## Evaluation of the relationship between suicidal ideation and cognitive abilities in patients with addiction to Methamphetamine referred to treatment clinics in Ardabil from winter 2021 to winter 2022

## **Abstract**

**Background:** Considering the high risk of suicide in methamphetamine addicts compared to other drugs, as well as the existence of reports of the loss of some cognitive functions in them, there is a possibility that there is a relationship between the risk of suicide and cognitive functions in these patients.

**Aim:** To evaluate the relationship between suicidal ideation and cognitive abilities in patients with addiction to Methamphetamine referred to treatment clinics in Ardabil from winter 2021 to winter 2022.

**Materials and methods:** In this study, 75 patients with a history of methamphetamine addiction who referred to addiction treatment clinics in the city of Ardabil participated and completed the Beck Suicidal Thoughts Questionnaire and Nejati Cognitive Abilities Questionnaire. Furthermore, in order to compare with healthy subjects, a control group of 75 individuals was also taken and they also completed the aforementioned questionnaires.

**Results:** The mean age of the case and control groups was  $34.7\pm11.1$  and  $35.3\pm10.5$  respectively (P=0.638) and in each of the two groups, 66 people (88%) were male and 9 people (12%) were female. The frequency of high and very high risk of suicide in the case group was significantly higher than the control group (P<0.001). The score of case group was significantly higher than the control group in all subscales of cognitive function (P<0.05). In the case group, there was a significant relationship between suicide risk and subscales of memory (P<0.001), planning (P=0.002), and cognitive flexibility (P=0.003). In the control group, there was no significant relationship between suicide risk and cognitive function (P>0.05).

**Conclusion:** Compared to healthy subjects, patients with a history of methamphetamine addiction were significantly more at risk of suicide; All dimensions of cognitive functions were disturbed in them; And the level of suicide risk in them had a direct and significant relationship with greater

impairment in three areas of cognitive function, namely memory, planning, and cognitive flexibility dimensions.

**Keywords:** Suicidal thoughts, Cognitive functions, Methamphetamine.