Achievable Objectives?

A review of the literature suggests there are three broad objectives of intervention programmes for convicted drink drivers which align themselves as the main protagonists with interests in these schemes. In Table 4 below the objectives of traffic safety, criminal justice and health care are described:

TABLE 4.

Three Objectives of Intervention Programmes for Convicted Drinking Drivers

1. Traffic Safety	To improve traffic safety by reducing the number of road crashes in which alcohol impairment of the driver is a factor.
2. Criminal Justice	To reduce the incidence of recidivism amongst drink driver offenders by referring them to health intervention programmes.
3. Health Care	To improve the health of drivers convicted of drink driving by various health care interventions.

To some extent all three objectives are linked since it is assumed that a reduction in the health problems of drivers (the health care objective) will result in a reduction in recidivism (the criminal justice objective), and that this in turn will improve traffic safety in terms of the crash rate. It is necessary to stress however that since no tested causal model of drink driving behaviour exists, the assumed link between these objectives is very tenuous indeed.

3.1. Drink Driver Programmes and the Traffic Safety Objective

A number of factors contribute to traffic accidents and some of these are, the road conditions, night driving, traffic volume, as well as the driver's physical and mental conditions.[23] To drive

adequately requires an individual to maintain tracking tasks, visual, search and recognition behaviour and adequate motor control functions.[24] Any psychotropic substance (including alcohol) which effects the central nervous system impairs these functions.[25] Importantly the social contexts, such as peer group activity and the personal beliefs about alcohol effects the style of driving behaviour when intoxicated. For example, some intoxicated persons may drive slowly believing they are being

TABLE 5.

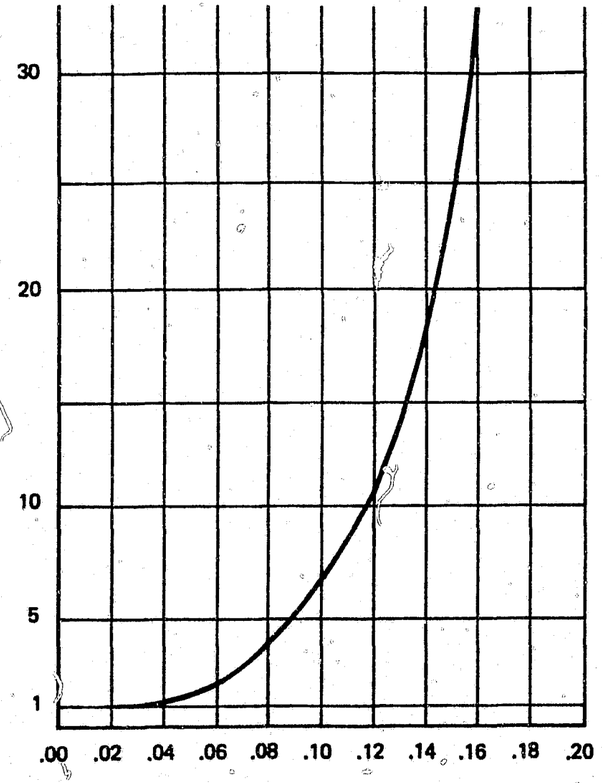
Blood Alcohol Levels of Drivers, Motorcycle Riders and Pedestrians Killed in the First Six Months of 1980 in New South Wales.

Recorded BAL	Drivers	Riders	Pedestrians
NIL	101	30	33
0.005 - 0.049	13	2	3
0.050 - 0.079	9	3	4
0.080 - 0.099	3	4	3
0.100 - 0.149	20	5	10
0.150 - 0.199	17	8	8
0.200 - 0.249	18	4	5
0.250 - 0.299	8	1	2
0.300 - 0.349	5	1	1
0.350	1	0	1
Total tested fatalities	195	58	70
Untested	32	8	50
Total	227	66	120

* Source: TARU.

DRINK DRIVE STATISTICS CLARIFIED

GRAPH 1. Traffic Accident Probability at Different Levels.



Alcohol is a factor in two per cent of all crashes and a factor in 50 per cent of all fatal crashes. The more severe a crash is, the more likely it is that alcohol is heavily involved.

The introduction of .05 legislation in N.S.W. had increased public awareness in reducing the road toll in two ways. First that publicity handouts emphasised the need to reduce the amount of alcohol one drives with. Second that since crash risk rises rapidly with increasing BAL (see graph), even a small drop in BAL, when BAL is high, produces a large drop in crash risk.

For example, a drop from 0.16 to 0.14 (a reduction of two drinks in the last hour) lowers crash risk from 35 to 19 per cent -- almost half the risk for two fewer drinks.

Modified extract from Connexions Vol 2 No. 3 April 1981.

careful while others will drive aggressively. While of course both groups are a traffic hazard, their intoxication alone cannot usually be described as the single cause of a traffic crash. However, the probability of a crash dramatically increases as an individual's blood/alcohol level rises[26] (see Graph 1) and alcohol impairment has been found to be a factor in about 50 per cent of fatal crashes and 55% per cent of single vehicle crashes.[27] For example Table 5 below shows a breakdown[28] of B.A.L. by drivers, motorcycle riders and pedestrians from a sample of those killed between January and June 1980 in N.S.W.

If programmes for convicted drink drivers are to have an impact on this traffic safety issue then it would need to be shown that the population of convicted persons was the same as those persons responsible for road fatalities. South[29] has collected some evidence that suggests these two populations do not necessarily overlap and concludes that this is the case because only a small proportion of driving trips will result in a conviction or an accident. For example Whitelock[30] and colleagues examined 46 fatalities in Brisbane in 1970 and found 29 with alcohol in their blood but only 3 of these had previous convictions. Jamieson et al[31] following up 230 drivers involved in injury producing accidents found only one person in their sample with a previous conviction. Similar results have been found in U.S.A.[32] There is a need to update this research specifically for N.S.W. in the light of changes in policing practice which may make the likelihood of apprehension now somewhat greater. However, if South's basic argument still holds true the chance of programmes for the convicted group alone affecting the crash rate will be very low indeed.

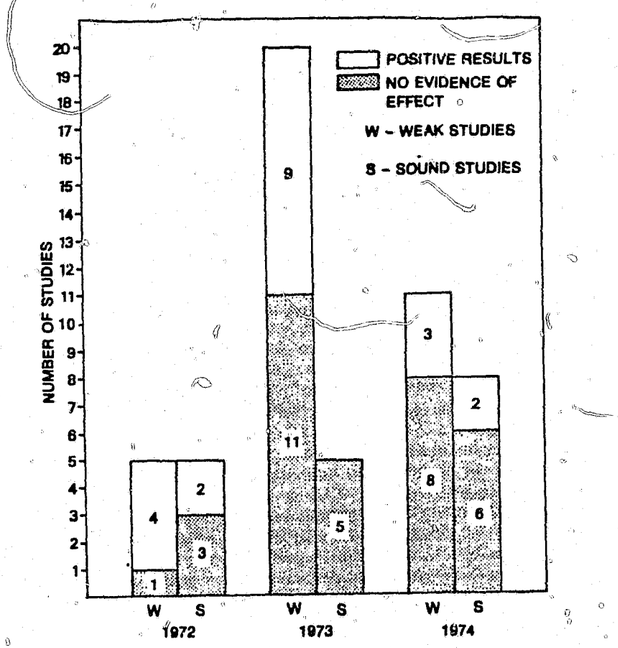
3.2. Drink Driving Programme and the Reduction of Recidivism

The court's decision to refer drink driver offenders to an intervention programme is based upon a belief that traditional penalties alone are ineffective in reducing recidivism. However, the ability of educational programmes to reduce recidivism, particularly amongst high risk groups has not been conclusively shown[33]. Weak research designs and the difficulty of using recidivism as an outcome measure, (because recidiuism is not only affected by the driver's behaviour but also the extent of police activity) are the usual explanations for inconclusive results.

Despite this, Raymond[34] has claimed the St. Vincent's programme in Melbourne which has worked with high risk young drivers, does reduce recidivism. In U.S.A. Eddy[35] followed up 227 offenders for 1 year after a programme and found "good" attitude change and a drop in overall recidivism when compared with conviction prior to the programme's commencement. McGuire[36] has also examined the records of 876 programme graduates and compared them with 802 (control group) persons receiving the standard penalty only. He found a "large" reduction in "alcohol related violations" on a one year follow up amongst the programme graduates. However, Masisto[37] et al has pointed to the importance of the length of time of the follow up period in determining the validity of such results. They state it is necessary to know the mean interval between first and second (and subsequent) offences for the general drink driver offender population and use this time period as a criterion for recidivism evaluation. Thus in their Tennessee (U.S.A.) Study the period was found to be 23 months making an appropriate follow up period at least 3 years.

It seems clear that before accepting research results in this field a study of the methodology used should be undertaken. Nichols[38] reported on such an evaluation of methodologies and results using 54 U.S.A. studies on drink driver education programmes and showed that positive results were indirectly proportional to the amount of experimental control used. In 67% of the studies judges considered the design weak but found in 44% of cases a reduction in recidivism was achieved. Conversely in the methodologically sound studies only 22% gave positive recidivism results. (See Figure 3).

Figure 3: Effects of ASAP schools in terms of reducing alcohol related arrests.



Op.Cit Nichols

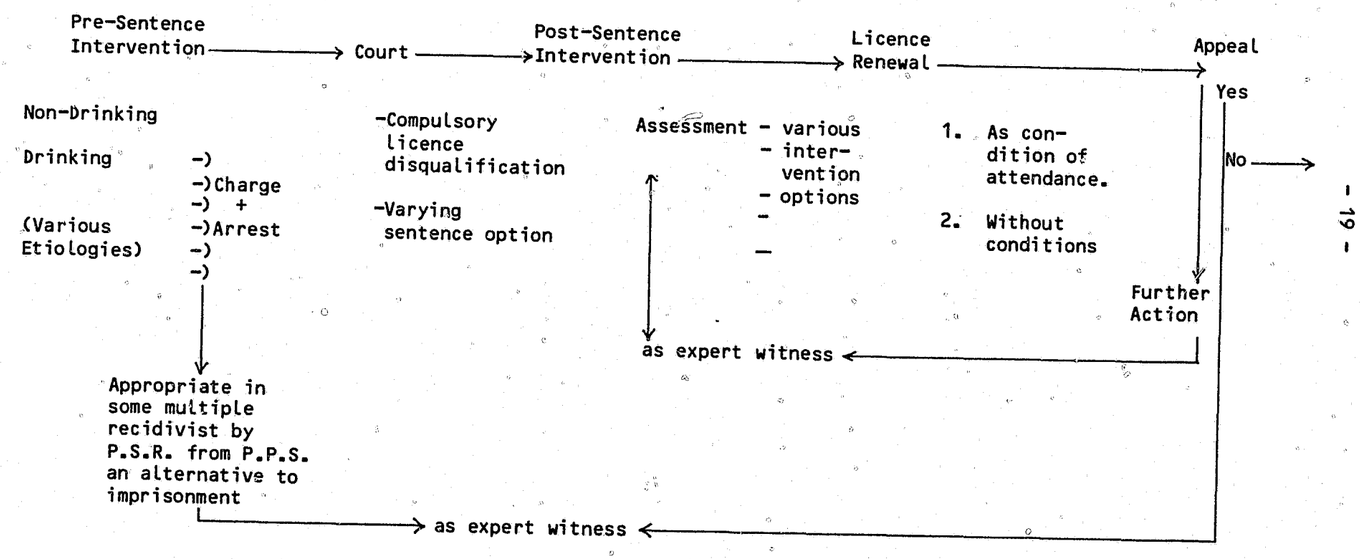
One study in N.S.W. which has attempted some methodological rigour has recently been completed by the Northern Metropolitan Health Region at Chatswood, Sydney.[39] They followed up course graduates over a period ranging from 13 to 36 months and compared their criminal records with a group of convicted drink drivers who did not attend any education course. They found the rate of new P.C.A. offences was 8.73% in course attenders and 10.3% in the non attenders. Using step-wise regression this result demonstrates no statistial significance (0.5) between the group effect and subsequent P.C.A. offences. Of relevance was the typological information (mainly M.A.S.T. testscores) gathered on the referred group which showed that they differed from the general population by having more alcohol related problems.

Such a finding suggests that "worst risk" cases are in general those most likely to be sent to programmes by courts.[40] Such a bias in who is referred fits well the way in which general welfare assistance is used in the sentencing processes in N.S.W. The social drama of a court suggests the more severe the offence (high B.A.L. in this case) and the greater the recidivism, the harsher the subsequent penality. Welfare interventions have traditionally found their place in this continuum of penalty harshness following the failure of milder penalties such as fines but before imprisonment and in some cases as an alternative to imprisonment.[41] While referral to programmes remains a prerogative of the courts such social events outside of the programme's control will influence success in recidivism reduction.

However, caution is expressed about improving results by working also with "low risk groups" (as measured by low B.A.L. and high social stability index scores). Research of Hagen[42] and also Preusser[43] and reported by Seth[44] has shown that licence disqualification is equally as effective as programmes particularly for "low risk" offenders. Accepting this evidence one can suggest that there is no cost-benefit in increasing the range of referrals to programmes but rather perhaps improving the type of programme to suit the "high risk" offenders.

FIGURE 4

FLOW DIAGRAM OF A POST SENTENCE DRINK DRIVER PROGRAMME



3.3. Drink Driver Programmes and the Health Care Objective

Health care objectives of many programmes can be described as improving knowledge of and attitude about use of drugs and alcohol and more specifically reducing the incidence of excessive alcohol intake. Excessive drinking has been variously defined on measures of ethanol intake that are known to cause body tissue damage or on more general alcoholism scales (Mortimer - Filkins Questionnaire[45], M.A.S.T.[46]). Other approaches have used some measure of "strife" assumed to be caused by excessive alcohol use in domestic, employment and social aspects of the person's life style.[47]

In general, attempts to improve knowledge and attitude and to reduce self reported alcohol use measured by questionnaires have suggested positive results.[48] However, Scoles et al[49] has suggested this effect may be much to do with the impact of the court process when changes in alcohol intake are measured in a short follow up period and further points to the inappropriateness of education (as information giving) for "high risk", high B.A.L. groups. Similar findings are reported by Fine et al[50] and in a recent comprehensive study of Swenson[51].

Lately the focus has moved to defining sub-groups within the heterogeneous drink driver population. This has been attempted by examining court/police records and through more detailed clinical profiles.

Borkenstein[52] has identified six target groups of drink drivers and suggested penalties are ineffective with compulsive drinkers, aggressive drinkers and drivers who occasionally drink too much. On the other hand penalties may well be effective for drivers sensitive to alcohol, inexperienced drivers and those persons convicted who do not seem to have a drinking or driving problem. An adaptation of a typology suggested by Homel[53] appears in Table 5 with a variety of possibly effective intervention strategies. Homel has shown that the "high risk" group in terms of recidivism (and also crashes) are "young, lower status offenders"who are convicted of a variety of other offences. It is this group specifically that generally fails to respond to education programmes and will drop out early unless legal sanction holds them to the task.[54]

It is difficult to compare studies which have examined clinical profiles because of their various definitions of alcoholism, criteria for referral to their programme and the variety of comparison groups used. However, Brown[55] found the M.A.S.T. distinguished drink drivers from inpatient 'alcoholics' and 'social drinkers'. Drink drivers scored between these two groups on average. Selzer et al[56,57] who found similar results and using the M.M.P.I. amongst other tests and concluded, 'drunken drivers' are heavier drinkers, experience more troublesome effects, drink for tension release, are less responsible than the general population and more aggressive. In a comprehensive study of inpatient alcoholics and referred drink drivers, Bell[58] found differences between the younger (under 30) drink drivers and the older (over 40) inpatients. While these drink drivers denied problems, were generally employed, and had fewer life crises, the opposite was the case for the inpatients although both had similar high accident rates.

TABLE 6

Typology of Driver and Suggested Intervention.

TYPOLOGY CATEGORY	INTERVENTION
1. Chronic alcohol abuser or alcoholic	Referral to doctor if necessary. Referral to treatment eg AA, private psychiatry, or long term rehabilitation centre, long term psychotherapy. Refusal of licence (mechanical devices?) Make certain person is aware of problem.
2. Persons with Long Criminal Records	Gaol. Probation. Community Service Order. Reality-testing therapeutic intervention, eg. William Glaser.
3. Psychiatric disorders	Mental health service. Refusal of licence (mechanical devices?)
4. Low risk offenders	Assessment process plus sentencing procedure may be all that is necessary. Minimal education/information oriented programs. Lifestyle based programs. Social network development.
5a) Chronic high risk	Emphasis on consultative problem oriented approach with possible exposure to a wide range of intervention options, eg. stress management, family therapy, group work, life skills training, behaviours modifications, individual counselling etc.
5b) Acute high risk	As for "5a" but with a change in perspective towards the crisis management orientation eg. bereavement, adolescent services etc.

In searching for typologies within a referred group of drink drivers Steer et al[59] used a large sample of 1500 men and cluster-analysed the results of B.A.L., frequency of drinking pattern and the neuroticism scores of Eysenck's Personality Inventory. They were able to determine 7 typologies but only 2 of which (216 of a 1,500 sample) represented serious risk groups for which the recommended treatment was court sanctioned long term programmes. In a less comprehensive study but probably more practical to apply, McGuire[60] divided drink drivers into "heavy" and "light" target groups for treatment using biographical information, the M.A.S.T. and the Connel Medical Index. He found "heavy" drinkers had a tendency towards sociopathy and had lower educational levels. Argerion et al[61] found that "treatment" of a similar group even after 6 months proved ineffective and suggested that short term interventions were ineffective while longer term programmes may not prove cost effective.

While these studies have used different criteria for defining problem drinkers there would seem enough information to suggest that worst risk traffic safety and recidivism cases are also worst risk cases in terms of "success" of educational programmes. Measures of low social stability, sociopathy and High B.A.L. present a profile of some drink drivers whose response to education (as defined by information giving) will be ineffective in changing behaviour. McGrath et al[62] has suggested the need for coercive strategies in cases where intervention is resisted but 'alcoholism' symptoms predominate and points to the apparent success of the probation plus treatment model. Homel's[63] conclusions were also that a recognizance may have a positive effect on recidivism.

In this context the recently introduced Community Service Orders[64] may have on face value a great deal to offer. Provision is made in the Act for conditions to be placed upon the order such as attendence for an assessment for alcohol dependence. Further the behavioural orientation and coerciveness of a punishment which is in lieu of imprisonment may suit the multiple recidivists described above. In fact a considerable number of P.C.A. offenders are already being referred, as the table below indicates:

TABLE 7: Offence by Sex: Community Service Order Recipients

	Male		Female		Not Stated		Total	
	No.	%	No.	%	No.	%	No.	%
Driving Offences	165	44.8	4	17.4	0	-	169	43.1
Property Offences (other than fraud)	118	32.1	13	56.5	0	-	131	33.4
Fraud and Misappropriation	27	7.3	4	17.4	1	100	32	8.2
Drug Offences	17	4.6	0	-	0	-	17	4.3
Assault	15	4.1	0	-	0	-	15	3.8
Other	6	1.6	0	-	-	-	6	1.5
Combination of Categories	17	4.6	1	4.3	0	-	18	4.6
Not Stated	3	0.8	1	4.3	0	-	4	1.0
Total	368	93.9	23	5.9	1	0.2	392	100.0

Source:- Dept. Corrective Services.
- Data from B.C.S.R. - October 1981.

Two areas of programmes have remained relatively unexplored. First, little attempt has been made to examine programmes in terms of sound educational principles. For example, in a related field of teaching about drug and alcohol issues to adolescents, Cowley[65] has examined programmes in terms of their information content to give basic knowledge; components geared to values and self concept and also skill learning. It has been shown with adolescents that information alone can be counter productive and that the skills approach can achieve behaviour change in the desired direction. Adaptations of this type of investigation are needed with drink driving programmes.

The second area of neglect may well prove to be the most productive of all. Henderson[66] some time ago pointed out the importance of the social context in which drinking and driving takes place and by implication the isolation in which Drink Driver Programmes usually exist."A complex network of social attitudes governs how, when and where people drink, and the degree to which the law conflicts with these drinking norms will be an important factor in its action or otherwise as a deterrent". More field investigation is needed in this area. The role of social networks as carriers of influence in people's lives is a currently growing area of investigation.[67] Where programmes in isolation attempt changes in individual behaviour which confronts peer group norms their chance of success would seem limited. This may be particularly the case with young drink drivers. Here programmes which aim at involving the friendship network of the convicted person may prove valuable.

4. Implications for Future Development of Convicted Drink Driver Programmes

4.1. The Management of Programmes

Improvements to existing programmes and development of new ones is unlikely unless a management unit is formed which is given this task. While programmes exist at the good will of various Government Departments they will remain a low priority in terms of resource allocation, and their development is likely to depend upon a number of compromises in attempts to meet different objectives.

Future management could strive to meet traffic safety, justice and health objectives by concentrating on high risk groups in the recognition that traditional education alone is unlikely to have great effect. Some imagination in planning is needed.

4.2. The Place of Programmes in "Due Process"

Programmes are likely to have more effect if they are post sentence but pre-licence. In other words an assessment of the offender could become a pre requisite to licence renewal. Two options are open in this respect. They are: to leave the decision in the hands of Magistrates for referral, or amend Motor Traffic Regulation 10 and Public Vehicle Regulation 19 to give more executive power to the Commissioner of Motor Transport to order persons to programmes.

The courts' referrals should still stand for multiple recidivists where the use of Community Service Orders (or probation) plus a health assessment as a condition of the order seems appropriate. Research of this approach should be set up.

4.3. The Traffic Safety Objectives

It appears unlikely that programmes will affect the number of crashes in which alcohol is a factor to any great degree. Research using a representative sample of crash victims and examining their criminal records would throw more light on this area. These various records are already collected by different Government Departments and so it would be a relatively easy task to undertake, providing privacy conditions are satisfied.

4.4. The Recidivism Objective and the Health Care Objective

If programmes received referrals of persons with lower B.A.L. and higher social stability it would seem likely that they could demonstrate improvement in recidivism rates and the health objectives. However, since this low risk group appears to respond well to the standard penalty such an approach lacks merit on cost benefit grounds.

It should be recognised that working with high risk and potentially high risk persons will be difficult because of their known lack of response to traditional education programmes. Recidivists could perhaps more appropriately be dealt with under a Community Service Order plus treatment option.

Young drink drivers warrant special consideration because they are the most at risk in terms of crashes, are still learning to drink as well as learning to drive, and are potentially health problems of the future. Thus, it is younger drivers who are high risks across all three objectives. In developing programmes for "at risk" young drivers account should be taken of the social context in which their drink driver behaviour takes place. Thus working with the offender and his peer group, perhaps in the drinking environment, could be encouraged. Table 8 summarises findings by objectives and interventions.

TABLE 8

CATEGORIES OF DRINK DRIVERS BY TRAFFIC, JUSTICE AND HEALTH OBJECTIVES WITH RESPONSE TO PENALTY, PENALTY AND PROGRAMME AND SUGGESTED FUTURE INTERVENTION

OBJECTIVE CATEGORY	TRAFFIC SAFETY "REDUCE CRASHES	JUSTICE "REDUCE RECIDIVISM"	HEALTH "IMPROVE HEALTH"	PREDICTED RESPONSE TO PENALTY (disqualification)	RESPONSE TO PENALTY, + PROGRAMME	RESPONSE TO NEW INTERVENTION	
Low B.A.L. High S.S.	Low risk	Low risk	Low risk	Not Reoffend	Good	Nil - on Cost - Benefit grounds	
High B.A.L. Recidivist	High risk	High risk	High risk	Will Reoffend	Poor	C.S.O. as alternate to imprisonment & assessment	Probation Services + Health Commission
Young Driver Low B.A.L. High S.S.	High risk	Medium risk	Low risk (potential risk)	May Reoffend	Fair	Assessment for potential problem	Health Commission
Young Driver High B.A.L. Low S.S.	High risk	High risk	High risk	Will Reoffend	Poor	Working with offenders + peer group	Community Group Probation/Health

S.S. = Social stability as measured by criminal record, employment, etc.
B.A.L. = Blood Alcohol Level.
C.S.O. = Community Service Order.

4.5 Programmes Generally

Because drink drivers are a heterogeneous group their needs and responses to "treatment" will vary. The upgrading of assessment prior to any other intervention should be a priority. It is surprising that assessment methods, with a few exceptions, have not been fully developed. For example with young drivers no index of early onset for later possible alcohol problems exists although research in the general population to establish early warning signs is being carried out.[69]

There are three possible objectives of assessment. The first concerns making use of their therapeutic value. Here information is collected about the offender's "well being" and then fed back to him/her in such a way that he/she is most likely to make their own life style changes. There is some evidence that this approach may be as powerful as longer term programmes, particularly with persons at early onset of an alcohol problem.

The second possible objective concerns the matching of the offender to a variety of treatment options. Such an approach assumes that a variety of treatment options does in fact exist. In urban areas with a variety of general health services this seems possible. In this model no specific programme apart from assessment exists and those in need of referral are advised of the most appropriate and available health care service. For example, it may be the person needs stress management skills and is referred to a local stress workshop.

The final objective of assessment could be to determine the suitability of the person to receive a new driving licence. Psychosocial measures collected at assessment seem unsuitable to make this judgement because they usually measure performance in terms of some mean value and use cut off points that are rather arbitrary. Physiological measures such as liver function and C.A.T. scans (brain picture) are more objective but very expensive.

4.6. Final Note

Finally a note on the use of community groups and organisations in running convicted drink driver programmes. Little use has been made of community organisations in running or financing such programmes as yet, although the problem of drink driving particularly in country areas, is a large one. With the likely continued decline of Government health personnel available for this field, the role of the drug and alcohol counsellor could change from face to face counsellor to trainer and developer of local community resources to combat the serious community problem of drug and alcohol impaired driving.

REFERENCES

1. Proceedings of the Institute of Criminology No. 33 (1977) A Diversion Programme for Drinking Drivers, Faculty of Law, Sydney.

2. Evaluation of Sydney Drink Driver Programme, N.S.W. Bureau of Crime Statistics and Research (in print).

3. Bush, R.A., Harris J. (1981) Drink Driver Programmes, Briefing Paper No. I Diversion Report 2/81. N.S.W. Drug and Alcohol Authority.

4. This approach is also recommended in the report, Alcohol, Drugs and Traffic Safety (1980). Report of the House of Representatives Standing Committee on Road Safety. A.G.P.S. Canberra.

5. N.S.W. Bureau of Crime Stats. op.cit. (No. 2).

6. Drink Driver Diversion Programme, N.S.W. Northern Metropolitan Health Region Study (in print).

7. Personal Communication: Dr. Pat O'Neill, Armidale Dependency Unit. New England Health Region.

8. Initiatives to support the development of health assessment methods of convicted drink drivers following a conference of programme organisers and researchers, sponsored by the N.S.W. Drug and Alcohol Authority in August 1981.

9. O'Neill P. (1976) "Alconfrontation" A.J.A.D.D. 3, 2: 43-44.

10. House of Representatives Report. op.cit (No. 4).

11. This type of community network approach was experimented with in the late seventies in Bankstown, N.S.W. run by students at N.S.W. University. They were enthusiastic about the approach and have lobbied for financial support to continue the project. N.S.W. Drug and Alcohol Authority File, DA372.

12. Brown R.A. (1979) Participant Evaluation of Two Alcohol Education Courses, Perceptual and Motor Skills 48, 577-578.

13. For commentary on public and health administration response to community problems see Buckle D.F. (1974) Preventative Mental Health Services in Hobson W (Ed). The Theory and Practice of Public Health, Oxford University Press. New York pp. 472-483.

14. Glaser F.B., Greenberg S and Barnett M (1978). A Systems Approach to Alcohol Treatment. Addiction Research Foundation, Canada.

15. Homel R. (1980) Penalties and the Drink/Driver A stud of 1,000 offenders Vol. 1. Main Report. Bureau of Crime Statistics and Research. N.S.W. Dept. of Attorney General and Justice.

16. Homel op. cit. (No. 15) pp.127.

17. Gibbs, J. (1975) Crime, punishment and deterrence. Elsevier Sci Pub., New York.

18. Ross H. (1977) Deterrence regained: The Cheshire Constabulary's Breathalyser Blitz. J of Legal Studies 6: 241-248.

19. House of Representatives Standing Committee of Drugs Alcohol and Road Safety. op. cit. (4)

20. Hendtlass T.N., Bock I.M. Ryan M.P., (1981) Drink Driving Counter Measures. Road Safety and Traffic Authority, Victoria.

21. West L.H.T. Hore T. (Ed) (1980). An Analysis of Drink Driving Research. H.E.A.R.U. Monash University Victoria. pp. 36-87.

22. Duncan J.A. (1976) Drinking and Driving by Canberra Motorists: A report as a survey of the effect of the introduction of the Breathalyser Legislation. A.G.P.S. Canberra.

23. A useful account of the inter relationship between these variables is contained in Londsale C.J. Stacey B.G. (1981) An Analysis of Drink Driving Research in New Zealand, Research Report No. 33, Dept. of Psychology, University of Canterbury, N.Z. Londsdale et al op.cit (23) pp. 27.

24. Dott A.B. & McKeley R.K. (1977). Influence of Ethyl Alcohol in Moderate Levels on the Ability to Steer a Fixed-Base Shadowgraph Driving Simulator, Human Factors 19(3) pp. 295-300.

25. Health strategies for the control of drugs related to traffic safety, Proceedings of a conference. W.H.O. and N.I.D.A. (1981). National Institute on Drug Abuse, Rockville, U.S.A.

26. Rankin J. (1967). The Effects of Alcohol on Driving Efficiency. Medical Journal of Australia, October.

27. Stated in Homel R. (1981) Motoring Offences as Crime: Some priorities for social and action research in Aust. J. of Social Issues. Vol. 16 No. 4 pp. 268-284.

28. Lukin J. (1980) Blood Alcohol Levels of Fatally Injured Drivers, Motorcyclists and Pedestrians, T.A.R.U. Dept. of Motor Transport N.S.W.

29. South D.R. (1980) Treatment Programmes for Drinking Drivers in Australia Potential and Limitations. Community Health Studies Vol. 4 No. 3 pp. 294-298.

30. Whitelock F.A., Armstrong J.L., Tonge J.I., O'Reilly J., Davison A, Johnston N.G., Bilcroft R.P., (1971) The Drinking Driver, Medical Journal of Australia, 2, pp. 5-16.

31. Jamieson K.G., Duggan A.W., Tweddell J., Pope L, Zuirbulis (1971) Traffic Crashes in Brisbane, Aust. Road Research Board Special Report No. 2.

32. South op. cit pp. 294.

33. West L.H.T., Hore T. op. cit (21) pp. 260-262.

34. Raymond A. (1980) paper presented at the 1st Pan-Pacific Conference on Drugs and Alcohol. Paper held at A.F.A.D.D. Library Canberra.

35. Eddy J. (1976) A D.W.I. Educational Programme. J of Drug Education 6 pp. 137-139.

36. McGuire F.L. (1978) The effectiveness of a treatment program for alcohol-involved driver in American J of Drug and Alcohol Abuse 5(6) pp. 517-525.

37. Maisto S.A, Sobell L.C., Zelhart P.T. Connons G.J., Cooper T. (1979) Driving Records of Persons Convicted of Driving Under the Influence of Alcohol. Journal of Studies on Alcohol Vol. 40 No. 1 pp. 70-77.

38. Nichols J.L. (1979) The Effectiveness of A.S.A.D. Education and Rehabilitation Programmes in Johnston (Ed) Proceedings 7th International Conference on Alcohol Drugs and Traffic Safety, A.G.P. Canberra pp. 622-629.

39. Drinking-Driver Diversion Programme, June 1976 - July 1978. Northern Metropolitan Health Region, N.S.W. (in print).

40. The Sydney Drink Driver Programme in fact limited intake to multiple recidivists and those with a B.A.L. reading above .15. The procedure has been generally followed elsewhere with some exceptions. For example referrals to the new Chatswood Programme accepts all offenders from North Sydney Court.

41. For some discussion on this point as it relates to the use of probation see proceeding of the Institute of Criminology Probation (1977). Faculty of Law., Sydney.

42. Hagen R.E., Williams R.L., McConnell E.J. and Fleming C.W. (1978) An Evaluation of Alcohol Abuse Treatment as an Alternative to Driver Licence Suspension or Revocation. Final report to the Legislature of the State of California, Division of Alcohol Abuse and Alcoholism.

43. Preusser, E.F., Ulmer, R.G. Adams J.R. (1976) Driver Record Evaluation of a Drink Driver Rehabilitation Programme J. of Safety Research 8, 3, 718.

44. Seth, R. (1980) Policy Implication of the N.S.W. Drink/Driver Rehabilitation Programme, paper delivered at 1st Pan Pacific Conference on Drugs and Alcohol, Canberra. February 26 March 1980.

45. Kerlan M.W. Mortimer R.G. Mudge B. and Filkins L.D. (1971) Court procedures for identifying problem drinkers. Vol 1 Manual. Highway Safety Research Institute, University of Michigan.

46. The most widely used of all alcoholism screening tests are described in Jacobon G.R. (1976). The Alcoholisms, Detection, Diagnosis and Assessment. Human Sciences Press. N.Y.

47. O'Neill. Alconfrontation. op. cit (9).

48. Two examples: The Northern Metropolitan Health Region Study, and Brown R.A. (1980) Knowledge about Responsible Drinking in Drinking Drivers and Social Drinkers. International Journal of the Addictions 15(8) 1213-1218.

49. Scoles P, Fine E.W. (1977) Short Term Effects of an Educational Programme for Drinking Drivers. Journal of Studies on Alcohol Vol. 38 No. 3 pp. 633-637.

50. Fine E.W., Steer R.A. Scoles P.E. (1978) Evaluation of a Treatment Program for Drink Driving Offenders in Galanter M. (Ed) Currents in Alcoholism Vol. VI. Grune and Stratton. New York. pp. 121-132.

51. Swenson P.R., Clay T.R. (1980) Effects of Short-Term Rehabilitation on Alcohol Consumption and Drink-related Behaviour. An eight month follow-up study of drink-drivers - International Journal of Addictions 15(6) pp.821-838.

52. Borkenstein R.F. (1971). The Drinking Driver - Strategy for Control in Kiloch L. and Bell D.S. (Eds). Proceedings of the 29th International Congress on Alcoholism and Drug Dependence. Butterworth, Sydney.

53. This adaptation was developed by an ad hoc group of Health Commission counsellors in N.M.H.R. and the author as part of planning an assessment/intervention matching programme.

54. Kern J.C., Schmelter W.R., Paul S.R. (1977) Drinking Drivers who complete and drop out of an Alcohol Education Programme, Journal of Studies on Alcohol Vol. 38 No. 7. pp. 89-95.

55. Brown R.A. (1979) Use of Michigan Alcoholism Screening Test with Hospitalized Alcoholics, Psychiatric Patients, Drinking Drivers and Social Drinkers in New Zealand. American Journal Drug, Alcohol Abuse 6(3) pp. 375-381.

56. Selzer M.L., Barton E. (1977). The Drunken Driver: A Psychosocial study. Drug and Alcohol Dependence 2, pp. 239-253.

57. Selzer M.L., Vinokur A., Wilson T.D. (1977). A Psychosocial Comparison of Drunken Drivers and Alcoholics. Journal of Studies on Alcohol Vol. 38, No. 7 pp. 1294-1312.

58. Bell R.A., Warheit G.J. Bell, Richard A, Sanders G. (1978). An Analytic Comparison of Persons Arrested for Driving while Intoxicated and Alcohol Detoxification Patients: Alcoholism: Clinical and Experimental Research Vol. 2. No. 3. pp. 241-248.

59. Steer, R.A., Fine E.W., Scoles P.E. (2979) Classification of men arrested for driving while intoxicated and treatment implications. - A Cluster-Analytic Study. Journal of Studies on Alcohol Vol. 40 No. 3 pp. 222-239.

60. McGuire F.L. (1980) "Heavy" and "Light" Drinking - Drivers as separate target groups for treatment. American Journal of Drug Alcohol Abuse 7(1) 101-107.

61. Argerion M. Manohar V. (1977). Treating the Problem Drinking Driver. Some notes on the time required to achieve impact: British Journal of Addiction Vol. 72(4). pp. 331-338.

62. McGrath T., O'Brien T., Liftik J. (1977) Coercive Treatment for Alcoholic 'Driving under the Influence of Liquor' Offenders: British Journal of Addiction Vol. 72 (3) pp. 223-229.

63. Homel op. cit pp. 3 No. 18.

64. Community Service Orders Act N.S.W. 1980.

65. Cowley J.C.P. Notes to a Health Education Conference. The author was former Director TACADE (U.K.)

66. Henderson M. (1972) Drink and Driving: Sociological Aspects. TARU 2/72 Dept. Motor Transport, N.S.W.

67. Robinson, C.D. (1977) Problems Facing Drink-Driving Counter-Measures: Aust. and N.Z. Journal of Criminology 10. pp. 53-59.

68. Mitchell R.E., Trichett E.J. (1980) Task Force Report: Social Networks as Medications of Social Support. Community Mental Health Journal Vol. 16(1) pp. 27-43.

69. Pokorny A.D., Kanas T, Overall J.E. (1981) Order of Appearance of Alcoholic Symptoms. Alcoholism, Clinical and Experimental Research Vol. 5 No. 2 pp. 216-220.

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