

## Use And Misuse Of Medicines And Drugs

1998

### 1. Introduction

In medical practice, the therapeutic use of chemical substances has been of great benefit to patients and the community. However, inappropriate use of chemical substances can have significant detrimental consequences.

Certain substances are associated with psychotropic properties, that is, they are capable of modifying mental activity.<sup>1</sup> For this reason, many such substances are used for recreational purposes. In some individuals, recreational use develops into dependence and abuse.

The use of many substances is regulated by legislation, which makes some substances illicit. In turn, this may result in criminal and other undesirable activities associated with the supply and use of those substances.

**The following definitions are used in this statement:**

**Substance misuse:** "The intentional or unintentional use of a chemical substance in a manner for which it was not designed."<sup>2</sup>

**Substance abuse:** "A maladaptive pattern of substance use manifested by recurrent and significant adverse consequences related to the repeated use of the substance or substances."<sup>2</sup>

**Substance dependence:** "A cluster of cognitive, behavioural, and physiological symptoms indicating that the individual continues to use the substance despite significant substance-related problems. There is a pattern of repeated self-administration which usually results in tolerance, withdrawal, and compulsive drug-taking behavior."<sup>2</sup>

**Tolerance:** "The need for increased amounts of the substance to achieve the desired effect, or a markedly diminished effect with continued use of the same amount of the substance."<sup>2</sup>

**Withdrawal:** "A maladaptive behavioural change, with physiological and cognitive concomitants, which occurs when blood or tissue concentrations of a substance decline in an individual who has maintained prolonged heavy use of the substance."<sup>2</sup>

**Compulsive drug taking behaviour:** "The individual's continuing use of a substance despite experiencing significant substance-related problems."<sup>2</sup>

### 2. Use of Prescribed Medicines

Prescribed medicines have been of great benefit to mankind. Medical research has provided many potent and life-saving medicines. However, all medicines can have unwanted effects. Further, the misuse and abuse of medications constitutes a serious and widespread personal and public health problem.

#### 2.1 Side-effects

Medical practitioners should ensure that patients are aware of the relevant side-effects of medications.

#### 2.2 Medication interactions

Interactions between medications may cause morbidity and mortality. Medical practitioners, the pharmaceutical industry and governments should together utilise

information technology to minimise predictable detrimental interactions and to identify other potential interactions. Medical practitioners should ensure that patients are aware of the relevant interactions between medications.

### **2.3 Resistant pathogens**

The injudicious prescription of antibiotics may lead to the development of resistant pathogens. Medical practitioners should ensure that the use of these agents is confined to clinically relevant circumstances.

The widespread use of antibiotics in agriculture leads to the development of resistant organisms which can adversely affect animal and human health. The use of antibiotics in this way should be minimised, documented and monitored.

### **2.4 Adherence issues**

When prescribing medications, medical practitioners should select the most appropriate alternative, taking into account the ability of the patient to adhere to the dosage regimen. Some patients may, either unintentionally or deliberately, not adhere to recommended regimens.

#### **2.4.1 harm-minimisation**

Medical practitioners should be aware of the potential for self-harm when prescribing for some patients, and should use the safest possible agent. When prescribing medications, medical practitioners should select the most appropriate medication and consider alternative approaches to dispensing, taking into account the ability of the patient to adhere to the regimen.

### **2.5 Iatrogenic tolerance/dependence**

When prescribing medications which may lead to dependence, the lowest effective dose should be prescribed for the shortest duration possible. The development of tolerance and dependence should not be a therapeutic concern in palliative care. When prescribing sedative, opioid and some psychotropic medication, medical practitioners should be aware of the possibility of the development of tolerance, dependence and withdrawal. The development of dependence requires systematic management.

### **2.6 Non-medical abuse of prescribed medications**

#### **2.6.1 performance-enhancing medications**

The prescription of medically unnecessary performance-enhancing substances is unethical.

#### **2.6.2 prescription-shopping**

In this context, what is known commonly as "doctor-shopping" is in fact prescription-shopping. This behaviour is characterised by patients consulting many medical practitioners, with a view to obtaining prescription medication, which is not needed for that patient's medical care.

When a medical practitioner is approached with such a request by a patient who is assessed to be a prescription shopper, the request should be refused. The aim of identifying prescription-shoppers is to treat the patient's underlying medical problems.

Patients who are identified as prescription-shoppers (doctor-shoppers), as defined by the Health Insurance Commission (HIC), should be counselled by the HIC as to

their excessive use of medical services and pharmaceutical products. The HIC should suggest to such patients that they nominate a principal practitioner. If there is a principal practitioner, the patient's permission should be sought, and that practitioner notified regarding the patient's excessive use of medical services and pharmaceutical products. If the patient refuses to nominate a principal practitioner, the HIC should notify the patient that the HIC will contact all relevant practitioners regarding the patient's excessive use of medical services and medicines.

### **3. Non-prescribed substances**

#### **3.1 Unorthodox "medicines"**

There is a community perception that the use of unorthodox "medicines", such as herbal and other "natural" substances, is unlikely to be harmful. However, serious illness and death have been associated with the use of some of these substances. Some have been shown to be contaminated with toxic substances.

The manufacture of unorthodox "medicines" is not subject to the same stringent regulations that apply to scheduled medicines. The manufacturers of unorthodox medicines should be required to adhere to the same standards as the pharmaceutical industry with respect to purity, labelling and consumer product information. A centralised system to allow the reporting of adverse reactions to unorthodox "medicines" should be established.

Continued research into unorthodox "medicines", to establish their possible use and safety, is required.

#### **3.2 Over-the-counter medications**

Over-the-counter medications are available without a prescription. Some are available only in pharmacies. It is the responsibility of the person dispensing over-the-counter medications to ensure that adequate documentation and procedures are in place in order to detect the abuse or misuse of such medications. Government authorities are scheduling an increasing variety of substances as over-the-counter medications. This should occur only where there is demonstrated safety in dispensing the medication by this method. Those dispensing over-the-counter medications should consider the possible need for a medical practitioner to monitor the illness, for example asthma, for which the over-the-counter medication is being provided.

#### **3.3 Non-medicinal substances**

The use of non-medicinal substances (eg. petrol, adhesives) to produce intoxication is highly dangerous. Factual information on this practice should be made available to patients and their relatives, health professionals and retailers of products which might be bought by people intent on misusing them.

### **4. Proscribed (illicit) drugs**

#### **4.1 General**

The increasing misuse of, and dependence on, drugs other than tobacco and alcohol, require flexible and comprehensive strategies directed at reducing demand for such drugs. In the interest of best patient care, testing for blood-borne viral illnesses should be offered to injecting drug users. Individuals who know they have a blood-borne viral infection have a responsibility to inform their medical practitioners of their condition.

## **4.2 Dependence on illicit substances (drugs)**

Users of illicit substances need information on the adverse psychological and physical outcomes associated with their use. This information should include advice on prevention of disease transmission. The physical and social consequences of continuing dependence should also be explained to users.

Medical practitioners should be aware of patterns of substance abuse, including polysubstance abuse with or without alcohol. Appropriate information regarding such abuse should be available to patients. Medical practitioners should familiarise themselves with the signs, symptoms and emergency treatment of abusers of illicit substances.

### **4.2.1 stimulants**

There has been an escalation in the use of stimulants for recreational purposes, which has led to an increasing number of sudden deaths in young people.

### **4.2.2 opioids**

Appropriately organised opioid substitution programs should be available throughout all Australian States and Territories including correctional facilities.

Governments should continue to sponsor research to identify methods of detoxification and of the maintenance of post-detoxification independence from opioids. The results of such research should be published in peer-reviewed journals. The AMA supports appropriately designed trials to investigate the use of prescribed heroin in the management of heroin dependence.

### **4.2.3 hallucinogens**

Hallucinogen use has the potential to cause organic brain syndromes and severe hepatic and renal damage. People predisposed to mental illnesses are particularly prone to the effects of these substances, which can precipitate episodes of mental illness.

### **4.2.4 cannabis**

#### **4.2.4.1 the consumption of cannabis**

There is adequate evidence that cannabis is an intoxicating substance which can cause physical, psychological and social harm, both to users and to others. Any measures, particularly educational programs, which are proven to reduce cannabis use should be supported. Resources should be allocated to the investigation of the toxinology of cannabis with reference to the detection of quantities indicating impairment.

In susceptible individuals, the use of cannabis may precipitate episodes of mental illness.

#### **4.2.4.2 penalties associated with cannabis use**

Due to the health consequences of imprisonment, the AMA considers that prison sentences are generally inappropriate for offences related to the use, or the possession for personal use, of small amounts of cannabis. The court's response to an individual who has offended by using, or by possessing for personal use, a small amount of cannabis should be graded as follows:

- for a first offence, a non-custodial sanction and provision of information and education, without criminal conviction; and
- for subsequent offences, a non-custodial sanction, assessment and referral to a diversionary educational programme.

To minimise the social harm to a person which arises from a criminal record, the AMA recommends that, in relation to use, or possession of, small amounts of cannabis for personal use, a criminal conviction should be recorded for repeat offenders only.

#### **4.2.5 sedatives**

Prescription sedatives, especially short-acting sedatives, are increasingly being used recreationally and sold illegally. Medical practitioners should prescribe these medications in limited circumstances only.

#### **4.3 Polysubstance use/dependence**

Medical practitioners should be aware of the common association of multiple illicit substance use with chronic physical illness.

#### **4.4 Role of health professionals**

Education on substance abuse related problems should be included in the undergraduate and postgraduate training for all health professionals. Medical practitioners should be aware of the potential of certain medicines to lead to dependency or abuse, and should consider this possibility when prescribing. Patients suffering from substance abuse or dependence should be appropriately treated or referred for expert care. A range of treatment and rehabilitation services for substance abusers should be readily accessible. The high incidence of substance abuse related problems in correctional service facilities should be recognised and substance rehabilitation services should be provided within them.

### **5. Sanctioned Social Substances**

#### **5.1 General**

Tobacco and alcohol are the most widely abused substances; therefore, they must be included in any consideration of substance abuse.

#### **5.2 Tobacco**

##### **5.2.1 general**

In order to reduce the disease, disability and premature death caused by smoking, the AMA is committed to achieving a reduction in the number of individuals who smoke. To achieve this objective, the following actions are necessary:

- change of the social climate, so that smoking is no longer viewed as desirable or tolerated as normal, but is rejected as unnecessary, hazardous and offensive;
- change of the economic and legislative climate, so that cigarettes are less readily available, the influences which promote smoking cease, and educational programs on the hazards of smoking are supported and reinforced; and
- ensuring the right of non-smokers to smoke-free air.

Tobacco smoking, which kills many thousands of Australians each year, and is responsible for ill-health in many more, needs to be universally recognised as one of Australia's major drug problems. Life, sickness and disability insurance companies should offer reduced premiums to non-smokers.

#### **5.2.2 smoking by 'role models'**

Smoking by teachers, staff, pupils and visitors on or in the immediate vicinity of school premises should be discouraged because of the influence of such behaviour on the early development of smoking habits in children. Medical practitioners and other health professionals should not smoke in public. Incidental product placement, in television programs, movies etc, should be acknowledged at the beginning of the program and should receive a rating which does not allow the program to be shown when people under 18 years of age are able to view the program.

#### **5.2.3 promotion by tobacco companies**

Sporting and other healthy pursuits should not be sponsored by tobacco companies or be seen to promote smoking directly or indirectly. Tobacco products should be not be promoted at the point of sale. The Commonwealth Government, and State and Territory Governments which have not already done so, should enact legislation restricting tobacco advertising and promotion, and tobacco company sponsorship of sporting and other events. Local governments should restrict tobacco advertising and promotion in areas under their control. Governments and the police forces have a responsibility to enforce the law regarding the sale of tobacco products to minors. This enforcement should be publicised.

#### **5.2.4 research**

Further research should be conducted into the reasons why people commence smoking, into methods to help smokers to cease smoking and into the social and economic cost to the community of the ill-effects of smoking on health.

#### **5.2.5 the responsibility of medical practitioners**

Medical practitioners have a responsibility, by example and precept, to encourage non-smokers to remain non-smokers, and to encourage smokers to quit smoking. Medical practitioners have a responsibility to advise their patients on the risks of smoking, to assist them to quit smoking, and to co-operate with community education programs to discourage smoking.

It is inappropriate for medical research to be directly funded by the tobacco industry. If a researcher undertaking research into smoking-related issues has accepted funding from a tobacco company, it should be mandatory to detail the amount and the precise source of funding in the preamble to any presentation of material developed as a result of that research.

#### **5.2.6 environmental tobacco smoke**

Passive, sidestream or environmental tobacco smoke is deleterious to health. Smoking should be prohibited in all public areas, including all indoor workplaces, restaurants and public transport.

### 5.2.7 taxation

Commonwealth, State and Territory Governments should be encouraged to make repeated real increases in the rate of tobacco taxation, setting aside the resulting revenue for health promotion activities and a National Health Promotion Foundation.

Tobacco products should be removed from the list of goods used in calculating the consumer price index.

**5.2.8** Nicotine should be subject to the Uniform Scheduling of Drugs and Poisons and hence the Poisons Acts in each State and Territory.

**5.2.9** Tobacco products should not be imported into, or sold in, Australia duty-free.

### 5.3 Caffeine

Medical practitioners should recognise problems associated with caffeine use, including overuse and withdrawal.

### 5.4 Alcohol

See the AMA Position Statement on *Alcohol Consumption and Alcohol-Related Problems*.

## 6. Non-sanctioned naturally occurring plant or animal substances

Varieties of fungi, cacti, animal toxins and plants can be used for intoxication. Intoxication with most of these substances can result in the development of acute brain syndromes. Medical practitioners should be aware of the sporadic misuse of these substances which requires—an educative and supportive approach.

## 7. Chemical substances and the environment

Substances used in agriculture and for domestic and industrial purposes are potentially toxic to the environment through:

- contamination of water supplies;
- residues in the animal and human food chains; and
- pollution of the atmosphere.

In each case, there is a potential for human health to be adversely affected. Medical practitioners should advocate the maintenance of strict quality control of air, water and food supplies to ensure the maintenance of a healthy ecology for the sustenance of human life.

## 8. Research (also refer to AMA Position Statement on Health and Medical Research)

Further research is needed into the effects of medications and of illicit substances in relation to driver's ability to control motor vehicles and in relation to road trauma.

The development of appropriate strategies, and the evaluation of their efficacy, are dependent upon data, which are presently inadequate, on the causes, extent and effects of substance misuse and abuse in Australia. Steps should be undertaken urgently to acquire the necessary data.

In the long term, changing the attitudes of society through education is more effective than law enforcement. More research is required into the methods of education about substance misuse and abuse, and into the evaluation of those methods.

**References:**

1. adapted from Miller-Keane (1992). *Encyclopedia and Dictionary of Medicine, Nursing, and Allied Health*. 5th edition. Philadelphia, WB Saunders Company.
2. adapted from American Psychiatric Association (1995), *Diagnostic and Statistical Manual of Mental Disorders*, 4th edition, Washington DC.

**Addendum approved by Executive Council 28 June 2001****Direct to Consumer Advertising**

*A position of the Australian Medical Association, the Pharmacy Guild, and the Pharmaceutical Society of Australia as members of the Joint Medicines Working Party.*

The Joint Medicines Working Party is opposed to Direct to Consumer Advertising of prescription medicines being introduced into Australia. The Joint Medicines Working Party recognises that most people need and want more information about medicines and health, but they do not believe the information vacuum can or should be filled by advertising messages and linked with promotional activities.

Direct to consumer advertising of prescription-only medicines (DTCA) is legal in only the United States and New Zealand. However, the European Commission is considering proposals for legalisation and in Australia the *National Competition Review of Drug, Poisons and Controlled Substances Legislation* has raised the issue.

The Joint Medicines Working Party opposes DTCA being introduced at present, because although there is very limited evidence relating to the Australian scene, overseas experience indicates that public benefits are unlikely. In general, DTCA is likely to increase drug use with increased costs to health care systems, but there is no evidence that this would be rational and effective drug use, in accordance with Quality Use of Medicines principles. DTCA is likely to promote use of drug therapies over alternatives such as lifestyle changes and non-drug therapies. Most of the advertising in the USA is for a very small number of products, so as an information source to consumers it is very selective and very limited. It is unlikely that cheaper drugs with lower profit margins will be promoted by DTCA even if these are first line treatments. It would be likely to push up other health care costs.

DTCA could impact on patient-doctor relationship in a negative manner. A patient may inappropriately request medicines the doctor is not happy to prescribe. If the patient is convinced they need/want the medicine they may go to another practitioner.

**More Information Needed**

There is an overwhelming lack of information to inform the debate about DTCA in the Australian health setting. However, in this information vacuum, it is very important not to introduce a new system that has the potential to undermine rational and effective drug use, the doctor-patient relationship and the Australian pharmaceutical manufacturing industry. It is also important to observe the impact of the recently introduced Therapeutic Goods Advertising Code on S3 products, before the consideration of the introduction of DTCA in Australia.

Reproduction and distribution of AMA position statements is permitted provided the AMA is acknowledged and that the position statement is faithfully reproduced noting the year at the top of the document.