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THE PREVALENCE OF HYPERTENSION AMONG KAZAK INDIVIDUALS OF DIVERSE OCCUPATIONAL BACKGROUNDS IN XINJIANG, CHINA

Jingmei Jiang^a, Mingtao Zhang^b, Fang Xue^a, Yong Tang^b, Lei Hou^a, Shaohua Liang^b, Wei Han^a, Wang^b, Biao Zhang^a, Haiyu Pang^a, Yanhong Wang^a^aDept of Epidemiology & Biostatistics, Institute of Basic Medicine, Chinese Academy of Medical Sciences & Peking Union Medical College, Beijing, China^bThe People's Hospital in Altay Region, Xinjiang, China

Background The prevalence of hypertension varies greatly among various ethnic groups in China. Kazak's hypertension ranks fifth with regard to morbidity among the 56 Chinese ethnic groups. Kazaks, are the main ethnic group in Kazakhstan, and represent a sizable ethnic minority in China and Russia. For thousands of years, China's Kazak people are mainly active in raising livestock on the prairie grasslands in northwest China, and have developed a unique culture and lifestyle. In order to establish whether this distinct life-style and culture affects the prevalence of hypertension in this population, we undertook a population-based study of Kazak people who are involved in three occupational backgrounds (herdsman, farmer, non-manual worker of town city) in north Xinjiang China.

Methods A prospective cohort design was used, with 1670 participants (aged 30-92) from seven villages and town city recruited by a stratified random clustering sampling procedure in Hong Dun town, Altay region Xinjiang from January to March 2013. All participants completed the survey and physical examination using standardized procedures. The overall response rate for completing both the survey and physical examination was 92.0%.

Results Compared with farmers and non-manual workers, herdsman had the highest prevalence of hypertension and the lower rates of treatment and control (Table 1). High-salt diet (air-dried beef and milky-tea) intake and low intake of fruits and vegetables were more common in the nomadic group and a dose-response relationship was observed between the prevalence of hypertension and occupation (Figure 1). Furthermore, the prevalence of hypertension within each occupational group was more common in lower socioeconomic status based on educational attainment and economic measures (data not shown).

Conclusion Unlike the previous epidemic of hypertension in developed countries which was driven mainly by urbanization, these data highlight the need for careful monitoring and control of hypertension risk factors in rural area residents, especially groups such as the Kazak nomads who have a greater degree of marginalization in modern China.

jingmeijiang@ibms.pumc.edu.cn

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