Introduction: Impulsivity and alcohol drinking are both considered as important predictors of unintentional as well as intentional injuries. However, relationships between impulsivity and risky behaviors have not been investigated in alcohol dependence.

Objectives: The aim of this study was to analyze relationships between the frequency of risky behaviors and level of behavioral as well as cognitive impulsivity in alcohol-dependent patients.

Methods: By means of Barratt's Impulsiveness Scale and stop-signal task the levels of cognitive and behavioral impulsivity among 304 alcohol-dependent patients were measured. Also, patients were asked to answer questions from the Short Inventory of Problems applying to risky behaviors and accidents after alcohol drinking. In addition participants filled in a questionnaire to assess frequency of other behaviors from the analyzed spectrum (suicide attempts, use of other drugs, law problems).

Results: The statistical analysis revealed a significant association between impulsivity and frequency of risky behaviors in alcohol dependent patients. Individuals with higher scores in BIS behaved more frequently in a risky way (p=0.000001) and had significantly more accidents (p=0.00067) after alcohol drinking. The association for risky behaviors was strongest for non-planning (p=0.000075) and attentional (p=0.000002) impulsivity subscales, whereas frequency of accidents was particularly associated with motor impulsivity (p=0.001). In addition, a significant association between global impulsivity and risk of suicide attempts, use of other drugs and frequency of law problems was observed. A multivariate analysis revealed that impulsivity and severity of alcohol dependence are the most important predictors of risky behaviors.

Conclusion: Impulsivity increases the frequency of risky behaviors in alcohol-dependent individuals.