## Abstract

**Background:** In recent years, the rate of kratom use has been increasing in the Czech Republic. It is a psychoactive substance of plant origin, the availability of which is not yet regulated by law in the Czech Republic, which causes easy availability even for minors. Different patterns of kratom use are described, and it is not clear to what extent problematic use or addiction develops.

**Objectives:** The main objectives of this work were to map the use and effects of kratom use in the Czech population and to analyze the occurrence of different patterns of kratom use and whether, or to what extent, there is a loss of control during kratom use.

**Methods:** A cross-sectional online questionnaire study was conducted. The research group consisted of persons older than 18 years living in the territory of the Czech Republic who have experience of using kratom, selected by non-probability sampling on social networks. Groups and forums bringing together people with experience with kratom were used for recruitment, and the snowball method was used, when some respondents shared the invitation further among their contacts.

Results: 331 respondents completed the questionnaire. The research population consists of 259 respondents who reported using kratom at some point in their life, the majority of whom were men (79,5 %), most often in the age group of 15 to 34 years (76,1 %). Most of those who reported lifetime use also did so in the last year and month. Respondents mostly reported a medium frequency of use (most often 2 to 5 times a day) with a medium daily dose (11 grams on average). The majority of users maintain or increase the frequency and dosage during use, but almost a quarter reduced the frequency and dosage. When trying to quit, 61,0 % of respondents experienced unpleasant sensations, reminiscent of opioid withdrawal symptoms. Combining kratom with other psychoactive substances was common (84,0 %), with alcohol (80,7 %), nicotine (74,8 %) and cannabis (54,0 %) being the most common combination. Most respondents preferred the powder form and often used it for stimulation and relaxation.

Conclusion: Research suggests that kratom use is particularly prevalent among young adults. Most users show a steady pattern of use while maintaining control. Respondents often combine kratom with other psychoactive substances, which may increase the risk of negative health

outcomes. Withdrawal symptoms are reported when tapering is attempted. There is a need to raise awareness among kratom users about its risks.

Key words: Kratom, patterns of use, addiction, kratom addiction, questionnaire study