

The IDRS: A timely, effective and cost-effective way to support evidence-based policy-making

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Background to the development of the current IDRS

In 1994, Dr Grant Wardlaw was commissioned to prepare a report for the (then) Commonwealth Department of Human Services and Health in which he discussed the drug monitoring system in place in Australia prior to the current IDRS. This monitoring system collected data from two major sources: interviews with key informants (KIS) and indicator data sources.

Wardlaw's (1994) chief finding was that a monitoring system based on key informant and indicator data was deficient. In the words of Wardlaw: "*Modifications to (this system) were unable to overcome problems which had become apparent to both data producers and consumers. In particular, the anecdotal nature of the reporting system led to criticism of the reliability of the information supplied by the key informants*" (p.3). When comparing this system to the current IDRS, it is clear that all three components are required in order to avoid the project simply reverting back to a system similar to that deemed inadequate almost a decade ago.

The current IDRS

The strength of the current IDRS lies in its triangulation of data sources. In a recent review article, researchers from the United Nations Office of Drug Control and Crime Prevention and the European Monitoring Centre for Drugs and Drug Addiction argued that the presence of integrated information systems that combine a critical information processing function with the ongoing collection of data from *a variety of sources* will allow policy responses to be developed and implemented in an efficient and timely manner (Griffiths et al., 2000).

The collection of data from a variety of sources when monitoring drug use is important because each data source has inherent limitations. When a variety of data pertaining to the same issue is collected, the convergent validity (or the degree of consistency) of the data can be examined. This allows apparent trends to be reported with more confidence. As recommended by Wardlaw (1994), the data sources used by the IDRS to monitor drug trends were trialed extensively in Sydney in 1996. The strengths and weaknesses of each source of data were discussed in detail in the report of that trial (Hando et al., 1997).

The aim of Wardlaw's (1994) consultancy was "*... to consider the options for designing an improved IDRS*" (p.4). He argued that, among other things, an improved IDRS must ensure the comparability of the data collected. There is no doubt that, due to the nature of quantitative data and the consistency of methods across jurisdictions and over time, the IDU component of the IDRS provides the most comparable data (McKetin, 1999), data that

"... conform to the same standards of reliability and are collected according to common definitions or criteria" (Wardlaw, 1994, p.16).

Collection of comparable quantitative data

Each of the three sources of data collected by the IDRS is essential to providing a complete overview of trends in illicit drug markets. The quantitative IDU data allows the precise monitoring of changes in price, purity, availability and patterns of drug use. KIS data are the most sensitive measure of emerging drug trends (McKetin, 1999), but are less reliable and more subjective and impressionistic than IDU and indicator data, depending entirely on the specific group with whom KIS had recent contact. KIS are also less capable of providing specific data relating to purchases, prices and patterns of drug use than IDU, who report their own behaviours. Indicator data can act as a reliable and precise measure of a drug trend, but it is well recognised that they identify 'new' drug problems long after they first emerge (Stimson *et al.*, 1999).

In simple terms, it must be recognised that it is the participants of illicit drug markets themselves who are best able to provide information about those markets. It is important to note that the prices of drugs reported by IDU represent actual purchases of these drugs. They are thus not secondary estimates, or data reported from buy-bust operations, but primary data on purchases obtained from active participants in the drug market. Illicit drug users are clearly a crucial source for detecting changes in the cost or availability of their drugs. We can obtain this information on a second hand basis from KIS (experts who work with drug users), but it is also clear that the information provided firsthand from users is more up-to-date, more sensitive and more accurate than could be obtained from a second hand source.

Documenting differences in drug markets across jurisdictions

Conducting the entire IDRS in all jurisdictions in 2000 allowed the documentation of the widely differing drug markets across Australian jurisdictions. Inclusion of the IDU survey in all jurisdictions provided the IDRS with substantially greater power to detect trends in drug use in these jurisdictions, and proved that there is not a single Australian drug market; patterns of drug use that are problematic in one jurisdiction may not be observed in others.

For example, the IDU survey in TAS in 2000 demonstrated the high rates of methadone injection in that state, a phenomenon rarely observed in VIC. The IDU survey in the NT documented high rates of morphine injection, a behavioural pattern which occurs rarely elsewhere in the country. QLD was shown to have higher rates of amphetamine injection than all other jurisdictions, whereas the use of cocaine remained confined almost exclusively to Sydney. Without the IDU survey, these and numerous other findings could not have been quantified to the extent that they were in the 2000 IDRS. It is difficult to conceive of any other project that could have provided a similar breadth of information as that provided by the IDU survey for that relatively small cost. Without these data, the clear picture that has emerged from the 2000 IDRS on the different drug markets in each jurisdiction would have been lost, and the basis for detecting future trends substantially weakened.

Data delivered in a timely fashion

The consequences of not conducting regular, systematic monitoring of illicit drug markets would be that there would be less timely and less accurate information available on which to base evidence-based policy decisions. The timely manner in which IDRS data is provided to its consumers in the form of the quarterly *Drug Trends Bulletin* (distributed to approximately 950 agencies and individuals throughout the country) means that data collected from June to September are presented in November of the same year at the annual National Drug Trends Conference, in written form in summary in the December issue of the *Drug Trends Bulletin*, and then in detail in jurisdictional reports the following February and a national report in April. The data from the IDRS, and the interpretation of these data, are thus presented to policy makers in the law enforcement and health sectors on a regular and systematic basis.

The importance of maintaining continuity of data collection

The implementation and expansion of the IDRS has, for the first time, enabled regular, comparable data on illicit drug markets to be collected in Australia. The expansion of the full IDRS methodology has enabled cost-effective comparable data to be collected in all jurisdictions, and divergent state trends to be monitored. The continuation of the IDRS as a strategic early warning system will ensure that there is no loss of continuity in the monitoring of trends, and will enable the implementation of appropriate responses at both national and state levels to emerging trends in complex illicit drug markets. Without the IDRS, continuity would be lost, and the ability to detect trends in Australian drug markets substantially reduced.

The value of collecting data over time

The true value of the IDRS lies not in presenting a single snapshot that the data from one year provide, but in the establishment of baselines against which to compare future data and the monitoring of changes over time. For example, in 2000, low rates of cocaine use among IDU were recorded in all jurisdictions except NSW; however, this has begun to change in 2001 in the context of fundamental changes in the heroin market in Australia. Increases in availability and use of cocaine have begun to emerge in QLD, the ACT and VIC in 2001, and it is possible that these trends will continue in coming years, and spread to other jurisdictions as well. It is only through continued, systematic, regular data collection that a true, strategic 'early warning system' can operate.

The function of a strategic 'early warning' system

The detection by the IDRS of the sharp rise in the use of cocaine sustained in Sydney since 1998 was an excellent example of the operation of the IDRS as a *strategic early warning system*. The other major illicit drug monitoring system in Australia is Drug Use Monitoring Australia (DUMA), coordinated by the Australian Institute of Criminology. In 1999 and 2000, DUMA did not document significant cocaine use in the two Sydney sites included in the study; clearly, the IDRS and DUMA collect different data from different populations, and both are essential for complete monitoring of Australia's illicit drug markets. Without the broader data collection from the sentinel population of IDU interviewed in the IDRS, the trend of increased prevalence and incidence of cocaine injecting, with its significant implications for public health, would not have been documented in any detail.

Identifying issues which require further research

It was conceived during the development of the IDRS that the system would point to emerging trends of concern that required further, specialist research. Since its inception, a number of specialist studies have been conducted based upon trends identified by the IDRS, such as studies examining transitions between amphetamine and heroin use (Darke, Kaye & Ross, 1999), the use of antidepressants by IDU and the relationship between antidepressant use and heroin overdose (Darke & Ross, 2000), and the patterns of use and harms associated with cocaine use among IDU (Kaye, Darke & McKetin, 2000; Kaye, Darke & Topp, 2001).

Timely and cost-effective collection of additional data

A further benefit of regular IDRS data collection is in its provision of a vehicle to which additional data collections can be easily attached to address emerging questions of national or jurisdictional importance in reducing drug-related harms. For example, in the 2000 TAS IDRS, the views of IDU regarding needle and syringe availability programs were assessed in a module added to the core IDRS questionnaire. The information was presented in a COAG-funded "Statewide needs analysis for the state's Needle Availability Program (NAP)", and was critical in informing the recommendations of that report, which have been accepted by the NAP and are currently being implemented. Questions additional to the core questionnaire, assessing patterns of cocaine use and associated harms, have been administered for the last three years to IDU interviewed for the NSW IDRS who reported recent cocaine use. These constitute the most significant cocaine-specific data collected from this population in Australia.

As an example of additional data collected on a national level, in the 2001 IDRS, questions were added to the IDU survey in each jurisdiction to gauge the perceptions, length and effects of the heroin drought. The IDRS provides an opportunity to collect such additional data in a timely and cost efficient manner. This would not be the case if alternate funding sources had to be accessed by submission of a proposal in order to develop a new project from scratch.

Publication of results in peer-reviewed international scientific journals

In addition, a number of publications describing the IDRS methodology and results have been submitted to and published in international peer reviewed journals (Darke, Kaye & Topp, under review; Darke, Topp, Kaye, & Hall, in press; Darke, Topp, & Ross, in press; Fry & Bruno, under review; Hando, Darke, O'Brien, Maher & Hall, 1998; O'Reilly, Rysavy & Moon, 2000; O'Reilly, Rysavy & Williams, in preparation), evidence for the interest in both the methodology and results of Australia's monitoring system to an international audience.

The collection of IDU data in NSW over a five year period has enabled the analysis of long-term trends in that jurisdiction in the use of heroin (Darke, Topp, Kaye, & Hall, in press), the use of cocaine (Darke, Kaye & Topp, under review) and the injection of pharmaceutical products (Darke, Topp, & Ross, in press). The regular and systematic collection of comparable data from IDU enabled the latter paper to examine the effects of changes in NSW Government policy on the distribution of syringes and methadone take-away doses.

IDRS data may also be presented in the Australian Institute of Criminology series Trends and Issues in Crime and Criminology (Rushforth & Williams, under review; Williams, Carr, O'Reilly & Rysavy, under review; Williams & Losoncz, under review). The continuation of IDU data collection in all jurisdictions will enable the examination of national trends, as well as trends within jurisdictions, that will continue to have relevance for the research community as well as law enforcement and health officials.

Providing the basis for evidence-based policy making

The role of the IDRS is to provide the accurate information on which sound policy decisions must ultimately rest. For example, IDRS findings in recent years indicating the increased availability and use in Australia of potent forms of methamphetamine have made this a priority area for the MCDS and the Commonwealth Government. Although it is undoubtedly the case that other findings, such as those of the Drug Use Monitoring Australia (DUMA) project, would have suggested this as an area for concern, the IDRS provides different information to that provided by DUMA, including terminology, frequency of use, routes of administration, price, purity, purchase quantities and other data, collected from a non-forensic population.

The conduct of the IDRS in all states and territories in 2000 influenced the methodological development of the 2001 National Drug Strategy Household Survey, the latest in the triennial general population surveys of drug use in Australia. The 2000 IDRS clearly showed that the main drug injected in the NT is illicit morphine, a pattern of drug use that is different to all other states and territories. Given that, traditionally, much more has been known about drug use in the larger, eastern seaboard states than in the smaller jurisdictions, patterns of drug use that are typical in NSW or VIC have been assumed to be typical of all other jurisdictions, and the IDRS demonstrated that this assumption is not valid. The IDRS finding of the widespread use of morphine in the NT informed the development of the Household Survey questionnaire, and led to morphine being assessed separately to other opiates such as codeine and pethidine, which was not the case in previous Household Surveys.

Another example of the use of national IDRS data by policymakers was at the February 2001 meeting of the Australian Pharmaceutical Advisory Council subcommittee on the Intentional Misuse of Pharmaceuticals, in which the issue of intravenous benzodiazepine use (particularly of temazepam gelcaps) was the subject of considerable discussion. The IDRS is the only monitoring system in the country capable of providing in a timely fashion specialist data relating to such issues. These data were used by the Drugs Policy and Services division of the VIC Department of Human Services to develop a soon-to-be-implemented benzodiazepine injection education and prevention strategy to address the

diversion, misuse and injection of temazepam capsule contents. In the 2001 IDRS in both VIC and TAS, a supplementary module regarding benzodiazepine injection was administered to IDU, the results of which will provide further and more detailed information relating to this harmful practice.

Numerous examples are available in which IDRS data has been used to inform policymakers, health and law enforcement agencies, and the international research community. For example, the ACT Government's Health Department provided the following endorsement of the utility of the IDRS to the ACT IDRS Coordinator, Mr Paul Williams: *"We use the IDRS data regularly in our work in the Department. It is helpful to be able to see drug trends nationally and compare them to the ACT situation - it gives us some early warning of what issues might be heading for the ACT. The IDRS is useful in terms of determining where to focus our service purchasing priorities and is a good cross check of anecdotal advice that we receive on drug and alcohol issues in the ACT. We also cross check it against our service provider reports. So it is a good validation tool."*

In addition, policymakers in the ACT appear to be taking into account the findings and recommendations of the project. For example, the *ACT Drug Trends 2000* report recommended *"... an examination of the apparent acceleration in heroin use among indigenous people first identified by the ACT IDRS in 1998-99, and determination of the factors which contribute to their failure to access treatment services"*. In 2001, the ACT Government made available more beds for indigenous people; and the ACT Opposition Australian Labor Party has promised culturally appropriate treatment services if victorious in the elections to be held later this month.

In the NT, IDRS data formed the basis of the development of the current NT Government's 3 Point Plan in relation to drug use and abuse in the Territory. Local interest in the NT IDRS resulted in Dr Bridie O'Reilly presenting a 30 minute seminar at the Menzies School of Health Research for the House of Representatives Standing Committee on Family and Community Affairs Inquiry into substance abuse in Australian communities. Many staff from the Cooperative Research Centre for Aboriginal and Tropical Health also attended this presentation. Dr O'Reilly's publication in the *South Pacific Journal of Psychology* (see Reference list) sparked interest in both the NT and internationally and assisted in the success of the NT bid to take responsibility for producing the *South Pacific Journal of Psychology 2001 Special Issue*. This entire issue will be devoted to social and psychological aspects of drug use/issues in Northern Australia, South Asia and the Pacific Region. Dr O'Reilly is the Special Guest Editor in Chief of this special issue.

The NT IDRS has also allowed, for the first time, the incorporation of local data into a number of tertiary courses at Northern Territory University (such as the Graduate Certificate of Drug and Alcohol Studies, the Diploma in Human and Community Services, and various courses in social work and psychology), as well as in the TAFE sector (such as in Certificates 3 and 4 in Human and Community Services - Alcohol and Other Drugs). Prior to the implementation of the IDRS in the NT, these courses relied on national data relating to the use of illicit drugs, health, risk-taking and criminal activity. The IDRS clearly showed the disparate nature of illicit drug markets in Australia, and the theory and practical aspects of these courses are now informed by relevant local data.

The QLD Crime Commission has recently released two newsletters, one concerning the different forms of methamphetamine and the other concerning ecstasy, the preparation of which relied completely on IDRS data. In QLD, there has also been a change to the legislation concerning the manner in which police recruit 'informants'. All informants must now be registered and documented, with the result that there are fewer informants willing to work with police. The IDRS fills the vacuum created by this change in terms of keeping in touch with the 'grassroots'.

In SA, IDRS results have been widely disseminated to a broad audience in a series of special seminars presented by the former IDRS SA coordinator, Dr Rachel Humeniuk. Dr Humeniuk's seminars have been made to members of agencies such as SAPOL, the National Crime Authority, the Australian Bureau of Criminal Intelligence, the Department of Fisheries, the Australian Customs Service, the Australian Federal Police, the Department of Immigration and Multicultural Affairs, the Australian Taxation Office, the Australian Guidance and Counselling Association SA, the City Homelessness Assessment and Support

Team, the Statewide Nurses Action Group, the Douglas Mawson Institute of Technical and Further Education, and the South Australian Forensic Health Service.

In TAS, the Alcohol and Drug Services division of the Department of Health and Human Services has been requested to report to the State Government Cabinet Sub-Committee on Drugs every six months, producing a document entitled, "The Status of Injecting Drug Use in Tasmania". These documents rely heavily on IDRS data, and have influenced policy in a number of areas, including the Tasmanian State Methadone Policy 2000, and policies relating to the State's Needle Availability Program. Mr Raimondo Bruno, the TAS IDRS Coordinator, has also presented the findings of the IDRS to the TAS branch of the Australian Federal Police. The *Tasmanian Drug Trends 2000* report has been used extensively by the Australian Federal Police to guide their approach to operations in that jurisdiction.

It is also the case that prior to the implementation of the IDRS in TAS, policy decisions in that state were usually based on data collected from other, larger jurisdictions. The 2000 IDRS clearly demonstrated that the smaller jurisdictions such as TAS and the NT have patterns of illicit drug use that are substantially different to those jurisdictions that have the funding and dedicated bodies to conduct specialist drug research. Research findings that may well be irrelevant to the TAS context clearly cannot provide a sound basis for policy decisions.

The IDRS has for some years been a core data set for the *Victorian Drug Statistics Handbook*, published by the VIC Department of Human Services. IDRS data were used by the Drugs Policy and Services division of the VIC Department of Human Services in the development of a soon-to-be-implemented benzodiazepine injection education and prevention strategy. VIC IDRS researchers routinely provide information to the VIC Police Drug and Alcohol Policy Coordination Unit, constituting a key data source for the Regional Response Unit Illicit Drug Surveys in 2000 and 2001. Information is also routinely provided to the Public Health and Drug Treatment divisions of the VIC Department of Human Services. IDRS results were instrumental in signalling the need for the development of the VIC Department of Human Services training package *What goes up must come down: Responding to cocaine use - Cocaine preparedness and training package for alcohol and drug workers*.

The presence of four years of VIC IDRS data provided an appropriate context in which to present data from a specialist investigation of the characteristics and impact of the heroin drought, constituting meaningful, reliable and valid baseline data. Moreover, the 2001 IDRS results in VIC will document the state of the illicit drug markets in that state after the height of the drought. IDRS data thus greatly increase the interpretability of data collected within the specialist study. The results of the VIC IDRS have also informed the policy development activities of the Victorian Government Drug Policy Expert Committee, chaired by Professor David Penington, particularly the development of the Stage Two report, *Drugs: Meeting the Challenge*.

In WA, two of the Drug Issues Papers at the recent WA Community Drug Summit incorporated information from the 2000 IDRS: Issues Paper No. 7 - *Drugs and law enforcement, including consideration of the most appropriate legal framework for illicit drugs, diverting drug users into treatment and treating the most serious offenders in prisons*; and Issues Paper No 8 - *Reducing harm to the community and individuals caused by continued drug use*. IDU data from the WA IDRS has been used by researchers from the National Drug Research Institute as a comparison population for a study into service needs for Aboriginal injectors produced for the Health Department of WA. IDRS information is regularly compared with statistics generated by the WA Alcohol and Drug Information Service. Without these comparisons, ADIS staff would be largely unable to distinguish trends from seasonal variations. Education and research staff at Next Step Specialist Drug and Alcohol Service have used IDRS data in education sessions, and research staff have also incorporated the information into literature reviews.

The WA IDRS coordinators, Ms Kim Hargreaves and Mr Simon Lenton, have instituted 'roundtable' sessions with key stakeholders and consumers in their jurisdiction, in which IDRS data is presented and feedback collected. Participants in these round table sessions include representatives from the Crime Research Centre of the University of WA; Next Step

Specialist Drug and Alcohol Services; the Alcohol and Drug Information Service; the Alcohol and Drug Policy Branch of the Mental Health Division of the Health Department of WA; and the WA Drug Abuse Strategy Office.

Informal provision of information

In addition to these many examples of the formalised use of IDRS data by numerous consumers of the IDRS, it should also be noted that IDRS researchers from across the country regularly provide information on an informal basis to Commonwealth and State/Territory Government Departments, non-government organisations, and relevant concerned individuals. The provision of information in this manner is not formally documented but is of great value to bodies such as federal, state and territory health departments, law enforcement personnel, clinicians, doctors and other health professionals, researchers, pharmacists, solicitors, drug services and agencies, and drug users, among others. That such a broad range of people contact IDRS researchers is a clear indication that the IDRS provides information and knowledge that is presently impossible to supply in any other way.

Conclusion

The entire IDRS was successfully administered in all states and territories for the first time in 2000/01. The marked improvement in the quality of the data collected by the IDRS, particularly in terms of reliability and comparability, represents the outcome of a prudent investment by CDHAC and NDLERF in the future of the monitoring of illicit drug markets in Australia. That the methodology and results of the IDRS are of interest to a broad range of consumers, including law enforcement and health officials, policymakers, and the international research community, is a strong testament to the importance of this project, and the imperative of maintaining continuity of data collection in all jurisdictions in 2002/03 and beyond.

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