

Influencing factors for cholera and diarrhoea: Water sanitation and hygiene in impoverished rural villages of Beluran District, Sabah, Malaysia

Abstract

The lower percentage of water, sanitation and hygiene are the root causes of diarrhoea and cholera. Cholera is a sudden onset of acute watery diarrhoea which can progress to severe dehydration and death if untreated. The current pandemic, *Vibrio Cholera* O1 started in 1961. This study explores water, sanitation, hygiene and cholera and diarrhoea in three affected villages of Beluran District, Sabah Malaysia to support effective and timely public health intervention. This cross sectional study uses purposive sampling. All (114) households were interviewed and household water samples collected. The study reported lower coverage improved sanitation facilities (35.3% to 52.3%), no latrine at home (37% to 63%), improved water supply (52% to 60%), and prevalence of hand washing after toilet (57% - 74%). For water quality, *E. coli* was present in household water (32% to 37%) but *Vibrio cholerae* was not isolated in any of the water samples tested. Statistically significant associations were found for; 1) occupation–non-agriculture and unimproved sanitation facility and 2) house ownership and correct knowledge of ORS preparation. Predictors for household water quality were: latrine at home, and improved household toilet. Aggressive strategies to improve water supply, sanitation and hygiene–hand washing after toilet–were recommended for future prevention of cholera and diarrhoea in the affected area.