Modern technologies in the prevention of drug addiction

S.V. Bachininone, O.A. Roic2
(oneUral State Mining University, Yekaterinburg,
2Center "IMEDIS", Moscow, Russia)

The problems of drug addiction and drug addiction are at the intersection of many sciences - sociology, cultural studies, economics, law, medicine.

One of the main problems discussed by scientists is the explanation of the causes of drug addiction.

Sociologists consider drug addiction as one of the forms of deviant (deviant) behavior, i.e. behavior that does not correspond to the officially established or actually established norms, stereotypes and patterns of behavior in a given society.

All sociological theories describing the mechanisms of deviation are used to explain drug addiction and drug addiction:
- the theory of anomie (social disorganization), proposed by E. Durkheim and later developed by Robert K. Merton;
- the theory of subcultures of the lower strata of society (E. Sutherland);
- the theory of stigma (G. Becker).

In the modern literature on the sociology of drug use, one of the central places is occupied by the thesis about the inadequacy of youth leisure, which generates boredom and melancholy. Young people, who feel their inability to get real satisfaction from the offered leisure, are subject to social disorganization and begin to try drugs to harmonize their mental and somatic state. Other sociological studies associate anomalous drug addiction not so much with deficiencies in the organization of leisure time, as with failures in a life career. For example, the American sociologist Denis Kandel proved that important incentives for the use of illicit drugs are "failure of normal entry into adult roles", when one has to socially adapt and make vital decisions on his own. Difficulties arising in this case, often accompanied by anxiety. Social immaturity and socialization problems are most clearly manifested in young people aged 16-19. In our case, these are students of 1-2 courses of higher educational institutions. Thus, drug use is seen as a manifestation of social and psychological pathology associated with the inability of certain individuals to take "normal" positions among their peers, in the sexual sphere, family life, and in the labor market.

Drug addiction, often, is a search for answers to questions of reality by transitioning into a reality of a different order. And, perhaps, an escape from reality, the search for freedom of decision-making in life in an altered state of consciousness. The relationship between anxiety and "chemical" addiction diseases (drug addiction, alcoholism) is the subject of numerous scientific studies. Reception of psychoactive substances (PAS), which are "mood moderators" (D. Edwards, 1975), is aimed at changing the mental state. The most important motive for this change is the desire to "overcome melancholy, anxiety and guilt" (E. Stehelin, 1967), to alleviate frustration, i.e. depression and anxiety when there are obstacles to desires and intentions (E. Morris, 1983). The use of psychoactive substances (PAS) is often accompanied by anxiety.

Anxiety is a state of consciousness associated with the experience of impending or perceived dangers. Feelings of anxiety are associated with, but different from, fear. Fear is a reaction to a near, real danger, and anxiety is a reaction to what might have happened.

Anxiety levels increase during and after stress. Anxiety can also increase with prolonged psycho-emotional stress, then a person lives for years, constantly experiencing anxiety. In this case, these people are focused not on the present, but on the future. Moreover, in the future they see images, situations, and circumstances of negative development of events that are unpleasant for themselves. At the psychological level, anxiety is felt as tension, anxiety, nervousness, a feeling of uncertainty, impending failure, inability to make a decision, etc. As the state of anxiety increases, its manifestations undergo a number of natural changes. Optimal level of anxiety

necessary for effective adaptation to reality (adaptive anxiety). An excessively high level of anxiety (as well as an excessively low level) cause a maladaptive reaction, manifested in a general disorganization of behavior and activity. Anxiety can be relieved voluntarily - with the help of vigorous activity to achieve the goal, and also involuntarily - as a result of taking psychoactive substances. Anxiety syndrome, as a risk factor for the use of psychoactive substances, is often not taken into account by specialists in the development of preventive and rehabilitation programs. Taking into account the importance of the anti-anxiety component in the prevention of drug addiction, we carried out a diagnosis of anxiety and its level in students with an established fact of using psychoactive substances (PAS). Revealing the fact of the use of surfactants was carried out by the method of vegetative resonance test (ART) using the hardware and software complex "IMEDIS-EXPERT" and "MINIEKSPERT-DT with software" . one). Then, all students with the established fact of the use of psychoactive substances were diagnosed with the state of anxiety and its level. For the purity of the experiment, we used various methods for diagnosing anxiety.

Diagnosing anxiety
To identify the state of anxiety and determine its level, we used the following methods:

1. ART.
2. The presence of a complex of physiological symptoms that accompany the condition anxiety:
- a strong heartbeat (or an unpleasant sensation in the chest);
- nausea;
- tremors (tremors) of the knees, hands, fingers;
- pallor or redness of the face;
- muscle tension and feeling of numbness;
- lethargy;
- headaches;
- diarrhea (diarrhea);
- shortness of breath when breathing anxiety or disturbed sleep, insomnia;
- numbness of various parts of the body;
- strange thoughts and nightmares;
- feeling tired and helpless;
- uncontrolled outbursts of anger.

Each may have their own, one or more of the signs from the list. Having discovered in himself any of these (one or several) signs, a person begins to become even more anxious. Anxiety is growing like a snowball. There is vague anxiety, hypochondriacal fears. They are afraid of cardiac arrest, worsening of their condition, there may be causeless fears and anxiety. Autonomic reactions occur: chills, sweating, heart palpitations, fluctuations in blood pressure, a feeling of constriction in the chest, "cramps" in the abdomen, etc. In this case, the motive for the use of psychoactive substances is the desire to get rid of the painful state of melancholy, anxiety and improvement of physical condition.

3. Special psychological tests of anxiety to identify its level. We used the hospital anxiety and depression scale (HADS). The scale is composed of 14 statements and includes 2 parts.
Assessment of the level of anxiety (1 part):
1. I feel tension, I feel uncomfortable: 3 points (3b) - all the time; 2b - often; 1b - time from time to time, sometimes; 0b - I don't feel at all.
2. I am afraid, it seems that something is about to happen: 3b - this is definitely so, and the fear is very great; 2b - yes, it is, but the fear is not very great; 1b - sometimes, but it doesn't bother me; 0b - I don't feel at all.
3. Restless thoughts are spinning in my head: 3b - constantly; 2b - most of time; 1b - from time to time and not so often; 0b - only sometimes.
4. I can easily relax: 0b - definitely so; 1b - probably so; 2b - only occasionally; 3b - I can't at all.
5. I feel inner tension or trembling: 0b - I do not feel at all; 1b - sometimes;

2 b - often; 3b - very often.

6. I feel restless, I constantly need to move: 3b - this is definitely so; 2b - probably so; 1b - only to some extent this is so; 0b - I don't feel at all.

7. I have a sudden feeling of panic: 3b - very often; 2b - quite often; 1b - not so often; 0b - not often.

Assessment of the level of depression (part 2):

1. What brought me great pleasure, and now gives me the same feeling: 0b - definitely so; 1b - probably so; 2b - this is so only to a very small extent; 3b is not at all the case.

2. I am able to laugh and see funny things in this or that event: 0b - definitely this So; 1b - probably so; 2b - this is so only to a small extent; 3b - not capable at all.

3. I feel cheerful: 3b - I do not feel at all; 2b - very rare; 1b - sometimes; 0b - almost all the time.

4. It seems to me that I began to do everything very slowly: 3b - almost all the time; 2b - often; 1b - sometimes; 0b - not at all.

5. I do not follow my appearance: 3b - definitely so; 2b - I don't pay as much to it time as needed; 1b - maybe; 0b - I don't look after my appearance the way I used to.

6. I believe that my affairs can bring me a sense of satisfaction: 0b - just like usually; 1b - yes, but not to the same extent as before; 2b - much less than usual; 3 b - I don't think so at all.

7. I can enjoy a good book, TV program: 0b - often; 1b - sometimes; 2b - rarely; 3b - very rare.

For interpretation, it is necessary to summarize the scores for each part separately:

0–7 points - "norm" (absence of reliably expressed symptoms of anxiety and depression); 8-10 points - "subclinically expressed anxiety and depression"; 11 points and above - "clinically expressed anxiety, depression".

The ART method was taken as the fundamental diagnostic method, the other two were used as auxiliary ones. But all the methods used gave the same result.

It is noteworthy that in 570 students with the established fact of the use of psychoactive substances, subclinically expressed anxiety was diagnosed, and only 11 people were diagnosed with clinically expressed anxiety and depression.

It is not an easy task to help a person get on the path of drug quitting and stay on this path. The adequacy of the ongoing rehabilitation measures is fundamentally important. Of particular interest are the results obtained with the use of adaptive bioresonance therapy (BRT) to eliminate anxiety. The range of BRT capabilities is very wide and varied. It is currently the most holistic and effective direction in modern primary prevention of addictions. The use of the expanded capabilities of BRT allows for a fairly short period to achieve a complete removal or a significant reduction in the level of anxiety, which ultimately leads to the planned result: a persistent refusal to take psychoactive substances.

It is fundamentally important not only to stabilize the process, but also to avoid complications. When determining the dynamics of indicators, the results of the positive dynamics of the mental status of students are of particular interest: anxiety, tearfulness, irritability decreased. Patients became calmer, more willing to make contact, talked more openly about their problems, noted the emergence of "internal calmness", the disappearance of "internal anxiety". From the 3-4th day of the use of BRT, the craving for the psychoactive substance decreased. It is noteworthy that in the process of BRT, activity appeared, contact and communication skills improved. The observed became softer, more responsive, more willing to talk. Students felt a "burst of energy", the appearance of "cheerfulness", subjective improvement and "relief" of the thought process. During this period, mood stabilization can be noted. The behavior of the subjects was noticeably more orderly: they expressed fewer complaints and claims, more "loyally" and with interest began to relate to the passage of the rehabilitation program. Decreased the intensity of craving for surfactants. According to students' self-assessments, the "ideatorial" component of the pathological drive disappeared or clearly decreased by the 5-7th day from the start of BRT. Importantly, there was no need to prescribe antidepressants. The "ideatorial" component of the pathological drive disappeared or clearly decreased by the 5-7th day from the start of BRT. Importantly, there was no need to prescribe antidepressants. The "ideatorial" component of the pathological drive disappeared or clearly decreased by the 5-7th day from the start of BRT. Importantly, there was no need to prescribe antidepressants.

In people predisposed to drug use, as a result of BRT, there was the development of sequential and closely interrelated processes leading to

persistent refusal to take surfactants. Many students, experiencing a painful attraction to the use of psychoactive substances, do not fall into the field of view of specialists, and for a long time and sometimes unsuccessfully try to overcome their suffering on their own. The living conditions of a modern person confront him with negative influences on the psychoemotional sphere and often cause the appearance of a state of anxiety. In this case, young people use psychoactive substances to relieve an uncomfortable psychoemotional state. Timely diagnosis and correction of the state of anxiety is an important link in the prevention of drug addiction. The use of ART and BRT to achieve positive results in the prevention of drug addiction allows you to comply with the important principles of modern medicine:
- Individualization of therapy for each specific patient.
- Treatment under constant control of the vegetative resonance test (ART) "IMEDIS-TEST", which allows you to objectively monitor the dynamics of treatment and carry out adequate correction of the therapy.

Table 1

The results of hardware testing to establish the fact of the use of surfactants
(January-November 2011)

University	Gone testing (people)	Revealed the fact of the use of surfactants (people)		
		T	TO	M
UGPU (Ural state pedagogical university)	134	40 (29.85%)	3 (2.23%)	0
USUE (Uralsky state economic university)	138	34 (24.63%)	18 (13.04%)	0
USMU (Ural state mountain university)	1918	258 (13.45%)	117 (6.1%)	111 (5.78%)
TOTAL:	2190	332 (15.15%)	138 (6.3%)	111 (5%)

T - tabletted pharmacological preparations containing codeine-containing preparations and used repeatedly during 2011 without a doctor's prescription.

TO - hookah mixtures containing surfactants. Use no more than three times in 2011 with an interval of 2-4 months.
M - marijuana. Use no more than three times in 2011 with an interval of 2-4 months.

table 2

Results of adaptive bioresonance therapy
(January-December 2011)

Form nosology	Quantity patients	Method treatment	results		
			Significant improvement	Improvement	No improvements
Mental disorders and disorders behavior	581 people	BRT	554 people 95.35%	26 people 4.45%	1 person 0.2%

Conclusions:

1. Diagnostics of the state of anxiety and its level, elimination of the identified state as the risk factor for the propensity to use psychoactive substances is undoubtedly necessary to achieve positive results in the implementation of prophylactic anti-drug measures.

2. Proposed new approaches to the diagnosis and elimination of risk factors based on ART and BRT methods indicate the potential effectiveness of drug addiction prevention when used professionally.

3. An important link in solving the main problems in the prevention of addictions with the use of BRT is training.

Bibliography

1. Zingerman I., Karelsky G. Deep causes of drug addiction. http://www.rebcentr.org/