**Action-Oriented Study on Water Quality and Water Borne Diseases in Bungamati VDC, Lalitpur District Nepal**

Pradhan Kayastha B1

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1Department of Community Medicine and Family Health, Institute of Medicine, Tribhuwan University, Nepal.

**Background**

Water pollution is one of the serious public health issues in Nepal. It is estimated that one third of the total deaths of children under five years of age in rural area is due to water-borne diseases including cholera, typhoid, dysentery and gastro-entities. The water related diseases lie among the top ten diseases in the country. Yet the vital connection between water and health is given little emphasis in government policy. This was an action oriented research study on water quality and water related diseases in Kathmandu valley.

**Methods**

The study was conducted in Bungmati VDC of Lalitpur district. The total sample size was 110 households constituting 72, 23 and 15 for Bungmati, Chundevi and Phasidol respectively. The study has been primarily based on primary data. The study region comprised different water sources such wells, stone spouts, ponds, public taps and rivers with their respective number of 5, 2, 5, 6 and 2. The quality of drinking water has been tested for 20 sample sites.

**Results**

The findings showed that majority of households found to have cleaned their drinking water sources once a year and that the water used by the communities found to be contaminated either at source or consumption points. As a result incidence of diarrhoea appeared the common health problem among the sample households in the study region. Yet majority of households found to be unaware with the real cause of diarrhoea. The community perception towards environmental sanitation and personal hygiene is very poor. Not all households do have latrine in their houses and therefore the people of the households with no toilets use nearby field or the river bank for defecation. Two-third of the sampled households has used proper hand washing practices after defecation. Not all households have used slipper or shoes while going out including toilet.

**Conclusions**

Regular monitoring of water quality at frequent intervals and awareness programs towards conservation of surrounding environment and personal hygiene to the local communities should be made more effective in the study region by the concerned agencies. Open defecation habit must be controlled through making available, affordable toilet scheme to the communities. Solar disinfection appeared to be appropriate as well as effective method of water disinfection in the study region.

**Keywords:** environmental sanitation; personal hygiene; water-borne diseases; water quality.