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891 - Association between arsenic concentration and satisfaction level for well water in Basailbogh village, Bangladesh

Makoto Sekine³, *sekine-makoto-cb@ynu.jp*, Mohammad RAKNUZZAMAN¹, Masahiro Tokumura¹, Kawser AHMED², Shigeki Masunaga¹

¹ Faculty of Environment and Information Science, Yokohama National University, Japan, Yokhama, Kanagawa, Japan; ² Department of Oceanography, Earth & Environmental Sciences Faculty, University of Dhaka, Dhaka, India; ³ Graduate School of Environment and Information Science, Yokohama National University, Yokohama, Japan

Abstract Body: We investigated association between arsenic concentrations in tube well water (shallow tube well water and deep tube well water) and satisfaction level for water among the citizens living in Basailbogh village, Bangladesh. We collected twenty well water samples and conducted questionnaire survey (n=126) in this village. The average concentration of arsenic in shallow tube well waters was approximately 350 mg L⁻¹ and that of deep tube well waters was approximately 8 mg L⁻¹. The former value exceeded the standard for arsenic in drinking water (10 mg L⁻¹) set by the World Health Organization (WHO). This value has the potential to cause cancer in the citizens. Eighty eight percent of the respondents answered that they were satisfied with the quality and quantity of deep tube well water. Eighty three percent answered that they were satisfied with the quality and quantity of shallow tube well water, even though the concentrations of arsenic in the shallow well waters exceeded the standard value. Majority of respondents were satisfied with their tube well water because they have never experienced acute sickness after they drank their tube well water. However, from a chronic health effect point of view, they should take appropriate means to protect themselves from long term adverse effect of arsenic.