Epidemiological analysis of dyslipidemia in adults of three ethnicities in Xinjiang, China


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ABSTRACT. This study investigated the prevalence and distribution of dyslipidemia in adults of Uygur, Kazak, and Han ethnicity in Xinjiang, China. A questionnaire including general data, physical examination (blood pressure, body height, and body weight) and blood lipid [total cholesterol (TC), triglyceride (TG), low-density lipoprotein cholesterol (LDL-C), and high-density lipoprotein cholesterol (HDL-C)] was administered to 11,506 adults in Xinjiang, China from 2009 to 2010 using a stratified sampling method. The overall prevalence rates of dyslipidemia in Uygur, Kazak, and Han adults were 42.4, 31.6, and 30.2%, respectively; they were 42.4, 31.8, and 28.2% after age standardization (P < 0.01). After standardization, the overall prevalence rates in Uygur, Kazak, and Han men were 52.6, 35.4, and 33.2%, respectively; they were 42.4, 31.8, and 28.2% after age standardization (P < 0.01). After standardization, the overall prevalence rates in Uygur, Kazak, and Han adults were 42.4, 31.6, and 30.2%, respectively; they were 42.4, 31.8, and 28.2% after age standardization (P < 0.01). After standardization, the overall prevalence rates in Uygur, Kazak, and Han men were 52.6, 35.4, and 33.2%, respectively, which were significantly higher than that in women of the corresponding ethnicities (P < 0.01). In Uygur, Kazak, and Han adults, there were significant differences with respect to the standardized prevalence rates of high TG (9.3, 9.3, and 17.3%), high TC (5.2, 6.9, and 6%), low HDL-C (33.6, 20.8, and 11.1%), and high LDL-C (2.4, 2.9, and 2%) (P < 0.05). The prevalence rates of dyslipidemia in Uygur, Kazak, and Han adults in Xinjiang are higher than the average levels
in China, with significant differences in ethnicity, age, and gender. Han adults exhibited the highest prevalence rate of high TG. Meanwhile, Uygur adults had the highest prevalence rate of low HDL-C. Kazak adults had high prevalence rates of high TC, low HDL-C, and high LDL-C.

**Key words:** Dyslipidemia; Prevalence rate; Kazakh; Uygur; Han