Undiagnosed diabetes mellitus and associated factors among psychiatric patients receiving antipsychotic drugs at the University of Gondar Hospital, Northwest Ethiopia

Daniel Asmelash, Wondale Getnet, Belete Biadgo, Sintayehu Ambachew, Tadele Melak, Lemessa Melese, Shiwaneh Damite, Habtamu Wondifraw
Baynes and Molla Abebe
University of Gondar, Ethiopia

BACKGROUND: Undiagnosed diabetes mellitus cases are at higher risk for diabetic related complications. In low-income African countries, patients with undiagnosed diabetes mellitus account for 75% of diabetes cases. Psychiatric disorders have a greater impact on the global burden of diseases and disability associated with chronic diseases like diabetes mellitus and cardiovascular diseases.

OBJECTIVE: To assess the prevalence of undiagnosed diabetes mellitus and its associated factors among psychiatric patients receiving antipsychotic drugs at the University of Gondar Hospital, Northwest Ethiopia

METHODS: Institution based cross-sectional study was conducted at the University of Gondar Hospital from February to April 2016. A total of 205 psychiatric patients aged above 15 years that were taking antipsychotic were included by the simple random sampling method. Fasting blood glucose, triglycerides and cholesterol level were determined from venous blood samples to evaluate diabetes mellitus based on WHO criteria.

RESULTS: Among 205 psychiatric patients taking antipsychotics, 15(7.3%) had undiagnosed diabetes mellitus. Duration of antipsychotic treatment and sex had a statistically significant association with the prevalence of undiagnosed diabetes mellitus. As the duration of antipsychotic drug treatment increased by one year, the risk of having diabetes mellitus increase by 1.47 times (AOR: 1.47 CI: 1.021-2.125).

CONCLUSION: The prevalence of undiagnosed diabetes mellitus among psychiatry patients taking antipsychotics was higher than the estimated diabetes national prevalence of Ethiopia. Screening of diabetes mellitus in particular, patients having a longer duration of antipsychotic treatment is mandatory to bring more undiagnosed cases for medical attention.