

## psychedelic drugs and the work of the **world health organization** program on substance abuse

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The Program on Substance Abuse (PSA) was established to intensify the WHO's response to alcohol and other drug-related problems worldwide.

**T**HE WORLD HEALTH ORGANIZATION (WHO) is a specialized agency of the United Nations with primary responsibility for international health matters and public health. Its main objective is the attainment by all peoples of the highest possible level of health. Health is defined as a state of complete physical, mental and social well-being and not merely the absence of disease or infirmity. Reduction of the health and socially adverse consequences of psychoactive substance use is an essential part of that objective.

Over the years WHO has regularly issued information and recommendations on research, training and the provision of health services to deal with alcohol and other drug-related problems.

The Program on Substance Abuse (PSA) was established in 1990 to intensify the response to these worldwide problems, in the areas of Regulatory Control, Prevention, Advocacy and Promotion, and Treatment and Care. In the area of public health, PSA has responded by designing a global strategy modeled on methodologies proven successful with other health and social problems, stressing the relevance of primary health care, and the need to promote healthy lifestyles.

WHO recognizes that people who take such substances do so for a wide variety of reasons, and these may vary from time to time for the same individual. Some of the reasons given for drug taking include the need to alleviate stress and pain, to foster a sense of easy relaxation, to facilitate relationships, to escape from something, to reduce hunger or fatigue, to seek euphoria or

increased vigor, energy or courage, to search for new realities, to gain access to mystical and religious experiences, to achieve better insight or creativity, or to satisfy curiosity about drug effects.

Such motives are not necessarily associated with individual pathology or with adverse social influences. They can be functional for normal as well as abnormal persons, whether or not such persons are satisfied with the social structure and situation in which they find themselves. In addition, these motives do not necessarily lead to drug-taking.

The availability of psychoactive substances is a necessary but not sufficient condition for their use. As the efforts to control the supply of drugs have not been successful, the problem is to learn how to reduce the negative effects of the use of drugs to the lowest possible level without undue detriment to society. Although no use would be ideal, the reality is that communities must learn to live with drugs, that is, by helping people, particularly the young, to live with the presence of psychoactive substances without being negatively affected by them.

To increase the understanding of health and social consequences of substance use and be able to recommend appropriate and effective strategies to Member States, the Program on Substance

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Abuse has a variety of projects in the areas of prevention, health promotion, service development, community empowerment, action-oriented research, biomedical research, treatment, and regulatory control. Below, two projects related to psychedelic substances are detailed.

#### Use of indigenous plants

Herbal medicine is one important resource which had contributed to man's struggle against diseases and has been an important component of health care systems for thousands of years. Especially in developing countries, people recognize the value of medicinal plants in the treatment and prevention of several diseases. Among the hundreds of species which have been used in traditional medicine and by indigenous populations, the use of psychoactive plants has long been recognized. These plants have been used for a variety of purposes, ranging from sleep problems, to increase a sense of well being, to calm, to alter mood and levels of consciousness, in rites of passage or initiation, and to induce transitory visionary states which would indicate solutions for the community's or individual problems.

Apparently, the traditional uses within a culture of psychoactive substances have not been associated with major health problems, including dependence or harmful consequences. However, relatively little have been investigated and it is likely that for some of them, therapeutic applications could be proven effective in clinical practice.

Recent advances in the neurosciences in the last 20 years have also created opportunities for using psychoactive plants, including hallucinogens, as tools to understanding the brain and the neurobiological basis for some psychic functions, and hopefully to develop more effective treatment for mental disorders.

As a result, WHO has a project aimed at documenting the botanical, pharmacological, toxicological and therapeutic properties of selected psychoactive plants. It is proposed to collect current information on the extent, nature and consequences of use of these plants in different regions of the world with a particular focus on traditional patterns of use. Selected psychoactive plants would then be further investigated, including khat, ayahuasca, kava, betel nut and San Pedro cactus.

The information collected from different regions of the world will be compiled in a publication, which would also indicate gaps in knowledge and recommend strategies for action for Member States and interested individuals and institutions.

#### Drug Substitution & Treatment

The AIDS epidemic has called attention to the need for alternative treatment for dependent users of psychoactive substances, especially those who inject drugs. While reduction in consumption would be ideal, many of these dependents are not willing or ready to do so; however, the risk of HIV infection and spread to others cannot be ignored as it has become a public health problem of great importance. Harm reduction approaches, including syringe exchange programs have flourished and have been effective in controlling the transmission of HIV through i.v. drug use.

**H**EROIN IS THE MOST COMMON injected drug and heroin dependence is a problem in several parts of the world. The most widely used treatment is methadone maintenance, an opioid substitute which can be given orally as well. However, some heroin dependents, usually chronic patients with severe health problems, do not accept such treatment, diverging the methadone to illegal sale in order to obtain heroin. For these patients, other treatment approaches are needed.

Substitution treatments have been tried for other drugs as well: coca tea for cocaine dependents or anxyolitics for alcohol dependence. The definition of substitution which has been adopted is: "for people dependent on a psychoactive substance, the administration of a prescribed drug, pharmacologically related to that substance, to achieve defined treatment aims, usually improved health and well-being."

There are some criteria for a drug to be appropriate for substitution:

- cross-tolerance and cross-dependence with the psychoactive substance causing dependence
- reduce craving and supervision of withdrawal
- clients can be stabilized on the drug (stabilize consumption within a therapeutic range)
- facilitates psychosocial functioning and improves health
- acceptable to clients
- no long-term toxic effects
- affordability and availability

It is also desirable that the substance:

- does not grossly impair psychomotor functioning
- is less attractive for diversion than the psychoactive substance causing dependence
- does not have gross short-term toxic effects

Oral use of cocaine for chewing or infusions is a common practice in Andean countries such as Peru and Bolivia; it taken by more than 5 million

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people. There are, however, no comparative studies on physiological and psychological effects after ingested cocaine by oral route with other routes. People who use oral cocaine for traditional uses and in hot or cold infusions, do not report mental, physical or behavioral troubles. Cocaine is well absorbed from the gastrointestinal tract, and can be detected in plasma and urine with toxicological tests after chewing or drinking. There are no described toxic or ill effects resulting from normal consumption in this way. Coca tea has also been used with apparent success for cocaine dependence in well-controlled studies.

In Thailand, herbal medicines are used for opium dependence but have not been well evaluated to date.

In Switzerland, a longitudinal study is being carried out to analyze the long term effects of the medical prescription of different narcotics (i.v. heroin, i.v. morphine, i.v. methadone) in long term heroin dependents with signs of severe social disintegration. Several variables are being analyzed: health status, risk behavior, multi-drug use, psychological well-being, social disintegration, delinquent behavior, and work capacity. The trials are taking place in eight Swiss cities. It seems that prescription heroin could be a feasible substitution treatment for heroin dependents who do not accept other forms of treatment.

**M**OST OF THESE TREATMENTS, however, have been weakly evaluated and much research is still needed. Therefore, WHO designed another project to gather data on national practices of drug substitution and to provide information on the feasibility and efficacy of such programs. It is also aimed at identifying substances which may potentially be used in drug substitution programs.

A review of the literature on the pharmacological aspects of drug substitution, cross-cultural comparisons, and program acceptability and cultural sensitivity will be prepared. An expert consultation meeting will be organized to evaluate the literature review and to prepare a report on the findings of the literature review to make recommendations for further action.

#### **Psychedelics as a Pharmacological Treatment Approach**

Although the data regarding psychedelics for the treatment of psychiatric patients are not very strong, the discussion should be widened to include the problems we now have with all psychoactive substances. Systematic research and careful attention to selection, screening, preparation, supervision and follow-up of subjects are absolutely necessary.

More research is needed in the area of hallucinogens, including the use of plants by indigenous people which may indeed lead to new therapeutic developments. At the same time, one must take into consideration that the problems researchers and clinicians will face when carrying out such research are not exclusive to hallucinogens but reflect international trends in drug-related policies in many countries. For example:

1. The criteria used to control psychoactive substances are not applied "equally" to all of them. Alcohol and tobacco are by far the most toxic substances, clearly causing dependence and a wide range of health problems, but are not controlled as LSD or heroin (I am not saying they should be). Therefore, to compare, for example, one psychedelic: psilocybin to another: LSD, and to demonstrate its safety would not be enough to make these substances available by prescription or legalized.

2. Changes in drug policies are outside the scope of WHO. The International Narcotics Control Board (INCB) is the highest authority in

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this area. The INCB can officially request WHO to evaluate substances from the liability of new products, but it is up to them to decide how to regulate them. WHO can have projects on the implications of policy on health, or how policies address public health problems, for example.

3. Psychedelics are hallucinogenic and individuals under their influence can engage in risky behaviors, can have impaired judgment, or can engage in dangerous acts with risks of physical harm. One could not assure that their use would be restricted to medical purposes, and it must be shown that their therapeutic benefits outweigh their potential harm if used outside a controlled environment. As Strassman said in his article "hallucinogens are powerful drugs, with the potential to elicit or exacerbate psychiatric symptoms" (Strassman, 1995). The same which was said about LSD could happen with psilocybin: "...once hallucinogens escaped from the laboratory, however, emergency rooms and clinics were quickly impacted by adverse effects in unprepared, unsupervised and psychiatrically ill individuals taking LSD..."

4. With cannabis, for example, a physical dependence syndrome with clear withdrawal signs is still questioned as a diagnosable entity, the acute effects are mild, and there are several proven medical uses for the substance. Nonetheless, it is still a controlled substance. With psychedelics, there is only evidence for potential psychiatric use, but this research is still quite limited.

5. Regarding the studies on the therapeutic efficacy of psychedelics, it must be recognized that most of them were carried out more than 30 years ago and were with a limited number of participants. Studies with LSD included numerous patients and still "these studies were hampered by lack of adequate control groups and impartial raters, small sample size and primarily

anecdotal data" (Strassman 1995). This situation and interpretation of results may differ nowadays.

6. Studies on LSD for substance abuse treatment "were numerous, and while initial reports were enthusiastic, studies using control groups and longer follow-up demonstrated less impressive results..." "...with alcoholics meaningful generalizations could not be reached..." (Strassman 1995).

**THINK RESEARCH SHOULDN'T STOP** but it must be as scientific as possible.

Faith should not replace reason in such an important area, because we may take the risk of going back to the Middle Ages. We need to advance forward by opening our minds to new tools and paradigms of investigation while keeping track of the scientific method and need for accuracy.

Given the preliminary nature of recent studies and the fact that basic questions have not yet been answered yet, what can be done at the international level? What type of activity or project could one suggest which could be taken on by WHO or any other international agency? Who can be the potential donors/funders for such projects? Who should participate? Would the randomized controlled trials (RCT) be the only alternative for research design? •

#### References

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answered yet, what can be done at the international level?