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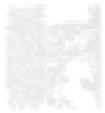
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**NEW PSYCHOACTIVE SUBSTANCES (NPS) AND PROBLEMS
ASSOCIATED WITH THEIR USE IN THE WORLD AND IN UZBEKISTAN.**

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Abstract: Detailed literature review and interviews with 17 NPS users (between ages of 16-35) to describe the existing situation with NPS use among youth in Uzbekistan, users' motives and needs, their awareness of harms caused by NPS use.

Keywords: new psychoactive substances, mephedrone, alpha-pvp, salts, drug addiction

Relevance: The sale and distribution of NPS is currently taking place via the Internet and social networks, including various instant messengers. The legality of NPS products in some of the European countries made these substances available for a long time and consumers considered them to be less dangerous than legal drugs. They were offered as "legal soft drugs."

Studies carried in several countries concluded that young people perceived the risk of NPS use as very low [1]. A study of perceived risk of NPS among the UK students revealed that those who had prior experience of taking NPS (8.2% of surveyed students) considered the risk of using NPS lower than those who had not taken the drugs [2]. Nightlife outreach and peer education are encouraged to educate consumers about the health risks and available care from drug and health services [3].

Besides the low awareness of harms caused by NPS, motives for consumption among young people can vary. The socialization process, cognitive enhancement, recreational, and appetite/weight-related purposes were the main factor for taking psychoactive substances among young people including students [4, 5]. Another article by Deligianni et. al. stated about the influence of friends (69%) and the desire to get high (76%) as the primary motives for using NPS [6]. Large research using both qualitative and quantitative methods that was carried out in 2016-2017 in Great Britain by K. Higgins. et. al. identified the following list of key drivers for NPS use: legal status, availability and accessibility, potency and quality, costs, and pleasure [7].

Traditional drug preventive and rehabilitation options seem to be ineffective when it comes to NPS users. Research by Prilutskaya stated that NPS users are younger in age quickly leave rehabilitation programs, which indicates an increased risk of relapse, and they are somewhat conflicted and quarrelsome with the staff [8]. As the most young users purchase NPS online, Miliano et al. recommended using social network channels in which NPS is disseminated through to raise awareness of the dangers of NPS consumption [9].

The emergence and popularity of NPS among young people in Uzbekistan has been on the rise due to the availability through Internet platforms and the relative cheapness of NPS compared to illegal traditional drugs [10]. In Uzbekistan, there is not enough information about the dangers and consequences of the abuse of NPS due to the constant emergence of new substances. There is not enough work aimed at psychosocial work with NPS users in Uzbekistan and clarifying all the gaps in our understanding of

the problem of the actual state of NPS use. Despite efforts to search for publications, no scientific papers on psychosocial work with NPS users have been found in Uzbekistan. Thus, there is no reliable information on the number of users, their motivation to use NPS, as well as their awareness of the harm caused by the use of NPS to health and social life. Moreover, specialists (narcologists, psychologists and toxicologists) lack this kind of information to provide the necessary support.

A review of the literature on the available international articles showed that most articles are devoted to the harm and negative effects of NPS, distribution channels, the level of awareness and motives for taking NPS. At the same time, there is a lack of a knowledge base on the effectiveness of any preventive measures / interventions associated with the use of NPS.

There are gaps in our understanding of the psychosocial and health needs of NPS users, how they should be contacted and what measures are needed to reduce the harm associated with the abuse of new illicit substances. We aim to study the role that psychosocial work could play against NPS use, especially among young people, as international practice has proven that existing therapies are ineffective for NPS users. Given the fact that this area is generally not covered by academic work in Uzbekistan, it is envisaged that this project will be of great importance for academic research.

Target. To conduct psychosocial research to fill the missing gaps in our knowledge on the use of NPS among youth in Uzbekistan.

Research methods. In this formative study, mixed-methods approach will be utilized to collect and analyze the required data. We will use both quantitative and qualitative approaches throughout our research. While the secondary data will be obtained through systematic literature review (both qualitative and quantitative), primary data will be obtained through interview with NPS users and their significant others (qualitative), online survey among NPS users (quantitative), and focus groups with other health care providers (qualitative).

a.Literature review. Literature review will be done using PRISMA structure to gain state-of-the-art knowledge on what is known and what is not known internationally and on local levels in terms of development of programs to reduce harmful effects of new psychoactive substances on youth. Here we also will consider theories that could serve as the foundation for development of interventions targeting NPS users.

b.Interviews with NPS users. We will consult with young (16 to 35 y.o.) on their motivations to use NPS, their perceptions of associated risks, real harms, specifics of their drug use practices and ideas of what kind of health services they think would be useful in maintaining and improving their health and psychosocial functioning. We plan to conduct 25-30 face-to-face interviews with NPS users.

c.Online survey. Based on the results of these interviews a survey will be developed and shared with at least 50 NPS users. This survey will focus on the following topics: their consumption history, their needs, motives and ways of getting the NPS, their awareness level of potential harms of NPS use. It will not be very easy to gather large number of NPS users, which is partly connected to the socio-cultural aspects of our country. It is accepted norm not to reveal or openly discuss family and personal problems with outsiders. In order to solve this issue and get access to NPS users it was decided to contact former consumers of NPS, and conduct informal, unstructured interviews with them. This can help to identify the existing network of consumers, since NPS users trust each other and they will more willingly discuss their problems and their consumption patterns with their peers rather than with outsiders. It is also considered to use some incentives (eg.financial and non-financial) for those who participate in the survey.

d.Interviews with significant others of NPS users. We aim to interview significant

others (family members, friends, co-workers) of at least 20 NPS user-respondents who will be engaged in the study. Interview questions will include questions on perceptions of risks and opportunities to help their loved ones to maintain their health.

e. Focus groups with healthcare providers. STRIDA project that was run in Sweden revealed that healthcare workers had low awareness of NPS and as a result had problems in dealing with adverse results of NPS patients [11]. Considering this fact, we hypothesize that healthcare workers in Uzbekistan also have low awareness of NPS. In order to prove this hypothesis a series of focus group discussions (FGD) with narcologists (n=12), psychologists (n=12), and toxicologists (n=12) from all regions of Uzbekistan are planned. FGD will aim to gain information of healthcare providers' knowledge on local trends of NPS use, associated harms and effectiveness of the existing services and potential for development of new ones.

Results. Based on the 17 NPS user interviews conducted so far, we identified some common traits among users. 71% of users were male, while the average age was 27. Interestingly, 52% had at least a secondary education, while additional 29% had higher education (41% total finished or unfinished). 12 out of 17 NPS users reported to have employment and self-employment while 5 were unemployed. 53% of users were single.

Average age when they first tried out psychotropic substance was 19, while average age for NPS trial was 23. Majority of the users (65%) seem to start off with tablets like lyrica, tropicamide, regapen or marijuana and then level up to NPS like mephedrone, alpha-pvp, and salts. The use of stimulant synthetic cathinones were dominant (65%) among NPS users. 47% of NPS users reported that they started using NPS in social setting with friends. It's worth noting that 100% of users reported to have used traditional drugs such as cocaine, heroin, or marijuana making them poly drug users.

Mephedrone seems to be the most popular NPS (88%) tried among interviewed users (15 out of 17) while 65% (12 out of 17) consider it as the preferred NPS. The cost of 1 gram of mephedrone could be anywhere between \$70-\$100 according to the users. Few noted that they have used bitcoin/crypto to purchase NPS online. Almost all of the users (88% or 15 out of 17) purchase NPS online, mainly through Telegram channels. 70% (12 users) reported to have used NPS in the past 30 days. Most users (70%) believe that mephedrone is the most popular NPS among all other users. Majority users (76%) seem to use NPS at home either alone or with friends.

Most of the users (76%) confirmed that addiction occurs with NPS use. Primary reasons and motivations included: pleasure, socialization, euphoria, escaping reality, blocking of feelings, different mental state and sexual enhancement. Of the 17 NPS users interviewed, 16 (94%) were aware of the harms caused by NPS use. 88% of users seem to be trying to cut down the use of NPS. All of them have reported that NPS use has negatively impacted their lives including their relationships with their friends and relatives. 53% were willing to help other NPS users as they deemed that only previous users could help active users with their addictions.

It is interesting to mention that 76% of them had Russian as their primary language despite some of them being ethnically Uzbek among this group. In Uzbekistan, knowing and speaking Russian language is considered to be "elite" or "cool" among population, especially among youth. As most users started using NPS with friends, it could be argued that NPS use can be associated with wanting to be part of the "cool" group as part of socialization process. Also, as most NPS is imported and sold from Russia and Kazakhstan, common language makes it easy to connect sellers and users. There's an online community of NPS users where they share their NPS experiences and side effects.

Some NPS users (3 out of 17) report of being offered money for distributing drugs and most of them confess of making money by distributing NPS which many do not

regard as criminal activity. Very few NPS users have experience of contacting official drug treatment services as NPS users believe that only they can only help themselves in overcoming their addictions. The majority of the respondents expressed their lack of confidence in narcological services. These NPS users were glad to have a psychotherapist to talk to and they have shown the desire to continue talking to specialists.

Conclusions.

1.The primary reasons and motives behind NPS use remain pleasure, escaping reality, blocking of feelings, socialization, euphoria, and sexual enhancement.

2.Stimulant synthetic cathinones seem to be dominant among NPS used among youth with mephedrone being the most popular NPS in Uzbekistan.

3.Drug addiction specialists often have very limited expertise about NPS that influence NPS users' motivation for seeking help from them. It is critical to raise awareness on NPS among drug addiction specialists to provide informed medical and psychosocial assistance to NPS users.

4.There are some specific social-cultural factors in Uzbekistan such as common shared language with NPS exporting countries.

5.NPS users showing the desire to talk to mental health specialists creates an opportunity to potentially set up psychosocial health interventions for youth.

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