

## Chronic psychosocial stress and the development of type II diabetes

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Type-2 diabetes (T2DM) is complex, involving a combination of genetic and environmental factors. Psychosocial stress is an important factor that can add to the risk of T2DM. The association between psychosocial stress and the development of T2DM is affected by many physical, psychological, and behavioral factors. To date, the nature of this association is unclear, given the limited number of human studies examining it. This study aimed to investigate the associations between chronic psychosocial stress and the development of T2DM among middle-aged adults. It used cross-sectional data from the National Health and Nutrition Examination Survey (NHANES 2001-2004). Research questions were examined using data on 348 subjects who met the research criteria. Subjects with undiagnosed diabetes, compared to those with normal HbA1c, had significantly higher means of age and Body Mass Index (BMI) and higher proportions of overweight, obesity, positive family history of diabetes, and stress levels (i.e. > 1 psychosocial stressor). After controlling for age, family history, smoking, alcohol consumption, and BMI, stress significantly contributed to the prediction of HbA1c. Stress uniquely accounted for 1.5% of the variance in HbA1c in the study sample. After controlling for age, gender, family history, and alcohol consumption, stress did not significantly contribute to the variance in BMI, indicating that obesity did not necessarily mediate the relationship between stress and T2DM. Finding stress as a significant predictor for T2DM has important implications for healthcare research, clinical practice, and healthcare policies for people at risk for T2DM and exposed to psychosocial stress factors.

### Biography

Maysa Almomani has completed her Ph.D. at the age of 40 years from the University of Wisconsin-Milwaukee. She is the chairman of Adult Health Nursing Department at Jordan University of Science and Technology.

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