

## Potable water and uncontaminated food at every household: Dream or reality? A study among tribal population of Naxalbari Block, Darjeeling district, West Bengal, India

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### Introduction

Water quality, water behavior along with food quality, food behavior, domestic environment and food handler's hygiene play pivotal role in preventing food and water borne diseases. Working women seemingly face more hazards and perceived negligence is higher in hilly tribal population. Thus the pilot study was undertaken. The objective of the study is to assess water quality at source and household level and cooked food quality, immediate domestic environment along with determining their existing knowledge/practices regarding water and food handling techniques

### Methods:

Descriptive community based cross-sectional study was conducted in collaboration with department of microbiology from May-July 2018 in Kiranchandra Tea Estate. Water quality was assessed among all five sources and selected 50 households using PA Coliform Kit. Water behavior was assessed in 187 households. All 120 houses with women as permanent workers were studied for food behavior, food handler hygiene and domestic environment. 50 selected houses were assessed for cooked food quality using PA H2SHi-Dip Media Kit. Results were interpreted after 48 hours incubation and confirmed by culture

### Results:

Contamination was noted in both open wells and 33 houses with E coli and Klebsiella. Improper water carriage, storage and treatment were found in 67.2%, 76.3% and 88.2% cases respectively. Food quality and domestic environment were inappropriate in 56.3% and 68.4% cases respectively. Illiteracy and lack of administrative support were significantly associated.

### Conclusion:

Water and food was unfit for consumption in vast majority. Water and food behavior was inappropriate. Identified causes need sustainable and viable solutions. A larger study is recommended.

### Biography:

Nilanjana Ghosh has completed her MBBS, MD in Public Health, DNB, MNAMS and DHM and PGDEPI. She is an Elected Member of National Editorial Board IJPH and State Executive Committee Member of IAPSM.