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3.А. Яркина, Е.А. Лащевская ДОФАМИНОВАЯ ЗАВИСИМОСТЬ В СОВРЕМЕННОМ ОБЩЕСТВЕ

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Z. A. Yarkina, E. A. Lashchevskaya DOPAMINE ADDICTION IN MODERN SOCIETY

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Резюме. Суть дофаминовой зависимости: при нарушении обмена дофамина в организме у человека возникает желание сделать что-то, что вызовет выброс большего количества дофамина и получение удовольствия. Так формируется химическая зависимость. С каждым разом снижается чувствительность рецепторов, растёт толерантность.

Ключевые слова: дофамин, зависимость, удовольствие, желание.

Resume. The essence of dopamine addiction is when, in case of a violation of dopamine metabolism, a person has a desire to do something that will cause the release of more dopamine and enjoyment. This is how chemical addiction is formed. Each time the sensitivity of receptors decreases, tolerance grows.

Keywords: dopamine, addiction, pleasure, desire.

Relevance. In modern society, people often face such a problem as dopamine addiction. Scientists had done many studies that showed that the dopamine system could be activated by a wide range of pleasurable experiences such as eating delicious food, scrolling through feeds of social media, having sex, watching stand-up comedy or profitting. The dopamine system also responds strongly to addictive drugs, including opiates, alcohol and cocaine. These drugs may be more energizing than natural "rewards". That's how dopamine addiction starts.

Aim: to study how dopamine affects our lives.

Objectives:

- 1. To find out what dopamine addiction is, how to treat it and whether it should be treated.
- 2. To study what dopamine addiction can lead to and how common it is among the younger generation.

Materials and methods. We used research methods of literature analysis, material generalization and its comparative characteristics. Also we interviewed a group of people and did the research. We found out how many people were aware of dopamine addiction, what manifestations occured more often than others and how people dealt with them mostly.

Results and their discussion. We have interviewed more than a hundred people and compiled statistics about the main addictions that people have in modern society. The results may differ depending on our environment and the people's interests. The interview with more than a hundred of people showed that 26,1% of those people have never heard of dopamine addiction before; 54,9% have bad habits; 47,9% say that they are addicted to

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social media; 12,3% have addiction to videogames; 16,6% smoke and drink; 50,7% cannot live without sugar and junk food; 19,2% are addicted to sex and masturbation. More than a half of them (58,9%) noticed a loss of concentration and attention, stress, insomnia, obsessive thoughts and overeating lately. 46,6% of people want to work on their addiction and overcome it. We conducted an experiment and found out what changes would happen to a person if he or she tried to give up all of the above addictions for a week. One student was the "test subject", and the other one observed and recorded the data:

- On the first day the girl had a headache and really wanted something sweet, but she also became more active;
 - Gradually the quality of sleep had improved significantly, the headache was gone;
 - Fatigue had decreased, she also needed less time to rest than usual;
 - She replaced sweets with fruit.
- By the end of the experiment, her sleep and skin quality had improved, she had more energy and motivation for work and her craving for former temptations had greatly decreased.

We were satisfied with the experiments results and proved that could be overcome if you had a clear goal and strove for it!

Dopamine is a hormone and neuromodulatory molecule released in the brain. It is believed that dopamine causes a feeling of pleasure or satisfaction, which affects the processes of motivation and learning. However, recent studies show that dopamine does not cause feelings of pleasure or satisfaction, but creates a strong feeling of anticipation from getting a result or unwillingness to get it, similar to what people experience before orgasm or with strong disgust. Dopamine is naturally produced in large quantities during positive experiences, such as sex, eating delicious food, pleasant bodily sensations, thus giving these events motivational importance. Neurobiological experiments have shown that even memories of encouragement can increase dopamine levels, so this neurotransmitter is used by the brain to evaluate and motivate, fixing actions important for survival and procreation.

The dopamine system also responds strongly to addictive drugs, including opiates, alcohol and cocaine. These drugs may be more energizing than natural "rewards". That is how dopamine addiction starts.

Different mental changes occur before the "reward", including changes in motivation, arousel, attention, emotions and learning.

An abnormal level of dopamine often leads to irrational person's action, contributes to the development of illnesses such as depression, psychosis, compulsive overeating and so on. Even in Parkinson's disease, the nerve cells that produce dopamine are gradually dying. This leads to problems with muscle stiffness and movement, because dopamine controls the muscles.



Fig. 1 – Dopamine

Dopamine addiction is a trap of constant self-stimulation. In this situation, the goal achievement is important to the person, but the chase process itself. The miracle expectation becomes more important than a miracle and those caught in the dopamine loop cannot stop.

A dopamine detox is a form of cognitive behavioral therapy, which is based on the fact that conscious restriction of addictive activities can help people become more aware of impulsive behaviors and encourage more flexible thinking.

Conclusions: we have concluded that not all people have the most common manifestations of dopamine addiction. Nevertheless, in modern society, we cannot completely ignore all those benefits, bringing us pleasure. We also do not pay attention to the signs from our body often. Therefore, to develop willpower and sound mind the best options for our actions are control and protection of physical and mental health.

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