

# A review of attitude of medical professionals toward substance abuse

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## ***Abstract***

The Accident and Emergency Department is the location where emergency life support is provided for critically ill patients. However, given the current increasing trend of substance abuse among young people in Hong Kong, medical professionals have become key persons in the provision of care for those persons exhibiting problems related to use, including overdoses. Lack of awareness and understanding of substance abuse among service providers may hinder the access and treatment of many substance abusers. Service providers may be exposed to biased and uninformed beliefs and attitudes regarding substance abuse. It is important that medical professionals have a positive attitude toward substance abuse the same as toward other medical problems. This review paper provides an overview of the attitudes of medical professionals toward substance abuse.

## ***Introduction***

Substance abuse is an escalating problem in the world, especially among teenagers and young adults. Lifestyle-related illness accounts for half the annual mortality rate in the United States and alcohol and drugs account for half of it (25% of annual deaths) (McGinnis & Foege, 1993), implying a great need for health professionals to identify and treat substance-abusing or addicted persons. All substances of abuse (including alcohol) are associated with risky sexual activities (Morrison et al, 1998) and criminal behaviours (Poldrugo, 1998). Factors influencing the under-diagnosis of substance abuse may emerge from personal (Waller & Casey, 1990) or societal biases (Chappel, 1993), deficient medical education about addiction (American Medical Association Council, 1972), false perception of poor response to interventions (Klamen & Miller, 1997), and third-party-payers' pressure on physicians to attend to more patients in less time (McArthur & Moore, 1997). With an increasing trend of substance abuse among young people, medical professionals have become key persons in the provision of care for those persons exhibiting problems related to use, including overdoses.



### ***Background of the Problem***

Substance abuse and substance abusers stir up complex responses in society. On the one hand, stigma, rejection, and punitive responses to “addicts” and “alcoholics” are common. On the other hand, lack of awareness and understanding of substance abuse results in many substance abusers remaining undetected and untreated. Both of these responses make it difficult for substance abusers to recover and successfully integrate into the community. Service providers are likely to be exposed to biased and uninformed beliefs and attitudes regarding substance abuse. It is assumed that education and clinical supervision address these biases, but this is not always the case. Professionals may be unaware of the biases and attitudes they have assimilated from larger society. Significant barriers to substance abuse treatment are in the identification/outreach phase and the treatment phase of services. This paper provides an overview of the executive review of attitudes of medical professionals toward substance abuse, a preliminary discussion of this literature, as well as recommendations for actions in the field of research, education and practice. In this paper, substance abuse refers to the abuse of alcohol and illicit drug.

### ***Attitude Structure***

The attitude of an individual consists of three components, namely cognitive, affective and behavioural. The cognitive component includes beliefs, facts and information about the object. The affective component describes the emotional reactions toward an object and the behavioural component includes the behaviour associated with the object. These three components are interrelated. Individuals’ behaviours are influenced by their feelings (affective) and beliefs (cognitive). In addition, the cognitive and affective components of individuals are influenced by some external factors such as culture, religion, education, and past experience (Baron & Byrne 1977).

Historically, the social scientific study of attitude has focused on the general relationship between attitude and behaviour. Social science researchers are interested in determining the degree of “connectedness” between what we are and what we do. Psychologists such as Allport and Bandura would agree that any attempt to define attitude could be a little complex because attitudes are not observable. Antonak and Liveh (1988) estimated that there were as many as 500 published definitions of attitude. As Baron and Byrne (1977) have indicated, studying and understanding attitude is important for three major reasons: 1) attitudes guide our thoughts; 2) attitudes influence our feelings; and 3) attitudes affect our behaviour (Myers, 1990).

There are several theoretical propositions regarding the topic of attitude formation. Fishbein and Ajzen (1975) presented the concept that attitudes are formed by information processing, and they developed from those beliefs that people have about the attitude objects. Another investigation (Arvey et al, 1989) introduced a genetic basis for attitudes after the finding that identical twins raised in different environments have similar attitudes. According to Myers (1990), despite these findings, the theory that attitudes are earned through mere exposure, conditioning, and socialisation is more widely accepted by the psychologists and social scientists. Socialisation refers to the acquisition of language, values, and attitudes progressively through reinforcement, observation, and learning processes. In addition, Myers (1990) reported that attitudes could be acquired from others through social learning in the form of classical conditioning, modelling, and direct experience. In turn, attitude's capacity can predict later behaviour.

Various studies have shown that many health professionals have negative views of drug users and are reluctant to work with them. Disapproving attitudes have been identified among general practitioners (Roche, Guary & Saunders, 1991; Greenwood, 1992) and psychiatrists (Tantam *et al.*, 1993). Factors accounted for this unwillingness to be involved with drug users include attitudinal factors, occupational constraints, and a lack of motivation to learn about drug-related issues (Albery *et al.*, 1996).

### ***Literature review of medical professionals***

#### ***Primary Care Settings***

There are numerous studies documenting the failure of primary care settings to identify and differentiate individuals who use, abuse, or are dependent on substances (Hack & Adger, 2002). General practice had been recognised as a suitable place to treat patients with substance misuse problems (Cohen et al., 1992; Gossop et al., 1999; Gruer et al., 1998). On the other hand, Greenwood (1992) stated that GPs may have difficulties in establishing rapport with substance misusers, fears of censure for irresponsible prescribing and concern that substance misusers will put off other patients. Addiction may not be seen as a medical problem and so it is not considered as a legitimate part of general practice (Abed & Neira-Munoz, 1990).



In UK, Abed and Neira-Munoz (1990) reported that the majority of GPs were prepared to help substance addicts despite the following findings: (a) most GPs agreed that substance addicts were unreliable patients; (b) most believed that the problems addicts experienced were of their own making; and (c) the vast majority did not consider substance addiction to be a medical problem.

Owens et al. (2000) found that many general practice nurses are also lacking the knowledge to give appropriate advice in alcohol misuse. The issue of training of practice nurses has been addressed (Atkin et al, 1993). A major problem to overcome is that the background and qualifications of practice nurses vary widely (MacKereth, 1995). Additionally, the role of practice nurses varies from running health promotion clinics to treatment of acute and chronic diseases (Mungall, 1992; Jewell & Turton, 1994). Practice nurses are an under-utilised resource for the management of alcohol misuse in the community (Deehan et al., 1998), and their involvement needs to be encouraged.

In Australia, general practitioners often pay little attention to substance abuse problems. It has been well documented that medical practitioners hold negative, stereotypical views about drug-using patients, especially those using illicit drugs (Jacka et al., 1999; Roche 1997; Glanz 1993; Zweben 1991). Moreover, interventions in this area are not always recognised as a legitimate clinical business. These perceptions make it less likely that interventions with drug-using patients will occur. Interventions with substance abuse patients can indeed have low returns.

## ***Emergency Rooms***

### *Illicit Drug*

Emergency rooms (ERs) are well known to be highly involved with substance-using individuals, and there has been significant progress in getting ER physicians and nurses to perform screening and brief interventions with alcohol- and drug-involved individuals (Klein et al., 1999). Hence, many adolescents use the ER as their primary source of medical care.

In turn, alcohol- and drug-related medical problems are major reasons for adolescent ER use (Mader et al 2001). In addition, the Drug Abuse Warning Network reported a 17% increase between 1999 and 2001 in adolescent, drug-related ER episodes (Substance Abuse and Mental Health Services Administration 2003). Moreover, more and more people are coming to the emergency department.

The Hospital Authority (HA) in Hong Kong records a total of 2,380,064 ED visits in 2002/03 (HA Statistical Report 2002/03). However, drug overdose cases represent a small proportion of the total emergency room cases. (Table 1)

	2001	2002	2003	2004
Heroin	33	36	18	16
Ice	9	9	4	6
Ecstasy	26	12	2	4
Ketamine	20	28	18	6
Cocaine	3	2	1	5
Psychotropic Drugs	23	26	22	22
Cocaine	3	2	1	5
Unknown	176	125	70	67
Total	296	239	136	138

*Note:* The total number of Major Type of Drug Abused may exceed the total number of persons attending A&E as the person may have abused more than one type of drug. Source: Narcotics Bureau, Hong Kong Police Force

Meanwhile, the American Drug Abuse Warning Network (DAWN) reported that, over the past nine years, drug-related A&E visits and associated drug mentions grew at roughly twice the rate of total A&E visits. From 1994 to 2002, A&E visits related to drug abuse rose 29%, while total A&E visits rose 15%. DAWN found that the following “club drugs” (GHB (gamma hydroxyl butyrate), Ketamine, LSD and MDMA (ecstasy)) collectively were involved in about 8,100 emergency department visits in 2002. Most of the patients in club drug related emergency department visits were under age 26: 56% of GHB, 68% of Ketamine, 75% of MDMA, and 76% of LSD related emergency department visits. Table 2 lists the number of Phencyclidine (PCP) mentions by metropolitan area and years 1994- 2001.



Table 2

*Number of PCP mentions in DAWN Emergency Departments in major city*

Metropolitan Area	1994	1995	1996	1997	1998	1999	2000	2001
Chicago	780	873	537	468	352	631	1,003	874
Los Angeles	1,098	1,266	709	696	605	731	823	990
New York	852	697	229	261	256	278	237	203
Philadelphia	431	596	367	481	573	580	604	785
San Francisco	131	89	158	122	67	62	70	76
Washington, DC.	1,301	868	347	212	152	176	317	525

*Note:* These estimates are based on a representative sample of non-Federal, short-stay hospitals with 24-hour emergency departments in the coterminous U.S.

*Source:* Office of Applied Studies, SAMHSA, Drug Abuse Warning Network, 2002 (09/2002 update).

### **Alcohol**

On the other hand, Chung et al. (2003) revealed that nurses working in local ERs in Hong Kong tended to have negative attitude when working with alcoholic patients. Such attitude could be associated with job satisfaction, job motivation, role adequacy, role legitimacy, and task-specific self-esteem. Similar finding was also reported in Cooper's (1994) work. He also suggested that it would cause nurses to have great anxiety if they lacked sufficient skills and information to tackle alcoholic cases.

### **Physicians**

On alcohol abuse Halpern-Felsher et al. (2000) showed that physicians provided education about the risks of alcohol use to an average 69% of their adolescent patients who were screened positive for using alcohol. The attitudes and beliefs of physicians are amenable to change (Ozer et al., 2000; McCormick, et al., 1999; Sancu et al., 2000; Schumacher et al., 2000). As such, they offer potential points of intervention to improve physician adherence to practice recommendations. Physicians' attitudes and beliefs that are related to the delivery of preventive services, including more positive beliefs toward prevention in general (Lewis et al., 1987), attitudes toward working with the population of interest (Franzgrote et al., 1997; Lewis et al., 1987), and self-perceptions of

knowledge and management skills regarding the specific prevention (Franzgrote et al., 1997; Gottlieb et al., 1987; Boekeloo et al., 1991; Cheng et al., 1999).

### ***Health Professionals***

Moodley-Kunnie (1988) suggested that health professionals' perceptions of substance dependent individuals were influenced by society's biased conceptions and perceptions of different substance abusers. As Levitt et al. (1963) have indicated, health personnel have a set of mental attitudes about substance abusers, which appears to be part of their value and belief system and which also prevails in their societies.

### ***Recommendation***

A large number of articles explored medical professionals' attitudes toward substance abuse. Additional training and support are needed to deal with difficult negative attitudes and beliefs. There are some suggestions:

### ***Training***

More training in substance misuse has been recommended for doctors (Advisory Council on the Misuse of Drugs, 1990; British Medical Association, 1997; Department of Health (UK), 1999). Few doctors have the opportunity to attend training courses in substance misuse specially aimed at GPs (Albery et al., 1996; Glass & Strang, 1991). In addition, "shared care" idea has been recommended for working with substance misusers in primary care (Department of Health (UK) 1991, 1996). For example a drug agency should provide training workshops and advice to GPs, especially on the complicated cases using multiple substances.

Expanding medical and nursing school curricula and developing addiction rotations within residency and nursing programmes are first steps in skill enhancement. In addition, Bry and Attaway (2001) have trained staff to refer youth who display academic and conduct problems to school-based programmes. This risk-focused identification approach, coupled with subsequent intervention, has been effective in preventing substance use in school settings.



## ***Financing***

Multiple substance use is also likely to be a risk factor for the utilisation of hospital facilities because of the danger inherent in this form of substance usage. The use of ER and other hospital services has a high cost to society. Some studies have dealt with the issue of social and economic costs of drug abuse. In Hong Kong, Cheung, Ch'ien and Lee (2000) argued that the majority of non-government organisations' expenditure was on treatment and rehabilitation, therefore more resources needed to be allocated to prevention, education and research work. Lee and Lau (2001) had found social and economic factors associated with specific drug abuse trends. The overall drug abuse trend is positively associated with unemployment rate.

The financing mechanism will have to be improved if there is to be an increase in screening, assessment, and referral services. This area is particularly challenging, with few clear answers. Consequently, economic, organisational, and financing research is needed so that informed decisions on private financing mechanisms and responsive insurance packages can be made. The identification of frequent users or factors that increase the use of these services offers the opportunity for obtaining substantial benefits through preventive interventions.

## ***Health Promotion in Emergency Room***

Emergency physicians are in a better position to implement public health strategies and identify and address underlying causes of health problems than many other health care professionals because of opportunities that more inherent in the practice of emergency medicine (Madden & Cole 1995).

There are significant cost considerations associated with the integration of health promotion services into the practice of emergency medicine. For example, a recent study done by Harrington (1991) showed that social work services provided in the ER were found to reduce hospitalisation rates, increase compensable ancillary services rendered, and increase compensable consultation charges generated. The combination of expenses saved and revenues generated were found to approximate or exceed the salaries of medical social workers.

A second barrier to increasing health promotion services in the ER related to the low confidence and high pessimism of the emergency physicians is the query about the success of their health

promotion efforts. A lack of training and preparedness is often cited as the reason for not performing health promotion interventions. Incorporation of health promotion training into emergency medicine residency programmes, as well as development of targeted continuing education for emergency physicians in health promotion and screening and brief intervention methods, may help address this issue.

Health promotion efforts in the ER must become a team effort which includes emergency medical service (EMS) personnel, nurses, and social service workers. EMS personnel frequently observe a different set of health risk factors in the pre-hospital environment than those identified in the ER. Insufficient support will make medical professionals find it more difficult to handle substance patients. In Williams et al. (2000) only one-third of emergency physicians viewed nurses as educators with regard to health promotion. Nurses and social service workers could become more active in health promotion through performance of health risk screenings, providing educational materials, counselling patients, and initiating aftercare referrals.

### ***Limitations***

The existing literatures and identifying discussion are mainly drawn from Western studies; not many studies are found in Chinese society. In addition, drug abuse had been a neglected topic in Chinese medical education and continuing medical education. In fact, very minimal information about drug abuse could be found from medical textbooks and references before 1990 (Tang, 1997b). Thus, medical students and trainees had had minimal opportunities to learn about drug abuse treatment. Drug abuse workshops and training courses, sponsored by different organisations, in China began in the mid-1990s. Some were sponsored by the World Health Organisation.

Meanwhile, most Chinese have considered drug abuse to be a bad habit rather than a disorder, especially in the last two decades from 1980 to 2000. Both lay people and professionals think punishment should be an important component of drug abuse treatment. They argue that addicted individuals should be responsible for their own behaviours and should learn a lesson from their own faults (Tang et al, 2005).

The first study on the attitudes, knowledge, and perceptions of Chinese doctors toward drug abuse and drug abuse treatments was done by Tang et al, 2005. They found that drug abuse treatment



staff members in China are not well qualified, trained, or experienced in drug abuse treatment. Negative attitudes and a punishment-oriented philosophy were very common. Fortunately, most of them were still interested in learning new techniques such as rehabilitation, aftercare, and other non-medical treatments. In order to fully understand how Chinese doctors in Hong Kong perceived substance, the author will conduct the caution research study soon.

### ***Implications for Practice and Policy***

If it is expected that improvement in knowledge, skills, and attitudes regarding substance abuse will take place within university educational process, more research should focus on knowledge, skills and attitudes, with a particular focus on perceptions, beliefs, and attitudes concerning substance abuse. In addition, the educational system must take responsibility for increasing the skill of both students and faculty in the identification and treatment of substance abuse. In order to fully understand the attitude of medical professionals toward substance abuse, further research is needed.

On the other hand, to have a substance programme under the health system, there are a number of key features: 1) joint management and monitoring by substance services and divisions; 2) national evidence-based clinical management guidelines for substance dependence in primary care; 3) effective systems for assessment, referral, consultation/liaison between GPs and substance services; and 4) education, training and clinical audit for medical professionals in the management of substance dependence.

To be effective, we need to have a clear policy direction that could be generalised across the health system and make it sustained.


Last but not the least, Schmid and Schmid (1973) suggested the use of an attitudinal survey as a screening instrument of selecting personnel for work with substance dependent individuals. A feasible alternative was advocated (Fisher et al., 1975), namely that attitudinal education and modification would have optimal success if teaching methods would focus on clinical training and the teaching of proper attitudes.

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