Association between outpatients treated for hypertension in internal medicine and alcohol dependence: A cross-sectional study of an internet panel

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Introduction: Hypertension is one of the most common noncommunicable diseases, and is significantly related to excessive alcohol drinking. Thus, patients with hypertension may have alcohol dependence. However, the association between outpatients treated for hypertension in internal medicine and alcohol dependence is unclear in Japan.

Study Design: Cross-sectional study

Setting & Participants: Internet panel sample from the general population (N=20,000) that had a drinking habit (2–3 times or more/week)

Predictor or Factor: Alcohol dependence

Outcome: Outpatients treated for hypertension in the department of internal medicine (yes or no)

Measurements: Alcohol dependence was defined as an Alcohol Use Disorders Identification Test (AUDIT) score of ≥15. The AUDIT contains 10 questions: three on alcohol use, four on alcohol dependence, and three on alcohol-related problems. The Japanese version of the AUDIT was created based on World Health Organization (WHO) translational methodology (Hiro et al. 1996).

Results: The mean age of the participants was 49.3 years; 66.0% were men. The number of outpatients treated for hypertension in the department of internal medicine was 3,261 (16.3%). The average AUDIT score was 8.77, and 3,392 (17.0%) patients were diagnosed with alcohol dependence. In the logistic regression analysis, after adjusting for age and sex, outpatients treated for hypertension showed significantly higher alcohol dependence (odds ratio 1.54, 1.40–1.69).

Limitations: Causation cannot be determined in a cross-sectional study. With the internet panel, sampling bias may exist.

Conclusion: Outpatients in Japan treated for hypertension in internal medicine had significantly higher alcohol dependence. Effective alcohol screening and intervention may be essential in internal medicine.