#### **EDITORIALS**

# Promoting community awareness of the link between illicit drugs and mental disorders

Anthony F Jorm and Dan I Lubman

## Getting the message right will help the public reduce their risk of mental illness

In the 2006–07 budget, the Australian Government announced expenditure of \$21.6 million over 4 years to improve community awareness of the link between using illicit drugs and the development of mental disorders. Community awareness programs to reduce the prevalence of unhealthy behaviours are nothing new; they have been around for decades for cancer, heart disease and infectious diseases. While campaigns focusing on the negative effects of drug misuse have already been delivered, this initiative breaks new ground. It will be the first large-scale campaign in Australia to tell the public what actions they can take to reduce their risk of developing mental disorders. Australia is not alone in this area, with both France and the United States launching campaigns in 2005 to alert the public to the potential link.<sup>1,2</sup> However, it is too early to know whether these campaigns have had any effect.

Probably the main reason that there have not been earlier campaigns on how to reduce the risk of mental disorders is a lack of evidence for causal links. How good then is the evidence that illicit drugs cause mental disorders?

First, there is substantial agreement that an association exists between early onset of cannabis use and later psychotic symptoms or disorder,<sup>3</sup> but there is ongoing disagreement regarding the causal basis of this association.<sup>4</sup> Clearly, cannabis use is "neither a sufficient nor necessary cause for psychosis",<sup>3</sup> but it may "unmask" psychotic disorders in individuals who are vulnerable. The timing of drug exposure may be particularly critical here, especially given recent evidence that a specific polymorphism of the *COMT* (catechol-O-methyltransferase) gene conveyed increased risk of later psychosis only if cannabis was consumed during adolescence.<sup>5</sup> Second, a number of studies have reported a modest association between early onset of regular cannabis use and later depression, although further research is required to determine whether this relates to a direct causal role or common psychosocial factors <sup>6</sup>

The evidence implicating other illicit drugs is more limited. Methamphetamine, which is rapidly growing in popularity in Australia, has been consistently associated with a transient psychotic state that is more common in people dependent on this drug. A growing body of literature suggests that a significant minority of those regularly using methamphetamine are also at risk of more entrenched patterns of psychosis.

While there is currently limited evidence of a direct causal relationship between illicit drug use and mental disorders, the issue becomes whether we can afford to wait and see if increasing early use of illicit drugs actually does lead to a rise in the incidence of mental disorders.

If a community awareness campaign is to be effective, it needs to be appropriately targeted. Initiation of illicit drug use typically starts in adolescence, and the evidence points to those with the earliest onset of drug use as being at greatest risk of subsequent mental disorders. A campaign targeting an early adolescent audience requires clear, coherent and credible evidence-based messages that are balanced and free from political dogma. The messages must also be delivered in a format that is appealing and

Principles of effective mass media campaigns<sup>9</sup> and possible applications to a campaign promoting awareness of illicit drugs as a risk factor for mental disorders

Carry out preliminary research with the target audience

 Carry out qualitative research with young people to help design the campaign and to get feedback about the effectiveness of messages.

Use a theory to give the campaign a conceptual foundation

There are several relevant theories of behaviour change, including
the transtheoretical model (which specifies how to communicate
with people who are at various stages of readiness to change)<sup>10</sup>
and the theory of planned behaviour (which looks at how
behaviour is influenced by a person's attitudes and those of the
people closest to them, and whether the person believes that the
behaviour is under volitional control).<sup>11</sup>

Segment the audience into subgroups of people whose message preferences are similar to one another

 Potential audience subgroups might include: young people currently using illicit drugs, adolescents not using drugs, people with a personal or family history of mental disorders, and parents.

Design messages that are targeted to the audience subgroups

 Messages need to appeal to each group. For example, messages for young people might need to avoid preaching, use suitable role models, and include features such as humour, novelty and a fast pace.

 ${\it Place messages through appropriate media}$  that are widely used by the audience

 The appropriate media may be quite different for each group (eg, the Internet or youth radio might be more appropriate for young people than for parents).

Conduct a process evaluation to see that the messages reach the

 Surveys should be conducted to ensure that the messages have reached the target audiences with a high frequency of exposure.
 The approach should be changed if an audience is not being reached.

 $\label{thm:continuous} \textit{Evaluate outcomes} \ \text{to find out whether the campaign caused any changes in target audience behaviour}$ 

 Measure changes in attitudes towards the link between drug use and mental disorders, as well as changes in drug use. Evaluate the effects using a staggered roll-out, with some regions used as controls, or a time-series design, which involves multiple measures before, during, and after the campaign.

#### **EDITORIALS**

meaningful to adolescents and informed by current trends in media and information technology. This might include web-based campaigns and the development of related Internet sites. Whether the campaign also focuses on providing information for parents will need to be determined, as this would require a complementary set of relevant information and materials.

Mass media campaigns in other areas of health have typically had very little effect, including when drug misuse prevention has been the goal. In many cases, the weak effect has been due to campaigns being insufficient in intensity. Nevertheless, there are lessons that can be learned from earlier campaigns and these need to be applied (see Box). Given that the campaign discussed here will be the first to address risk of mental disorders, it needs to be well evaluated, either through a staggered roll-out in which some regions serve as controls, or through a time-series analysis in which there are repeated measurements over time — before, during, and after the campaign.

As the first of its kind in Australia, it is important that this campaign is done well. A bad start could set back a field with considerable potential. Reducing the prevalence of risky behaviours, like illicit drug use, is not the only approach. It is also possible to promote positive actions that all individuals can take to reduce their risk of mental disorders. <sup>12</sup> Campaigns that focus on educating the public about other effective preventive strategies (eg, exercise) should also be a clear priority, similar to other areas of health policy. Indeed, we have good evidence regarding psychosocial factors that increase risk for both substance misuse and mental disorders, and we need to communicate this information to the wider community. We envisage a future in which the public will know as much about how to reduce their risk of mental disorders as they currently do about how to reduce their risk of cancer and heart disease.

## **Competing interests**

Anthony Jorm is a member of the Expert Panel advising the Tasmanian Illicit Drugs and Mental Illness Awareness Campaign.

### **Author details**

Anthony F Jorm, MPsychol, PhD, DSc, Professorial Fellow Dan I Lubman, PhD, FRANZCP, FAChAM, Senior Lecturer ORYGEN Research Centre, University of Melbourne, Melbourne, VIC. Correspondence: ajorm@unimelb.edu.au

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