

Background: Psilocybin is today the most studied psychedelic substance in neuroscience for its psychotomimetic and therapeutic effects. One of the institutions in the Czech Republic that studies this substance is the National Institute of Mental Health, where a clinical evaluation of its effects and safety is underway. The action and safety of this substance is examined here in terms of acute intoxication, but also in terms of long-term effects.

Aim: To determine how volunteers perceive the experience with psilocybin administered in a controlled experimental study environment and whether they have experienced any afterglow effects after the cessation of acute intoxication for 28 days after administration, as well as how these effects occur and how long they persist.

Methods: Data was obtained using semi-structured interviews. The research group consists of 20 interviews with 10 healthy volunteers of the clinical study at NUDZ. Interviews were conducted on day 28 after administration of an active dose of psilocybin or placebo. A qualitative thematic analysis of these interviews was performed in order to identify topics within the framework set by the research questions.

Results: The results showed that for the respondents, the experience with the active dose of psilocybin was significant in terms of self-experience, experience of changes in sensory perception, perception of time and death, as well as in terms of the spiritual dimension of experience. Placebo-controlled dose measurements were significant in terms of preparation and integration in relation to the active dose. The afterglow effect was observed by all study participants only after the active dose and not after the placebo-controlled dose. Most often, long-term effects were perceived on changes in experience, perception, relationship to oneself and relationship to others. The duration of these described changes was individual. Some described days, weeks, and 6/10 of the respondents felt the effect of these effects at the time of the interview. The results also showed that volunteers who showed an effort to strengthen and integrate the experience reported a longer duration. The afterglow effect was often associated with specific experiences during intoxication. A better understanding of the afterglow effects and determinants that may affect its appearance and duration requires further follow-up.

Key words: psilocybin, afterglow effect, psychedelic experience