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Substance use and dependence

Contents

Executive summary

The public health importance of substance use and dependence is growing from year to year as it is more than a health problem; it is a formidable moral, social and economic challenge with pandemic dimensions. Not a country or place in the world can be certified as "drug free". As part of one of the most important transit areas of the world for illicit drugs, with many countries experiencing rapid social change and conflict situations, the countries of the Eastern Mediterranean Region are increasingly vulnerable to health, social and economic problems related to substance use and dependence. The trend in substance use among youth (15–24 years) and women is rising. The commonest substances of dependence are cannabis, sedatives, opiates and stimulants. Injecting drug use is a new development with significant public health implications, specifically related to spread of bloodborne infections. The most frequently injected drugs are opiates. The rate of HIV positive status among injecting drug users increased from 0.16% in 1999 to 3.26% in 2003. Similarly HIV transmission through injecting drug use increased from 2% in 1999 to 13% in 2003.

There is an urgent need to recognize the health impact of substance use and dependence. A number of measures at the level of the individuals, family, community and the health system can be initiated to address the problem. During the past two years, the Regional Office with the advice of the members of the Regional Advisory Panel on the Impact of Drugs (RAPID) has made good progress in formulating a regional response to address this problem. A draft regional strategy to address substance use and dependence has been developed with the following strategic directions: development of national policy with focus on multisectoral actions and networking; increasing understanding of and knowledge about substance use and dependence, especially the extent of the problem, underlying factors, consequences and interventions; development of human resources; increasing accessibility to a wide range of services for psychosocial well-being, prevention, early detection, treatment, rehabilitation and harm reduction integrated within general health system facilities; community-centred actions in all these areas relying on culturally acceptable interventions using religious forums and educational settings and nongovernmental organizations. Member States are recommended to develop national strategies addressing prevention, treatment and harm reduction; ensure access for those affected to health and social support systems; build appropriate capacities in ministries of health; and introduce primary prevention programmes, such as life skills education in schools.

1. Introduction

The public health importance of substance use and dependence is growing from year to year as it is more than a health problem; it is a formidable moral, social and economic challenge with pandemic dimensions. Not a country or place in the world can be certified as "drug free". As part of one of the most important transit areas of the world for illicit drugs, with many countries experiencing rapid social change and conflict situations, the countries of the Eastern Mediterranean Region are increasingly vulnerable to health, social and economic problems related to substance use and dependence.

Throughout history, people have used different substances to alter their state of mind. The brewing of alcohol was generally popular among pre-Islamic communities living in Egypt, Iran and the Arabian peninsula [1]. Use of opium was part of traditional culture in a number of countries of the Region. Until recently, most drug use was limited to specific settings according to specific traditions. What is new in recent times is the wider range of drugs abused, the higher potency of the drugs, the more active routes of administration (such as injecting drug use), the lack of social controls against abuse and, consequently, the larger proportion of the population using and becoming dependent on drugs with attendant health and social consequences. In this connection

The purpose of this paper is to:

- review the substance use and dependence situation globally and in the Region with emphasis on a number of alarming trends, such as the increase in the absolute number of drug users, decreasing average age of drug users, increasing number of women drug users and tendency towards more injecting drug use.
- present the recent understanding and the approaches to care and identify areas for countries to take action to address the issue. Such actions include developing national policies, organizing preventive programmes, integrating substance-dependence care programmes into general health care and minimizing the health harms caused by substance use and dependence.

2. Global situation

2.1 Prevalence [2]

Use of alcohol, tobacco, and other controlled substances is increasing, and contributing significantly to the global burden of disease. Tobacco use is growing in developing countries and among women. Currently, 50% of men and 9% of women in developing countries smoke, as compared with 35% of men and 22% of women in industrialized countries. China, in particular, contributes significantly to the epidemic in developing countries. Indeed, the per capita consumption of cigarettes in Asia is higher than in other parts of the world, with the Americas and eastern Europe following closely behind.

Whereas the level of consumption of alcohol has declined in the past 20 years in industrialized countries, it is increasing in developing countries, especially in the WHO Western Pacific Region, where the annual per capita consumption among adults ranges from 5 to 9 litres of pure alcohol, and also in countries of the former Soviet Union. To a great extent the rise in the rate of alcohol consumption in developing countries is driven by rates in Asian countries. The level of consumption of alcohol is much lower in the WHO African, Eastern Mediterranean and South-East Asia Regions.

According to estimates of the United Nations Office on Drugs and Crime (UNODC), about 200 million people use one type of illicit substance. Cannabis is the most common illicit substance used, followed by amphetamines, cocaine and opioids. Illicit substance use is a predominantly male activity, much more so than cigarette smoking and alcohol consumption. Substance use is also more prevalent among young people than in older age groups. 2.7% of the total global population and 3.9% of people 15 years and above had used cannabis at least once between 2000 and 2001. In many industrialized countries, for example Canada, European countries and the United States of America, more than 2% of youths reported heroin use and almost 5% reported smoking cocaine in their lifetime. Indeed, 8% of

youths in western Europe and more than 20% of those in the United States of America have reported using at least one type of illicit substance other than cannabis. Injecting substance use is also a growing phenomenon, with implications for the spread of HIV infection in an increasing number of countries [3].

The global burden of substance use is substantial, accounting for 8.9% of productive life lost annually due to disability and premature mortality, as measured in disability-adjusted life-years (DALYs). The main health burden is due to licit rather than banned substances. Among the ten leading risk factors in terms of avoidable disease burden, tobacco was fourth and alcohol fifth in 2000, and both remain high on the list in the 2010 and 2020 projections. Tobacco and alcohol contributed 4.1% and 4.0%, respectively, to the burden of ill health in 2000, while illicit substances contributed 0.8% [4]. The burdens attributable to tobacco and alcohol are particularly high among males in industrialized countries (mainly Europe and North America). This is because men in industrialized countries have a long history of significant involvement with tobacco and alcohol and because people in these countries live long enough for substance-related health problems to develop.

2.2 Adverse effects

People use psychoactive substances because they expect a benefit, whether pleasure or the avoidance of pain. But use of psychoactive substances also carries the potential for harm, whether in the short-term or long-term. Harmful effects due to substance use can be divided into four categories: chronic health effects; acute or short-term health effects; acute social problems; and chronic social problems. Examples of chronic health effects include liver cirrhosis (alcohol consumption), lung cancer and emphysema (smoking) and HIV infection (injecting drug use). Acute or short-term biological health effects of drugs such as opioids and alcohol include those caused by overdose, as well as casualties due to the substance's effects on physical coordination, concentration and judgement, in circumstances where these qualities are demanded. Casualties resulting from driving after drinking alcohol or after other drug use feature prominently in this category, but other accidents, suicide and (at least for alcohol) assaults are also included. The third and fourth categories of harmful effects comprise the adverse social consequences of the substance use: acute social problems, such as a sudden break in a relationship or an arrest; and chronic social problems, such as defaults in working life or in family roles [2].

The World Drug Reports published by UNODC provide reliable information about the production, distribution and economic aspects of the drugs of abuse in the Region. The reports highlight the importance of several countries of the Region as major producers of drugs. About 87% of the worldwide opium production is in Afghanistan. Four of the top five cannabis sources are in the Region: Morocco (22%), Pakistan (15%), Afghanistan (13%), Lebanon (8%) [3,5]. Increase in production is complemented by increases in seizures of illicit drugs and violence associated with the illegal traffic of drugs. According to the most recent report of UNODC, the extent of land used for opium cultivation in Afghanistan has decreased in 2005. However, the actual amount of opium produced has not decreased substantially.

2.3 New understanding

A very important development of the past two decades is the greater understanding of the biological, psychological and social origins of drug use and dependence. A WHO publication released in 2004, *Neuroscience of psychoactive substance use and dependence*, provides many answers with evidence from a number of scientific disciplines [2]. It is significant that the newer understanding of the functioning of the brain can now guide substance abuse prevention and treatment programmes.

The book makes a number of important observations summarized below.

- All psychoactive substances can be harmful to health, depending on how they are taken, in which amounts and how frequently.

Box 1. Risk and protective factors for substance use

Risk factors	Protective factors
Environmental	*Environmental*
• availability of drugs • poverty • social change • peer culture • occupation • cultural norms, attitudes • policies on drugs, tobacco and alcohol	• economic situation • situational control • social support • social integration • positive life events
Individual	*Individual*
• genetic disposition • victim of child abuse • personality disorders • family disruption and dependence problems • poor performance at school • social deprivation • depression and suicidal behaviour	• good coping skills • self-efficacy • risk perception • optimism • health-related behaviour • ability to resist social pressure • general health behaviour

Source: [2]

- Use of psychoactive substances is to be expected because of their pleasurable effects as well as peer pressure and the social context of their use.
- Harm to society is not only caused by individuals with substance dependence. Significant harm also comes from nondependent individuals, stemming from acute intoxication and overdose, and from the form of administration (e.g. through unsafe injections);
- Substance dependence is a complex disorder with biological mechanisms affecting the brain and its capacity to control substance use. It is not only determined by biological and genetic factors, but psychological, social, cultural and environmental factors as well (Box 1).
- Treatment for substance dependence is not only aimed at stopping drug use. It is a therapeutic process that involves behaviour changes, psychosocial interventions and often, the use of substitute psychotropic drugs. Dependence can be treated and managed cost-effectively, saving lives, improving the health of affected individuals and their families, and reducing costs to society.
- One of the main barriers to treatment and care of people with substance dependence and related problems is the stigma and discrimination against them.

Studies in countries of the Region have shown that people with drug dependence have the highest stigma among a list of physical and mental health conditions [5,6]. This stigma prevents the affected persons from getting care. In a recent study from greater Cairo, only 12% of those dependent on drugs had received treatment at any time [5].

3. Regional situation

3.1 Overview

In 2003–2004, the Regional Office undertook a situation analysis of the substance use and dependence in countries of the Region. A detailed questionnaire on aspects of substance use and dependence was sent to all countries, and responses were received from 19 countries (Afghanistan, Bahrain, Djibouti, Egypt, Islamic Republic of Iran, Iraq, Jordan, Lebanon, Libyan Arab Jamahiriya, Morocco, Oman, Pakistan, Palestine, Saudi Arabia, Somalia, Sudan, Syrian Arab Republic, United Arab Emirates and Yemen). In 13 countries there is an official estimate of the extent of the substance dependence problem in the country. The trend of substance use among youth (15–24 years) is rising in 13 countries, stable

in 5 countries and decreasing in one country. The estimated age of initiating substance use by youth is around 15–18 years in most countries. In 11 countries there is an official estimate of the extent of substance dependence in women. The commonest substances of dependence among women are sedatives, opiates and stimulants.

The average age of persons with substance dependence is 33–44 years. In three countries it is between 20 and 30 years. Policy-makers and the general public are aware of and giving attention to substance dependence relating to opiates (14 countries), cannabis (9 countries), stimulants (6 countries) and sedatives (4 countries). Injecting drug use was reported as a considerable problem in 3 countries, moderate in 7 countries and rare in 5 countries. In 16 countries there is an estimate of the number of injecting drug users, with the numbers ranging from 200 to 137 000. The trend of injecting drug use is rising in 10 countries, stable in 4 countries and decreasing in 4 countries. The most frequently injected drug is opiates in 13 countries.

3.2 Spiritual, social and cultural dimensions and assets

Analysis of the true condition of this Region cannot be complete without consideration of the strong cultural, religious and social assets of the Region. Islam is the religion of 90% of the people of this Region. Christianity is the second religion. Both these religions promote strong family ties, helping those in need and moral and spiritual codes that promote healthy lifestyles. Islam in particular takes a strong stand against use of *khamr. They ask you about intoxicants (khamr) and games of chance. Say, "In both of them there lies serious harmfulness (ithm) as well as some benefits to mankind. Yet, their harmfulness outweighs their usefulness*. [2:219]. God has prohibited sins which means harm for the individual and the society: *My lord has only forbidden indecencies, the inward and the outward, and sin* [7:33].

Contrary to what some people believe, and according to many authentic Islamic narrators, *khamr* refers not only to alcohol but to any substance that clouds or veils the mind and consciousness. The Prophet ﷺ said: "Everything that intoxicates is wine and all kinds of wine are prohibited,"[1] and the Prophet ﷺ also said: "Every intoxicant is forbidden and every narcotic is forbidden and anything that causes drunkedness when taken in quantity is completely forbidden, as is anything that dims reason".[2]

Islamic teachings also emphasize the development of a human personality. As the person resorts to alcohol and drugs to escape from problems, while Islam refuses passiveness and escaping challenges. Islam urges individuals to act positively and try to change the bad reality. An ideal Muslim is a responsible human being who always urges decency and opposes what is detestable. The strength of her/his personality is based on two strong characteristics that Islam encourages: patience and belief in predestination:

Surely we will try you with fear and hunger, and loss of property, lives and crops; but [prophet], give good news to those who are steadfast, those who, when afflicted with a calamity say: "surely we belong to God, and to Him we shall return". These will be given blessings and mercy from their Lord, and it is they who are rightly guided. [2: 155-157]

Another aspect of Islamic teachings which can be used in planning for prevention of substance abuse and care of the substance-dependent rests on the activation of the role played by individuals and the community in providing mental, spiritual and social support to those dependent on substances. Community participation and each individual's responsibility to assist when another member of the community is in distress are important assets that can be used in the development of programmes. Awareness of this great religious heritage and finding ways of using it in the best way for prevention, care and reduction of harms related to drugs is of great importance in this Region.

In the Eastern Mediterranean Region, as well as many other areas of the world, the breakdown of extended family, unplanned urbanization, internal migration and the appearance of an underclass

[1] Narrated by Muslim and Ibn Majeh on behalf of Ibn Umar.

[2] Narrated by Abu Naem in "Ma'refat al sahaba" on behalf of Anas ibn Huthayfah.

nouveaux poor are among major social causes of substance abuse. However, the fact that the foundation of the family is still strong is an asset. In this respect, any programme for substance abuse treatment and control should have a component of working with and through families, particularly families affected.

3.3 Tobacco use [7]

Tobacco consumption increased by 24% in the Middle East from 1990 to 1997. In fact, the Middle East and Asia are the only two regions in the world where cigarette sales increased during that time period. Half of adult males in the Middle East are smokers. Egypt has the highest number of people that use tobacco, while the highest consumption rate is in Tunisia. This rate rose from 12 billion sticks in 1970 to 52 billion in 1997. The countries of the Gulf Cooperation Council (GCC) as a whole spend US$ 800 million per year on tobacco.

The number of tobacco shops in Morocco increased from 9600 in 1969 to 20 000 in 2003. In Egypt, the direct annual cost of treating diseases caused by tobacco use is estimated at US$ 545.5 million. The percentage of cancer deaths among men attributable to tobacco increased from 8.9% in 1974 to 14.85% in 1987. Smoking causes 90% of lung cancer cases in Egypt. There are 30 000 smoking-related deaths per year in countries of the GCC. With lung cancer topping the list of the region's ailments, 15% of the total medical costs in countries of the GCC, where health care is free, go towards the treatment of smoking-related illnesses.

The longer a person has smoked, the higher the risks to health. Those who start to smoke in their teens face the biggest risks. In fact, a person's risk of developing lung cancer is affected more by the length of time as a smoker than by the number of cigarettes smoked daily. Compounding the problem, 85% of smokers in Egypt also smoke sweetened tobacco (*shisha*) in water pipes, a practice that is also very prevalent in the GCC. In the GCC 50% of students aged 14 to 18 years smoke. Around 25% of them started between the ages of 10 and 15 years [8].

3.4 Alcohol consumption

Alcoholic beverages and the problems they engender have been familiar fixtures in human societies since the beginning of recorded history [9]. The brewing of alcohol from dates, grapes, honey and sorghum (*doura*) was generally popular among pre-Islamic communities living in the Arabian peninsula [1]. Temples from ancient Egypt show scenes of wine-making and intoxicated people. Around 200 years ago a major increase in the potential for harmful effects occurred with the discovery of the distillation process, which increases concentrations of alcohol. At the very beginning of the Islamic era, the drinking of wine was clearly identified as a disruptive social evil and was effectively dealt with. Baasher in 1981 noted "after 14 centuries, the successful Islamic model of alcohol abstention and prohibition still stands out as exceptional, indeed, almost unique in human history"[1]. However, in the past two decades there have been increasing reports of people with alcohol-related health problems seeking health and mental health care from a number of countries of the Region [10]. In 2005, some countries reported a general increase in the use of alcohol and persons dependent on alcohol.

At the global level, increasing number of studies are being published regarding the harmful effects of alcohol, increasing death related to intoxication and the fact that many of the outlets for alcohol consumption are in the deprived neighbourhoods and increasingly more deprived population groups are specifically harmed by alcohol consumption. A series of articles in a recent issue of International Journal of Epidemiology are just examples. Other reports strongly dispute the previous publications that attribute useful effects to moderate drinking.[11, 12, 13]

Harmful consumption was discussed at the World Health Assembly in May 2005 and addressed in resolution WHA58.26 on "Public health problems caused by harmful use of alcohol". In the resolution, the Health Assembly recognized that the patterns, context and overall level of alcohol consumption influence the health of the population as a whole, and that harmful drinking is among the

foremost underlying causes of disease, injury, violence, disability, social problems and premature deaths.

Proven strategies to reduce the alcohol-related burden of disease include: institution of a minimum legal age to buy alcohol; government monopoly of retail sales; restrictions on hours/days of sale; restrictions on the density of sales outlets; taxes on alcohol; sobriety checks; lower limits for blood alcohol concentration for drivers; and interventions in health care settings.

WHO is undertaking work in several areas relating to alcohol use and health, including: collecting, compiling and disseminating scientific information on alcohol consumption; preparing global and regional research and policy initiatives on alcohol; and providing support to countries in promoting identification and management of alcohol use disorders in primary health care.

The fact is that although the magnitude of alcohol-related problems is less in this Region than in others, the trend is upwards and more proactive, comprehensive programmes are needed to deal with this issue. The following can be regarded as necessary first steps:

- development of a reliable data collection and reporting system for provision of more accurate information; such a system should provide better data on manufacturing, import, smuggling and home production of alcohol as well as patterns of consumption and more accurate statistics on the number of alcohol abusers. The experiences of other regions, such as the European Region, can help in this regard.
- regional level consultations to discuss the development of comprehensive, multisectoral programmes addressing particularly the most vulnerable groups and youth;
- inclusion of alcohol abuse on the agenda of the future work of the Regional Advisory Panel on Drug Abuse (RAPID) in order to develop a regional strategy on alcohol abuse.

3.5 *Khat* use

Khat use is prevalent in three countries of the Region, namely Djibouti, Somalia and Yemen. It is variously estimated that in these countries, about 60%–80% of the adults consume *khat* on a daily basis. Its use is growing in popularity, with wide-ranging social and economic effects such as shifting of crop patterns in favour of *khat* growth. A recent study in Hargeisa, Somalia, showed an association between psychotic illness and regular *khat* chewing. Other negative effects include neglect of children and increased poverty, as families spend a disproportionate amount income on buying *khat* [14].

Public health approaches to *khat* use must consider the wide cultural and social acceptance of *khat* in certain countries and harmonize interventions with prevailing social attitudes and practices [15]. At present, systematic studies are needed on the effect of chronic use on health and disease, including among family members of regular users; the association between *khat* use and patients in psychiatric facilities; and identification of vulnerable groups among users.

3.6 Abuse of medicinal drugs

Among the general population, especially among urban populations, the abuse of licit drugs such as tranquilizers is becoming a public health problem. In contrast to illicit drugs like heroin, abuse of licit drugs is more common among women. Currently, the regulation of drug dispensing is inadequate, and widespread misuse of licit drugs could become a problem in the future. Methods for monitoring the trends in this area need to be developed. An attempt has been initiated in the greater Cairo area in association with UNODC.

3.7 Injecting drug use

Of the many health impacts of the use of illicit drugs, the most important health problem is the spread of HIV/AIDS among injecting drug users. The proportion of AIDS cases attributable to injecting drug use in the Region has increased, from 2.4% of all reported AIDS cases in 1999 to approximately 13% in 2003. This increase reflects a shifting trend from heterosexual transmission to transmission by injecting drug use. In 1999 less than 0.2% of the injecting drug users tested for HIV in the Region

were positive. In 2003, the rate of HIV positive tests among injecting drug users reached 7.7%. This is a very worrying public health problem. The issue of the specific harm from injecting drug use in spreading HIV/AIDS needs special attention. Similarly the problem of substance use and dependence in prisons is a matter of concern. A recent study of 611 drug users visiting treatment centres in Teheran found that the prevalence of HIV-1 was 15% [16]. The rates were higher among those who had shared needles in prison. Lack of condom use during sex was also significantly associated with the infection.

The development of needle exchange programmes, such as in the Islamic Republic of Iran, and the activism of former substance users as leaders to bring about change, as in Oman, are positive developments [17,18]. There is a need for closer cooperation between the programmes for control and prevention of AIDS and sexually transmitted diseases and for mental health to make antiretroviral drugs available to injecting drug users and to develop outreach and public education programmes to reduce social stigma.

Two studies completed in 2004 in Egypt and Libyan Arab Jamahiriya illustrate the dramatic aspects of this problem. In a study of 431 HIV risk-behaviours of problem drug users in greater Cairo, only 98 respondents (23%) had ever been in treatment for drug use [19]. Of these 98, only 11% were currently in therapy. In addition there was a very low rate of HIV testing among the group. In the Libyan Arab Jamahiriya, in the past few years, there has been dramatic increase in injecting drug use related HIV infections as a result of a change is the form of the heroin available and restrictions on availability of needles [20]. These studies highlight the need to monitor the situation on a continuous basis, as changes may occur suddenly due to a variety of factors.

Needle exchange programmes are particularly important in the light of findings that HIV is able to survive in used needles for several days and hepatitis C for several weeks (depending on temperature, humidity and other factors). A public health approach must therefore emphasize the importance of collecting used needles and syringes. The effectiveness of this approach in breaking the chain of transmission of HIV and other bloodborne viruses such as hepatitis is well established [21].

The basis of substitution therapy is harm reduction in the areas of health, family life, occupational status and in decreased crime and legal consequences. For example, once HIV has been introduced into a local community of injecting drug users, there is the possibility of extremely rapid spread. Provision of substitution maintenance of opioid dependence is an effective HIV/AIDS prevention strategy that should be considered for implementation, as soon as possible, for injecting drug users with opioid dependence in communities at risk of HIV/AIDS epidemics. It is for these reasons, provision of substitution maintenance therapy should be integrated with other HIV preventive interventions and services, as well as with those for treatment and care of people living with HIV/AIDS [22-25].

One of the earliest indications of the spread of injecting drug use among drug users was from prisons. In many countries, large numbers of drug users are imprisoned for varying periods of time. In prison, the use of illicit drugs often continues and becomes the source of spread of blood-borne diseases. It is only recently that prison-based programmes for drug abuse in terms of treatment and harm reduction have been introduced. This is a important area for future work. A recent study from Teheran, Islamic Republic of Iran showed a relationship between HIV-1 infection and the length of incarceration among participants who used injecting drugs [16]. The prevalence of HIV infection was 5% among those never in prison, 15% among those with less than 6 months in prison, and 31% among those with more than 6 months of prison stay. Prisons are extremely high-risk environments for HIV transmission because of overcrowding, poor nutrition, limited access to health care, illicit drug use and unsafe injecting practices, unprotected sex and tattooing. Many of the people in prisons come from marginalized populations, such as injecting drug users, who are already at elevated risk of HIV infection. In most cases, high rates of HIV infection in prisons are linked to the sharing of injecting equipment and to unprotected sex in prison. Syringe sharing rates are invariably higher in prisons than among injecting drug users outside prison.

Evidence is increasing that HIV transmission can be reduced in prisons [23]. Since the early 1990s, various countries have introduced prevention programmes in prisons. Such programmes usually

include: information, education and communication on HIV/AIDS; voluntary counselling and testing; distribution of condoms; use of bleach or other disinfectants; exchange of needles and syringes; and substitution therapy. Additional components of a harm reduction programme with a significant potential to reduce individual risk behaviour associated with drug injection and other risk behaviour are treatment and care related to HIV/AIDS, hepatitis and tuberculosis, including access to highly active antiretroviral therapy.

There are strong reasons for prison services to consider introducing substitution therapy. These include: problems in managing regimens and difficulties for staff that arise during withdrawal, including drug smuggling and acts of violence toward staff and other prisoners; the growing problem of suicide and self-harm during the period of withdrawal among imprisoned drug users and drug dependent people; the importance of equity in provision between prisons and communities; the drive to provide clinical services at a standard equivalent to internationally agreed best practice; the risk of a fatal overdose in the first few days following release from prison, especially for short-term prisoners. Substitution therapy programmes report several valuable benefits, including decreased use of other drugs, decreased crime, decreased mortality, less HIV transmission, less hepatitis C transmission and marked improvements in the health of drug users. This treatment has been shown to work and to be cost-effective [24,25].

4. Regional efforts to address substance use

In 1999, an intercountry consultation was organized for development of guidelines for demand reduction in substance abuse with special emphasis in injecting drug use. Experts recommended a balance between supply reduction and demand reduction and prevention of drug abuse. Recognizing the growing problem of injecting drug users, the Regional Office set up the Regional Advisory Panel on Impact of Drugs (RAPID) in September 2002 to: perform an in-depth study of different available data on substance abuse, with particular emphasis on injecting drug use and its related health consequences including HIV/AIDS; support and advise on creating a unified data collection system for the Region; and advise on the development of a regional strategy on all health-related aspects of substance abuse, including demand and harm reduction interventions.

During the past two years, the Regional Office with the advice of the members of RAPID, has made progress in understanding the regional situation regarding substance use and dependence. Following the first meeting of RAPID, a survey of the substance use situation in Member States was undertaken.

Innovative approaches to prevention, treatment and rehabilitation of individuals with substance dependence have been initiated by a number of countries. In Pakistan, the school mental health programme started in the 1980s had an anti-drug message “smoking is injurious to health”. In recent years comprehensive HIV/AIDS prevention and care programme for injecting drug users was developed in Kermansah province, Islamic Republic of Iran under the name “triangular clinic”, to signify the synthesis of treatment, reduction of harm and care [18]. The initial success of this approach led to the extension of the clinics to prisons and to 21 other provinces. The effort has resulted in a significant reduction of new HIV infections. The key elements are the political commitment, coordinated activities of a number of organizations and a dedicated and skilled team of carers.

In the area of prevention of drug abuse in school students, Egypt is conducting a major initiative. The National Project for Drug Abuse Demand Reduction among youth has been in operation since April 2001. The strength of the project is the active participation of the youth in school settings and out of school settings. The project is under implementation of 100 preparatory and secondary schools and 30 youth centres and clubs and includes a media campaign and the strengthening the capacity of 30 nongovernmental organizations to address the problem. In 2005, the programme was further extended to cover an additional 150 schools. As part of another initiative, a National Trust Fund provides support for delivery of services, including a hot-line for drug abuse with linkages to the different treatment and rehabilitation centres. In Morocco, there are active programmes with preventive interventions for street children.

A number of countries have set up national committees on drug abuse, such as the National Commission on Drugs in Morocco, National Project for Drug Abuse Demand Reduction in Egypt and National Harm Reduction Committee in the Islamic Republic of Iran. Several countries have recently opened new modern specialized treatment and rehabilitation centres (Bahrain, Kuwait, Saudi Arabia).

5. Strategic issues

There are a few questions that often come to mind when considering substance use and dependence. What is it that drives people to seek solace from substances of abuse? How is it that the substance of abuse becomes so much a part of the user that it dominates the user's life? Why are young people more at risk? Why is relapse so frequent after periods of abstinence? How is it that women use substances of abuse less frequently then men? What are the environmental /social risk factors? How can we increase the resilience of individuals to avoid seeking solace from substances of abuse in times of crisis? How do we balance the ethical aspects of harmonizing the rights of the individual with that the needs of the society in choosing options to address substance use and dependence?

One very striking aspect of substance use and dependence is the importance of youth. Efforts must be focused on reducing the demand among young people. Work with young people is in progress in a number of countries such as Egypt and the Islamic Republic of Iran. There are many reasons that working with this age group is important. First, providing education and skills to cope with the developmental needs of young people can reduce the demand for substance use and, thus, dependence. Second, the involvement of young people can have a larger effect on society, as they bring fresh ideas and energy to the community. Third, the skills that are shared with young people to address substance use also have beneficial effects in reducing other behaviour-related problems such as suicide, violence and risk taking behaviour. It is well known that school-based programmes, especially life-skills education programmes, are effective in preventing substance use and promoting mental health. There is an urgent need for life-skills education to become a regular part of the school curriculum.

Religion and spirituality have an important role in matters of health [26]. A recent report from Beirut on the inverse association between spirituality and smoking behaviour among new students at the university, has important implications [27]. Religion and spirituality have a special place in the hearts and minds of the people of the Region. It is important to find ways and means of maximally utilizing the religious beliefs and practices both to help prevent the problem of substance use and in the treatment and rehabilitation of people dependent on substances.

Transcending belief systems, such as religious conviction, can strengthen the personality and enable people to liberate themselves from the need to passively escape into the artificial and deluding world of intoxicants like alcohol or drugs. This is particularly true for Islam which opposes using any substance which can cloud the consciousness. Religious, and particularly Islamic, practices, and situations that unite a people in a conviction, strengthen self control, emotional awareness and stability and a general anti-drug attitude. For example, the statistics of drug abuse at different periods in Palestine show a decline during the peak of resistance *(intafadah)*. A recent study on protective factors against substance abuse has shown that two factors have a clear effect on decreasing the monthly use of alcohol, marijuana and cigarettes in adolescents: promoting the place of health in individuals' value systems and spirituality [28].

There is an urgent need to recognize the health consequences of substance use and dependence. Substance use and dependence cannot be seen only as a law and order problem. Supply reduction alone has not been successful in any of the countries. Legal efforts must be continued with medical interventions. The health interventions have to be directed at many levels. The needs of the vulnerable group of youth, especially during adolescence, should be given priority. More efforts must be directed at early identification, treatment and rehabilitation. Harm reduction strategies are needed to reduce the impact of substance use on the individual and community. There is also need for addressing the larger social situations like poverty, social deprivation, marginalization and conflict situations to reduce the use of substances. Programmes to address substance use must be multisectoral in nature, with the key sectors being health, education, agriculture, labour, police and social welfare. There is also urgent need for monitoring the trends of substance use in the different populations.

The recent regional survey brought forth two important points. The first point, which is positive, is that a high level of recognition is now being given by most countries to the problem, evident in the creation of professional units, passing of legislation and development of different interventions. The second point is that there is very little factual information about the nature, magnitude, consequences, outcome of interventions and cost of the problem in the countries. This type of information is crucial for proper planning.

6. Strategic directions

A regional strategy on substance use and dependence has been under development by the Regional Advisory Panel on the Impact of Drugs (RAPID) during the past three years. During 2003–2004, the substance use situation in the Region was reviewed through a questionnaire sent to all countries. Based on the findings, a draft regional strategy was finalized in June 2005. The strategic directions identified in the strategy are:

- Developing national policies on substance use and dependence;
- Developing effective coordination mechanisms for implementation of national policies;
- Developing mechanisms to increase understanding and knowledge of the substance use and dependence situation within each country and the underlying factors, the harmful consequences and interventions currently provided;
- Development of a wide variety of human resources;
- Increasing access to a range of health and social care services in the community for the provision of treatment, rehabilitation, aftercare and harm reduction, along with integration of services with general health care;
- Promoting psychosocial well-being and prevention of substance use and dependence;
- Promoting multisectoral action and networking.

WHO has an important role to play in the development of substance use and dependence policies, programmes and services in countries. This role includes advocacy and policy support; monitoring and surveillance; capacity building through training, developing guidelines and establishing collaborating centres and expert networks; research, documentation and dissemination of information; development of indicators for monitoring substance use and dependence in the countries; partnership establishment (United Nations agencies, nongovernmental organizations, community-level organizations) and fundraising; and development of a code of ethics related to this field.

7. Conclusions

The dynamics of substance use and dependence include social, economic, environmental, political, cultural and religious dimensions. The growing problem both in terms of the numbers of people involved as well as the impact on the health of the individuals and communities makes substance use a public health priority.

Interventions have to address—at the level of health promotion in general and mental health in particular—prevention in the groups at risk (such as adolescents), early recognition, and care and rehabilitation of people dependent on substances. The interventions cannot be restricted to the health system only; the other sectors like the education sector, the legal system, the media all are important.

In the countries of the Region, one of the most important needs is to document the changing pattern of substance use and dependence and the public health consequences. In addition, there is need to review the many social attitudes, practices and positions to recognize the changing aspects of substance use and dependence. The problem has to be seen from a multisectoral perspective and the solutions have to be also from a number of sectors. Health interventions are an important part of the effort to prevent substance use and dependence and treatment/rehabilitation. There is an added urgency in the countries

of the Region due to the large numbers of injecting drug users and increasing spread of HIV/AIDS. There are a number of initiatives that can be taken up for effective action.

8. Recommendations

Member States

1. Develop national strategic plans addressing prevention, treatment and harm reduction in relation to substance use, along with a mechanism to monitor trends and associated consequences of substance use.
2. Ensure access for the affected population to health and social support systems in order to enhance early identification, treatment, harm reduction and rehabilitation, and promote quality of life and social function.
3. Build appropriate capacities in ministries of health and provide support for development of "centres of excellence" in the fields of training, research, and service provision for substance use and dependence.
4. Introduce primary prevention programmes, such as life-skills education in schools.

WHO

5. Enhance collaboration and coordination with other international organizations to harmonize messages about substance use and its harms and to avoid duplication of efforts.
6. Actively support the efforts of Member States to formulate and implement programmes to control substance use and dependence, and establish or strengthen mechanisms for exchange of experience between countries.
7. Continue to develop indicators and systems for monitoring and initiate the development of an information system and focused research to monitor the changing trends in substance use.

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