

## عنوان مقاله:

The Relationship between Exposure to Arsenic in Drinking Water and the Prevalence of Diabetes Mellitus in Two Urban Populations in the Southeastern Areas of Iran

## محل انتشار:

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## خلاصه مقاله:

**Introduction:** Chronic exposure to Arsenic (As) can increase the risk of diabetes mellitus. This study aims to determine the relationship between exposure to the As by drinking water and the prevalence of diabetes mellitus in two urban populations of Rafsanjan and Kashkuyeh, Iran, in ۲۰۲۰. **Materials and Methods:** In this research, ۱۲۰ participants from Rafsanjan and Kashkuyeh were recruited and divided into four groups. The first two groups have lived in Rafsanjan and Kashkuyeh for the past ۱۰ years, and the second two groups have lived in these two cities for less than a year. Individuals with two episodes of fasting blood glucose (FBG)  $\geq ۱۲۶$  mg/dl were considered to have diabetes. **Results:** As was found in high levels in all samples (۱۰ samples) in Rafsanjan and ۵۵% of samples (۱۰ samples) in Kashkuyeh. The prevalence of diabetes was significantly higher in people with a residence duration of more than ۱۰ years ( $p = ۰.۰۳۸$ ). The analysis of Multiple Logistic Regression model demonstrated that the chance of developing diabetes in people who had lived in either city for more than ۱۰ years was almost ۵.۷ times higher than others (OR = ۵.۷۹;  $P = ۰.۰۰۳$ ). Also, the chance of developing diabetes was ۹۱% higher in people who had lived in Rafsanjan compared with Kashkuyeh, and ۹۱% higher in men than in women (OR = ۱.۹۱۵;  $P = ۰.۲۱۵$ ). **Conclusion:** Chronic exposure ( $\geq ۱۰$  years) to high levels of As by drinking water can increase the risk of diabetes, and future research is needed in this regard

**کلمات کلیدی:**

.Arsenic, Diabetes Mellitus, Drinking Water, Health

**لینک ثابت مقاله در پایگاه سیویلیکا:**

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