THE STUDY ON THE RELATIONSHIP BETWEEN PERSONAL HYGIENE AND INTESTINAL INFECTIOUS DISEASES OF RURAL RESIDENTS

Yajuan Zhang, *Department of Occupational and Environmental Health, School of Public Health, Peking University, 38 Xue Yuan Road, Beijing 100191, P.R. China*

Yuming Guo, *School of Public Health, Queensland University of Technology, Kelvin Grove, Brisbane, Queensland, Australia*

Hui Tao, *Department of Occupational and Environmental Health, School of Public Health, Peking University, Beijing, China*

Liyang Wang, *Beijing AiWeiHui, Beijing, China*

Xiaochuan Pan, *Department of Occupational and Environmental Health, School of Public Health, Peking University, Beijing, China*

Backgrounds and Aims: Epidemiological studies have demonstrated a link between unhealthy hygienic habits and morbidity of the intestinal infectious diseases of the city dwellers, rather than rural residents. Here, we use case-control design to explore the relationship between the personal hygiene and intestinal infectious diseases in rural residents of China.

Methods: About 20,000 persons were recruited for the survey by stratified random sampling. The subjects were interviewed with the questionnaire designed by our research team to collect the information of personal hygiene, e.g. drinking unboiled water, hand-washing before meals, hand-washing after toileting, tableware-washing timely(within an hour after eating), and tableware-washing with detergent, as well as cases of intestinal infectious diseases including infectious diarrhea, abdominal typhus, dysentery and acute gastritis of the subjects. The case and control group were divided according to case report of themselves. The Multivariate Logistic Regression was used for the data analysis.

Results: There were 692 and 19210 subjects in case group and control group respectively. After adjusting the related confounders, drinking unboiled water increased statistical significantly the possibility of suffering from the infectious diseases (*OR*=1.47, 95%CI=1.18~1.83, *P*<0.01)in the exposed population, the cases of intestinal infectious diseases of subjects were negatively correlated with hand-washing after toileting(*OR*=0.44, 95%CI=0.33~0.58, *P*<0.01), tableware-washing timely(*OR*=0.61, 95%CI=0.49~0.77, *P*<0.01) and tableware-washing with detergent(*OR*=0.72, 95%CI=0.56~0.91, *P*<0.01) respectively. While hand-washing before a meal has not significantly associated with the intestinal infectious diseases.

Conclusion: The better habit if personal hygiene could decreases the possibility of intestinal infectious diseases in rural residents. The approach of health education and promotion about personal hygiene is necessary for reducing the chance of being infected by intestinal infectious diseases.

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