Motives for New Psychoactive Substances Consumption among Young Adults in Uzbekistan: A Qualitative Study Protocol

Мотивы употребления новых психоактивных веществ молодыми людьми в Республике Узбекистан: протокол качественного исследования

doi: 10.17816/CP15531

Study protocol

Guzalkhon Zakhidova[1,2,3], Uladzimir Pikirenia[2,3], Timur Syunyakov[1,4,5], Mariya Prilutskaya[2,6]

[1] Republican Specialized Scientific and Practical Medical Center for Mental Health, Tashkent, Uzbekistan

[2] Frankfurt University of Applied Sciences, Frankfurt am Main, Germany

[3] Bukhara State Medical Institute, Bukhara, Uzbekistan

[4] Mental-health Clinic No. 1 named after N.A. Alexeev, Moscow, Russia

[5] Samara State Medical University, Samara, Russia

[6] Semey Medical University, Pavlodar, Kazakhstan

Гузалхон Захидова[1,2,3], Владимир Пикиреня[2,3], Тимур Сюняков[1,4,5], Мария Прилуцкая[2,6]

[1] Республиканский специализированный научно-практический медицинский центр психического здоровья (Ташкент, Узбекистан)

[2] Франкфуртский университет прикладных наук, Франкфурт-на-Майне, Германия

[3] Бухарский государственный медицинский институт, Бухара, Узбекистан

[4] ГБУЗ «Психиатрическая клиническая больница № 1 им. Н.А. Алексеева Департамента здравоохранения города Москвы», Москва, Росси

[5] ФГБОУ ВО «Самарский государственный медицинский университет», Самара, Россия

[6] Медицинский университет Семей, Павлодар, Казахстан

ABSTRACT

BACKGROUND: New psychoactive substances (NPS) represent a global problem, especially among young people. In Central Asia, while the trafficking in NPS continues to grow, there remains a lack of data on the social, health and psychological consequences of their use.

AIM: To investigate the motives behind the NPS use among young people in the Republic of Uzbekistan, as well as the medical and social characteristics of this group.

METHODS: The study will include young people (18–35 years) who have used NPS in the preceeding 30 days (on the basis of self-reports) or are undergoing rehabilitation and plan to cease the NPS use within the next 12–18 months. Semi-structured interviews will reveal the reasons for NPS use, risk perception, stigma, barriers to seeking help, and the need for preventive and rehabilitation services. Interviews will take place at the Republican Mental Health Center and two specialized rehabilitation centers in Uzbekistan between November 2024 and the completion of enrollment (25–30 participants), but no later than May 2025. Additionally, a focus group of psychiatrists, psychotherapists, narcologists, and psychologists will evaluate the level of awareness amongst health care professionals as regards of NPS use and its prevalence, medical, and social implications.

EXPECTED RESULTS: The study will identify the key motives of NPS use, usage patterns, and social and medical barriers of help-seeking. Findings will contribute to the development of prevention and rehabilitation strategies, including digital communication platforms and interactive educational programs.

CONCLUSION: The study focuses on raising awareness about the consequences of NPS in the Republic of Uzbekistan. This is essential for developing effective public health prevention and rehabilitation programs.

АННОТАЦИЯ

ВВЕДЕНИЕ: Новые психоактивные вещества (НПВ) представляют собой глобальную проблему, особенно среди молодежи. В Центральной Азии, на фоне увеличения трафика этих веществ, наблюдается нехватка данных о социальных, медицинских и психологических последствиях их употребления.

ЦЕЛЬ: Изучить мотивы употребления НПВ молодыми людьми в Республике Узбекистан, а также медико-социальные характеристики данной группы.

МЕТОДЫ: В исследование планируется включать молодых людей (18–35 лет), которые употребляли НПВ в последние 30 суток (по данным самоотчета) или проходят реабилитацию и планируют отказаться от употребления НПВ в течение последующих 12–18 месяцев. Для изучения мотивов употребления НПВ, восприятия риска, стигматизации, барьеров для обращения за помощью, потребностей в профилактике и реабилитации будут проведены полуструктурированные интервью. Интервью с потребителями НПВ пройдут в Республиканском центре психического здоровья и двух специализированных реабилитационных центрах Узбекистана в период с ноября 2024 года и до завершения набора участников (25–30 участников), но не позднее мая 2025 года. Осведомленность медицинских работников о распространенности и медико-социальных аспектах употребления НПВ изучат в фокус-группе с участием психиатров, психотерапевтов, наркологов и психологов.

ОЖИДАЕМЫЕ РЕЗУЛЬТАТЫ: По итогам исследования будут определены ключевые мотивы употребления НПВ, паттерны их использования, а также социальные и медицинские барьеры, препятствующие получению помощи. Также будут разработаны стратегии профилактики потребления НПВ и реабилитации потребителей, включая цифровые каналы коммуникации и интерактивные образовательные программы.

ЗАКЛЮЧЕНИЕ: Исследование нацелено на повышение осведомленности о последствиях распространения НПВ в Узбекистане. Его результаты будут способствовать разработке программ профилактики и реабилитации в системе общественного здравоохранения.

Keywords: *new psychoactive substances; youth; study protocol; Uzbekistan; qualitative study*
Ключевые слова: *новые психоактивные вещества; молодежь; протокол исследования; Узбекистан; качественное исследование*

INTRODUCTION

New psychoactive substances (NPSs) made their appearance on the market of addictive psychoactive substances in 2005 [1]. As defined by the United Nations Office on Drugs and Crime (UNODC), NPS is a substance susceptible to abuse, either in pure form or as a preparation, that is not covered by the 1961 Single Convention on Narcotic Drugs or the 1971 Convention on Psychotropic Substances but which may pose a "public health threat". In this context, the term "new" does not necessarily refer to novel preparations, but to substances that have only recently become available[1].

[1] United Nations Office on Drugs and Crime. The Challenge of New Psychoactive Substances. Viena: United Nations Office on Drugs and Crime; 2013 [cited 2024 Jul 23]. Available from: https://www.unodc.org/documents/scientific/NPS_Report.pdf

According to a report by the UNODC based on 2011–2016 data, an increase in NPS seizures and use in Central Asian countries associated with a surge in traffic from Russia and China is underway [2]. In particular, an increase in seizures of synthetic drugs in Kazakhstan has been observed since 2012, including the seizure of 10.6 kg of alpha-pyrrolidinopentiophenone in 2015 [2]. The same report noted a net increase in patients hospitalized with NPS dependence [2], while the prevalence of psychostimulant use among adolescents (13–18 years) is estimated to have increased to 2% [3]. In Tajikistan, 63 kg of methamphetamine was seized in 2012; in Kyrgyzstan, a methcathinone laboratory was dismantled in 2012 and 7 kg of amphetamine were seized in 2014[2]. An increase in documented cases of illicit cultivation of narcotic plants was recorded in Turkmenistan in 2012[2]. In 2013–2014, more than 6,500 drug-related crimes were registered in Uzbekistan, with an increase in the proportion of NPS-related offenses[2]. In the period from 2013 to 2016, all of the abovementioned countries, with the exception of Turkmenistan, reported the appearance of several dozen types of NPS[2].

The expanded presence of NPSs is largely due to their availability through online platforms and specialized outdoor outlets [4, 5]. The European Monitoring Centre for Drugs and Drug Addiction (now the European Union Drugs Agency, EUDA) reported more than 600 cases of NPSs between 2005 and 2016, with an annual increase of 13 NPSs in 2005 to 66 NPSs in 2016, with a peak of 101 cases of NPSs in 2014. This indicates a rapid, even exploding, availability of NPSs, combined with an increasing range of medical and social problems that includes attending issues such as the high toxicity of the drugs, poisoning, addiction and overdose, the sense of marginalization brought about by the use of these substances, the risks of accidental poisoning for others, the expansion of prisons, and increased overall violence [6].

Yet, the results of surveys looking into the use of NPSs remain highly volatile and context-specific, with considerable variations being observed between different countries and populations[3] [7]. In particular, such surveys have identified the geographic, cultural, and socio-economic factors that are associated with the easy availability of NPSs, the reasons for and how they are used, the specifics of the media coverage of the problem, and the degree of social stigmatization that comes with that use. The reasons behind the use of NPSs, the mechanisms of dependence, as well as the health consequences, including toxicity and the development of dependence, are also determined by the pharmacological profiles of the substances in this group [8, 9]. Considerably more complex relationships and health outcomes are related to the practice of poly-drug use of NPSs [9].

It is, therefore, not surprising that the reasons behind the surge in the use of NPSs vary and include curiosity, the seeking of pleasure or pursuit of a warped sense of sociability, and the desire to escape from reality, with the chief reasons varying depending on the region, cultural, and social contexts [5, 10]. Moreover, people using NPSs often perceive these substances as safer alternatives to traditional illicit drugs, which leads to stronger temptation to ignore barriers to their use and, as a result, an increase in their availability and associated risks [5]. At the same time, the proliferation of information about NPSs on the Internet has led to changes in drug use patterns, as many users seek these substances because of the hitherto unexperienced sensations they afford them [5]. Age-specific patterns and characteristics of NPS use have also been reported. In particular, according to a literature review by Coombs et al. (2022), the level of use of NPSs is highest among young people aged 16 to 24 years (data for Australia, New Zealand, Poland, Spain, the United Kingdom, and the USA)[3].

Public health measures to counter the spread of NPSs include innovative surveillance methods to identify new trends and the risks associated with these substances. For example, the French Addictovigilance Network uses a multifactorial approach (collection of data from different sources, analysis of abuse signals, early identification of drug use patterns) to monitor drug use patterns and related health effects, which has proven to be effective in the early detection of substance abuse signals and the prevention of adverse health effects [6]. Such systems are necessary for developing public health care strategies and interventions aimed at reducing the risks associated

[2] United Nations Office on Drugs and Crime. Central Asia Synthetic Druds Situation Assessment. Viena: United Nations Office on Drugs and Crime; 2017 [cited 2024 Jul 23]. Available from: https://www.unodc.org/documents/scientific/Central_Asia_November_2017_FINAL.pdf

[3] European Union Drugs Agency. European Drug Report 2017. Lisbon: European Union Drugs Agency; 2017 [cited 2024 Jul 23]. Available from: https://euda.europa.eu/publications/edr/trends-developments/2017/html_en

with the use of NPSs, which justifies the development of similar monitoring and prevention tools in other regions, including in Central Asia.

Under the current circumstances, the Government of Uzbekistan is taking comprehensive measures to increase oversight of the illegal circulation of narcotic drugs and psychotropic substances[2], including a review of the list of controlled substances, legislation, and the fostering of interdepartmental cooperation. In particular, the Narcotics Control Committee of the Republic of Uzbekistan regularly updates its lists of controlled substances and coordinates activities related to their legal circulation, including the issuance of permits for the import, export, and transit of NPSs[4]. In 2024, the national strategy for fighting drug addiction and drug-related crime for 2024–2028 was approved and centered on improving the legislation, drug monitoring, and public safety[5]. The National Center on Drug Control has been established, with the responsibility to interact with international organizations, develop preventive measures, and regularly submit reports to the UN[6]. At the same time, the issue of the development, implementation, and expansion of programs for prevention of the short- and long-term health consequences of the use of NPSs, including transient psychotic conditions [11, 12], psychoses [13, 14], and suicide [15], remains relevant for Uzbekistan.

In the current literature, the Central Asian countries are mentioned only as a starting point on the route of NPSs to other countries [14]. The lack of data is critical in the development of regional public health care programs, as the socio-economic and cultural factors that influence drug use behavior in Central Asia may have a different structure and impact compared with countries where the reasons for NPS use have been studied. The need for the development of these programs has to do with the inefficacy of simply raising awareness about the risks associated with psychoactive substances in stopping their use by adolescents and other youths [16]. In addition, the need for developing personalized strategies for countering illegal substance use through a deep look into the reasons behind such behavior and the application of interventions adapted to the individual's reasoning profile is being discussed [17]. The fact of change in behavior and, as a result, decrease in the level of substance use among young people as a result of motivational interviews also support the idea that a comprehensive solution to motivational problems is the key to effective countering of NPS use [18, 19]. It is important to note that the reasons for the use of classical psychoactive substances and NPSs can differ significantly, which also points to the need for the development of targeted (adapted to NPSs) prevention strategies and programs [20]. According to Jatau et al., such community-centered measures aimed at changing behavior through the implementation of motivational and cognitive behavioral strategies may be useful [21].

The aim of this study is to investigate the motives for NPS use among young people in the Republic of Uzbekistan, as well as the medical and social characteristics of this group.

This aim was dictated by the following objectives:

1. To study the reasons why young people use NPSs.
2. To assess how aware young people are about the consequences of using NPSs on their health and social well-being and their perception of the harm caused by NPSs.
3. To identify NPS use patterns.
4. To assess how young people perceive the stigma that comes with the use of NPSs and its impact on their willingness to seek help, as well as the barriers to seeking and accepting medical, psychological, and social assistance.
5. To evaluate the necessity for preventive measures and assistance for young people when problems arise in relation to their use of illicit drugs.

METHODS

Study design

This qualitative study will use a phenomenological approach to investigate the characteristics and patterns of the use of NPSs from the point of view of substance consumers

[4] Narcotics Control Committee [Internet]. Tashkent; 2024 [cited 2024 Jul 23]. Available from: https://www.uzpharm-control.uz/en/departments/the-drug-control-committee

[5] National Strategy to Combat Drug Addiction and Drug Crime in the Republic of Uzbekistan for 2024–2028. 2024 [cited 2024 Nov 3]. Available from: https://www.project-leica.eu/en/uzbekistan-developed-the-national-strategy-to-combat-drug-addiction-and-drug-crime-in-the-republic-of-uzbekistan-for-2024-2028

[6] On strategic measures to eliminate the negative impact of narcotic drugs and psychotropic substances on the health of the population and the gene pool of the country by ending the illegal circulation of narcotic drugs and psychotropic substances in the Republic of Uzbekistan: decree of the President of the Republic of Uzbekistan No. UP-73 of May 6, 2024. 2024 [cited 2024 Jul 23]. Uzbek. Available from: https://lex.uz/docs/6912475

in this group. The theory of social learning was chosen as the basic theory for the planned study, which focuses on the interaction of behavioral, cognitive, and environmental factors (in particular, the social environment and the context of the surrounding community) [22]. The immediate environment of the person (family, friends, and colleagues) will be regarded as the social environment, while cultural, economic, and social conditions, and the specific regional features or national traditions will be considered in the context of the surrounding community.

An inductive method of qualitative data analysis will be used to identify the key patterns and aspects of use of NPSs. Instead of being formulated in advance, study hypotheses will be based on the information collected, a method predicated on insufficient knowledge of the issue of the NPSs use by young people in Uzbekistan. However, the study will test a number of baseline assumptions about the reasons why young people in particular use NPSs, as well as their medical and social characteristics:

1. The use of NPSs is rooted in a combination of psychological factors, such as the desire to reduce stress and experience pleasure, social conditions, including the influence of the environment and the availability of substances, as well as economic circumstances, such as low cost and ease of access.
2. Young people who use NPSs have insufficient information about the long-term risks associated with their use, and the strength of the motivating reasons outweigh the assessed risks, which increases the likelihood of continued use.
3. Patterns of NPSs use, including the frequency and conditions in which they are used, the methods of purchase, and the types of substances used, vary and are linked to the availability of substances, the social context, and the individual preferences of those using them.
4. The high level of stigmatization of NPSs users in society suppresses their willingness to seek medical, psychological, and social assistance, which raises additional barriers towards accessing the necessary support.
5. From the perspective of young NPSs users, the most effective measures to tackle the problem would be to enlist interactive educational programs and digital communication tools, as well as making available anonymous treatment services and social assistance.

Our study will consist of three parts: two rounds of interviews with users (a pilot and a main survey) and a focus group with specialists. *The pilot survey* will involve interviewing NPS users to improve and adapt our questionnaires (data collection tools) for the main survey by testing questions for clarity and consistency for the participants in the pilot interview. *The main survey* will include a series of individual interviews with NPS users (current users of NPS or undergoing rehabilitation); the meetings will be held in a location convenient for the interviewer. The interviews in *focus groups* with health care professionals (psychiatrists, psychotherapists, drug addiction specialists, psychologists) will be conducted at clinics and rehabilitation centers participating in the study (more details below). Focus groups with specialists will also be held in other regions of Uzbekistan. The regions will be selected later among those with the highest prevalence of NPS use as based on updated data for 2024. As a result of the interview, it is planned to assess healthcare professionals' awareness of the prevalence and medical-social aspects of NPS use.

No compensation is planned for study participants.

Investigator characteristics and reflexivity

The principal investigator (G.A.Z.) is a highly qualified psychotherapist with more than 10 years of experience working with patients, including psychoactive substance users. Drug addiction specialists, all with more than 5 years of experience in the treatment and rehabilitation of patients suffering from substance dependence, will also participate in the study. The task of the principal investigator and drug addiction specialists is to conduct interviews, analyze data, including transcript encoding, and keep reflection diaries to minimize bias.

The research team includes a psychiatrist (T.S.S.) with more than 20 years of experience in treating patients with comorbid mental and behavioral disorders, a Candidate of Medical Sciences. His task would be to control for bias throughout the independent data analysis, including checking the accuracy of the data coding and interpretation conducted by other members of the team; reviewing and discussing reflection diaries from other investigators to identify additional patterns and reasons behind the use of NPSs and to ensure consistency in data interpretation; participating in data triangulation; and participating in joint data discussions to align interpretations and minimize subjectivity.

Study conditions

The interviews of NPS users will be conducted at the Republican Mental Health Center of Uzbekistan and two rehabilitation centers, Detox and Gratus (all in Tashkent, Uzbekistan). These institutions provide specialized assistance to users of psychoactive substances. The choice of location for the interviews (options: a psychotherapist office, a free room in a rehabilitation center, a cafe) will be left to the discretion of the participants in the survey.

The context of the study is marked by a high level of stigmatization of NPS users in society. In this regard, special attention will be paid to creating conditions for participants to freely share their experiences and opinions, as well as to create a trusting atmosphere and ensure confidentiality. All potential survey participants will be availed of detailed explanations regarding the study's goals, objectives, and methods; after such explanation, they will be asked to sign an Informed Consent Form as survey participants (see Appendix 1 in the Supplementary).

Data collection began in November 2024; it will conclude after completion of the scheduled number of interviews, but no later than May 2025.

Selection strategies and eligibility criteria

Two strategies will be used to design the study sample. The first one involves inviting NPS users who have sought psychotherapeutic help, or persons undergoing a rehabilitation program at the above-mentioned centers (a convenience sample). The second one is when participants of the first sample invite acquaintances of NPS users and are not undergoing rehabilitation in clinics or rehabilitation centers on a voluntary basis (a snowball sample). For all persons undergoing rehabilitation and agreeing to participate in the study, the medical documentation used in the routine practice of the relevant health care facility will be taken as a source of information. For participants who are not undergoing rehabilitation, medical records will not be completed, and information required by the study protocol, including socio-demographic data, will be recorded only in the study documentation.

Inclusion criteria: men and women aged 18 to 35 years, residents of Uzbekistan who, by self-admission, have used NPSs in the last 30 days or are in rehabilitation, have stopped using NPSs and plan not to resume using NPSs for the next 12–18 months. Participants must have sufficient knowledge of the Uzbek or Russian language to participate in the interview. The age range of 18–35 years is chosen based on data showing that the majority of cases of drug use were registered in this age range[7].

Exclusion criteria: evidence of coercive hospitalization or rehabilitation in the medical records; dependence on other psychoactive substances (alcohol, opioids, amphetamines) declared by the potential study participant or documented in their medical records; clinical signs of a psychotic disorder at the time of the interview.

Ethical considerations

The Ethics Committee of the Ministry of Health of the Republic of Uzbekistan has approved the protocol of a research study titled "Medical and social aspects of the use of new psychoactive substances among the young people of Uzbekistan (Tashkent). A qualitative interview" (Minutes No. 6/10-1916 dated September 05, 2024). In case of changes in the key parameters of the study protocol (number of interviews, remuneration for participation, use of promotional materials to attract participants to the study) or any other information that potentially affects the participants' consent to participate in the study, the necessary documents will be re-submitted for review to the Ethics Committee.

A signed Informed Consent Form (see Appendix 1 in the Supplementary) will be sought from all study participants. The Informed Consent Form has been developed and approved by the Ethics Committee and contains information about the study purpose and objectives, planned procedures, possible risks, and benefits for study participants.

Personal information (sex, age, interview number in the voice recorder, date of the interview) about the persons included in the study, as well as their consent for participation, signed with a name chosen by the participant, will be held by the principal investigator.

Data collection methods

An audio recording of the interviews with NPS users and health care professionals in focus groups will be made. The estimated duration of an interview is 40–90 minutes. Investigators' notes, including data from reflection diaries, will also be recorded.

[7] European Monitoring Centre for Drugs and Drug Addiction. Guidelines for the prevalence of problem drug use (PDU) key indicator at local level [Internet]. Lisbon: EMCDDA; 1999 [cited 2024 Sep 18]. Available from: https://www.euda.europa.eu/html.cfm/index58064EN.html_en

Tools and technologies used for data collection and storage

The interview with NPS users will be semi-structured, using a guide containing questions about the socio-demographic characteristics of the study participants (sex, age, education, marital status, employment) and 33 questions related to the study topic. We used material from the study by Gittins et al. [6], including an introduction explaining the study objectives and discussing confidentiality issues, issues related to the history of substance abuse, the types of NPSs used, frequency of use, places of purchase and user experience. In addition, to address the study aim, we included questions to investigate the motivation for the NPSs use (questions about the needs that the respondent is trying to meet and the purposes of the use) (see Appendix 2 in the Supplementary). Guidelines in Russian and Uzbek will be used to conduct interviews with NPS users (see Appendix 2 in the Supplementary). The interview will be conducted in the Russian and Uzbek languages at the convenience of the interviewee. A focus group guide will be used to conduct focus groups with specialists (see Appendix 3 in the Supplementary). The focus group will be conducted in the Uzbek and Russian languages.

The guidelines texts may change depending on the results of the analysis of the pilot stage.

Audio recordings of interviews will be made using portable voice recorders. Permission to record will be secured from the interviewee. At the end of the interview, the records will be copied to a personal computer to which only the principal investigator will have access. Audio records and text data will be encrypted using AES256 technology, and access to the files will be protected with passwords.

Number of interviews

About 25–30 interviews are planned. This number was set based on consultation with experts and experience from similar studies. However, the actual sample size will be determined by sampling saturation; i.e., the qualitative study threshold when data collection stops yielding new ideas and topics.

Source data processing, data analysis, and data reliability security techniques

The saved audio recordings will be transcribed manually in the interview language, verbatim, with subsequent translation into Russian for ease of analysis and coding. The quality of the translation will be ensured by back translation of all the interviews by an independent professional translator and comparison of the back translation with the original text.

The MAXQDA software (VERBI GmbH, Germany) will be used for data organization and analysis. Encoding of key topics, concepts, and categories in MAXQDA will be performed using an open-label approach (studying text data without a pre-specified code set) simultaneously by two investigators. Coding discrepancies will be resolved through discussion and consensus. Codes are the key ideas expressed by respondents, reflecting the most important aspects of their experience, such as reasons for use, perception of the consequences, stigma, barriers to seeking help, and assessment of existing prevention programs. For further analysis, the open-coded data, which will highlight key citations, ideas, and concepts, will be grouped into categories based on which the main topics will be determined, allowing one to assess the patterns and phenomena related to the study matter. At the next stage, through the comparison of topics, identification of convergences, and determination of key patterns, hypotheses reflecting key aspects of the study will be formulated and conclusions will be drawn.

Data analysis will be performed simultaneously with collection to ensure an iterative process and an inductive nature of the study. An analysis of the first 5–10 interviews during the iteration is planned in order to identify potential new topics and check the wording of the questionnaires in terms of whether they are adequately understood. If necessary, changes will be made to the wording of questions or new topics will be added for further interviews. For example, if participants actively raise topics that were not initially included, these topics will be added in subsequent interviews. To triangulate the data, the results of the interview, the data from the investigators' reflection notes, as well as the answers of the participants to various interview questions, will be compared.

When accessing the MAXQDA software, the coded data will be organized according to subjects' IDs (depersonalized identification number, sampling center, and interviewer), structured, and prepared for analysis. The data will be checked for accuracy and consistency through random control: the second investigator (T.S.S.) will compare randomly selected fragments of the decoded texts with the audio recordings. In addition, data from the interview will be compared with information extracted from the investigators' notes to reinforce the soundness of the analysis.

The principal investigator and drug addiction specialists will conduct the primary data coding, and the principal investigator and the second investigator will perform an independent analysis to verify the accuracy of the codes and the consistency of the topics. All investigators will participate in the discussion and the finalizing of the topics.

An inductive approach will be used to analyze the data, allowing the key themes of the narrative to emerge based on the actual data obtained.

When analyzing the codes for topics and reasons, the questionnaire items predefined for the study aims will be taken into account, as specified below:

1. To investigate the reasons why young people use NPSs, including the psychological, social, and economic factors that underpin the need for their use (questions 10, 11).
2. To assess the awareness of young people about the consequences of using NPSs on their physical and mental health, social well-being and their perception of the harm caused by NPSs (questions 12, 15–18, 21, 25).
3. To identify NPS use patterns (the frequency and conditions of use, methods of purchase, types of substances used) (questions 1–9, 13, 14).
4. To explore young people's perceptions of the stigma associated with NPSs use and its impact on their willingness to seek help, as well as the barriers to seeking and receiving medical, psychological, and social assistance (questions 22–24, 31).
5. To determine young people's needs for prevention measures regarding NPSs use and support in case of problems related to their use, including information support tools and identification of effective communication channels, as well as the development of recommendations for ensuring access to treatment and social support services for users of psychoactive substances (questions 19, 20, 26–30, 32).

DISCUSSION

Limitations

The planned study has several sources of possible systematic problems. First, there is the use of a convenience sample and a snowball sample, as well as the selection of participants aged 18 to 35 years in health care facilities in the city of Tashkent (a capital city with young people with specific socio-demographic and cultural characteristics). These circumstances may lead to the formation of a biased sample that does not reflect the composition and characteristics of the general population (all users of NPSs in Uzbekistan), which, in turn, will limit the possibility to extrapolate the study results.

Second, questions about the past (e.g., "*when and how did you first start using NPSs*"?) can be influenced by memory lapses; i.e., participants may distort or forget details of their first episodes of using NPSs. This may corrode the reliability of the information about the triggers and circumstances of the initiation to NPS use and associated factors.

Third, we assume that the semi-structured questionnaire does not cover the full range of motives, reasons, and context in the use of NPSs, as well as the barriers faced by young people living in Uzbekistan when seeking help. However, we plan not to limit the interview's cope to just the text of the guidelines, and if new topics arise, allow the interviewer to ask additional questions. In addition, we plan to take into account the results of the analysis in the pilot stage of the study in order to refine and improve the text of the questionnaire.

Fourth, objective confirmation (e.g., chromatographic studies, test strips) of isolated episodes of NPSs use (without other narcotic drugs) is not planned in this study. At the same time, we understand that poly-drug addiction usually follows a more severe course, which will enrich the phenomenology of reasons and warrants their study [9, 23].

Data sharing

The results of our study will be shared through the publication of articles in scientific journals, in the form of reports at conferences, or other public events. There are no plans to open access to the source data of the study.

Registration of the study protocol

The study was registered as a dissertation work at Bukhara State Medical University (the work was approved by the Scientific Council at a meeting on February 16, 2022, Minutes No. 002759).

Article history

Submitted: 07 Apr 2024
Accepted: 22 Jan 2025
Published Online: 11 Mar 2025

Authors' contribution: Guzalkhon Zakhidova (principal Investigator): conceptualization, data curation, investigation,

methodology, writing — original draft, writing — review and editing. Uladzimir Pikirenia: conceptualization, project administration, supervision, writing — review and editing. Timur Syunyakov: formal analysis, validation, visualization, writing — original draft, writing — review and editing. Mariya Prilutskaya: conceptualization, data curation, methodology, writing — review and editing.

Funding: Financially supported by the DAAD with funding from the Federal Ministry for Economic Cooperation and Development (BMZ).

Conflict of interest: The authors declare no conflicts of interest.

Supplementary data

Supplementary material to this article can found in the online version:
Appendix 1: https://doi.org/10.17816/CP15531-145489
Appendix 2: https://doi.org/10.17816/CP15531-145490
Appendix 3: https://doi.org/10.17816/CP15531-145491

For citation:
Zakhidova GA, Pikirenia UI, Syunyakov TS, Prilutskaya MV. Motives for New Psychoactive Substances Consumption among Young Adults in Uzbekistan: A Qualitative Study Protocol. *Consortium PSYCHIATRICUM.* 2025;6(1):CP15531. doi: 10.17816/CP15531

Information about the authors

***Guzalkhon Alijonovna Zakhidova**, PhD student of the Bukhara State Medical Institute; psychotherapist of the Republican Specialized Scientific and Practical Medical Center for Mental Health, Tashkent, Uzbekistan; PhD student of the Frankfurt University of Applied Sciences; ORCID: https://orcid.org/0009-0001-9006-1733
E-mail: guzalya_zzz@mail.ru

Uladzimir Ivanovich Pikirenia, MD, Cand. Sci (Med.), Associate Professor at the Department of Psychiatry, narcology and Medical Psychology, Bukhara State Medical Institute; postdoc of the Frankfurt University of Applied Science; ORCID: https://orcid.org/0000-0001-7952-9828, eLibrary SPIN-code: 7134-4048, Scopus Author ID: 57221802429, ResearcherID: N-3225-2018

Timur Sergeyevich Syunyakov, MD, Cand. Sci (Med.), Senior Researcher, Mental-health Clinic No. 1 named after N.A. Alexeev; Chief advisor on R&D, Republican Specialized Scientific-Practical Medical Center of Narcology; Leading Expert (Coordinator on Statistical Data Analysis), International Centre for Education and Research in Neuropsychiatry, Samara State Medical University; ORCID: https://orcid.org/0000-0002-4334-1601, eLibrary SPIN-code: 7629-5309, Scopus Author ID: 35773697500, ResearcherID: I-8133-2013

Mariya Valerievna Prilutskaya, Dr. Sci (Med.), Associate Professor, Semey Medical University; postdoc of the Frankfurt University of Applied Sciences; ORCID: https://orcid.org/0000-0002-9099-316X, eLibrary SPIN-code: 7582-3916, Scopus Author ID: 56741402900, ResearcherID: AAD-3806-2019

*corresponding author

References

1. Peacock A, Bruno R, Gisev N, et al. New psychoactive substances: challenges for drug surveillance, control, and public health responses. Lancet. 2019;394(10209):1668–1684. doi: 10.1016/S0140-6736(19)32231-7
2. Prilutskaya M, Sadvakassova G, Altynbekov K, et al. Inpatient Care for People with New Psychoactive Substance use Disorders: A Trend Study. Journal of Health Development. 2024;55(1):50–58. doi: 10.32921/2225-9929-2024-1-55-50-58
3. Altynbekov KS, Negai NA, Abetova AA. [Methodology and results of a national study on the consumption of psychoactive substances among young people in the Republic of Kazakhstan]. Vestnik KazNMU. 2021;(4):193–201. Russian.
4. Pisarska A, Deluca P, Demetrovics Z, et al. Novel psychoactive substances (NPS) – knowledge and experiences of drug users from Hungary, Poland, the UK and the USA. Neuropsychopharmacol Hung. 2019;21(4):152–163.
5. Benschop A, Urban R, Kapitany-Foveny M, et al. Why do people use new psychoactive substances? Development of a new measurement tool in six European countries. J Psychopharmacol. 2020;34(6):600–611. doi: 10.1177/0269881120904951
6. Gittins R, Guirguis A, Schifano F, et al. Exploration of the Use of New Psychoactive Substances by Individuals in Treatment for Substance Misuse in the UK. Brain Sci. 2018;8(4):58. doi: 10.3390/brainsci8040058
7. Coombs T, Ginige T, Van Calster P, et al. New Psychoactive Substances in the Homeless Population: A Cross-Sectional Study in the United Kingdom. Int J Ment Health Addict. 2023;22(4):2322–2237. doi: 10.1007/s11469-022-00988-7
8. O'Neill N. Mephedrone and Multiplicity: User Accounts of Effects and Harms. Contemp Drug Probl. 2014;41(3):417–444. doi: 10.1177/009145091404100307
9. Assi S, Gulyamova N, Ibrahim K, et al. Profile, effects, and toxicity of novel psychoactive substances: A systematic review of quantitative studies. Hum Psychopharmacol. 2017;32(3). doi: 10.1002/hup.2607
10. Higgins KM, O'Neill C, O'Hara L, et al. Evidence for public health on novel psychoactive substance use: a mixed-methods study. Public Health Res. 2019;7(14):1–150. doi: 10.3310/phr07140
11. Papanti D, Schifano F, Botteon G, et al. "Spiceophrenia": a systematic overview of "spice"-related psychopathological issues and a case report. Hum Psychopharmacol. 2013;28(4):379–389. doi: 10.1002/hup.2312
12. Daziani G, Lo Faro AF, Montana V, et al. Synthetic Cathinones and Neurotoxicity Risks: A Systematic Review. Int J Mol Sci. 2023;24(7):6230. doi: 10.3390/ijms24076230
13. Bilel S, Zamberletti E, Caffino L, et al. Cognitive dysfunction and impaired neuroplasticity following repeated exposure to the synthetic cannabinoid JWH-018 in male mice. Br J Pharmacol. 2023;180(21):2777–2801. doi: 10.1111/bph.16164
14. Deluca P, Davey Z, Corazza O, et al. Identifying emerging trends in recreational drug use; outcomes from the Psychonaut Web Mapping Project. Prog Neuro-psychopharmacol Biol Psychiatry. 2012;39(2):221–226. doi: 10.1016/j.pnpbp.2012.07.011

15. Chiappini S, Mosca A, Miuli A, et al. New Psychoactive Substances and Suicidality: A Systematic Review of the Current Literature. Medicina (Kaunas). 2021;57(6):580. doi: 10.3390/medicina57060580
16. Wieczorek Ł, Dabrowska K, Bujalski M. Motives for using new psychoactive substances in three groups of Polish users: nightlife, marginalised and active on the In. Psychiatr Pol. 2022;56(3):453–470. doi: 10.12740/PP/131971
17. Ricijaš N, Kranželić V, Leskovar L. Prevalence and the frequency of psychoactive substance consumption of youth in educational institutions — differences with regards to the type of institution and knowledge about psychoactive substances. Kriminologija & Socijalna Integracija. 2019;27(1):35–67. doi: 10.31299/ksi.27.1.2
18. Schijven EP, Didden R, Otten R, et al. Substance use among individuals with mild intellectual disability or borderline intellectual functioning in residential care: Examining the relationship between drinking motives and substance use. J Appl Res Intellect Disabil. 2019;32(4):871–878. doi: 10.1111/jar.12578
19. Macgowan MJ, Engle B. Evidence for optimism: behavior therapies and motivational interviewing in adolescent substance abuse treatment. Child Adolesc Psychiatr Clin N Am. 2010;19(3):527–545. doi: 10.1016/j.chc.2010.03.006
20. Agerwala SM, McCance-Katz EF. Integrating screening, brief intervention, and referral to treatment (SBIRT) into clinical practice settings: a brief review. J Psychoactive Drugs. 2012;44(4):307–317. doi: 10.1080/02791072.2012.720169
21. Jatau AI, Sha'aban A, Gulma KA, et al. The Burden of Drug Abuse in Nigeria: A Scoping Review of Epidemiological Studies and Drug Laws. Public Health Rev. 2021;42:1603960. doi: 10.3389/phrs.2021.1603960
22. Bandura A. Social foundations of thought and action: a social cognitive theory. Englewood Cliffs: Prentice-Hall; 1986.
23. Syunyakov T, Khayredinova I, Ashurov Z. The Role of Family, Microsocial and Medical History in The Shaping of Trajectories of Complex Opioid and Cannabis Addiction: Results of Machine Learning Modeling. Personalized Psychiatry and Neurology. 2023;3(2):120–133. doi: 10.52667/2712-9179-2023-3-2-120-133