A CASE CONTROL STUDY ON ENVIRONMENTAL SANITATION DEFICIT AND DIARRHEAL DISEASE IN SEMIURBAN COMMUNITY, PATHUMTHANI PROVINCE, THAILAND

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ABSTRACT

This study investigated the impact of environmental sanitation deficits on the occurrence of acute diarrhea. Knowledge, attitude and practices (KAP) were also studied. Forty-eight people who visited Klong Nueng Health Center with significant diarrhea during the period December 2007-November 2008 were selected as cases. Two age-group-matched controls were selected from the nearest households. Research data were collected by face-to-face interviews using questionnaires and spot-check observations for household hygiene and sanitation deficits.

The risk of diarrhea was higher among the cases than the controls due to unhygienically discarded garbage inside and outside the houses; OR=2.37 (95% CI: 1.08-5.19) and OR=2.87 (95% CI: 1.37-6.01). The presence of flies (OR=2.33, 95% CI: 1.14-4.43) and unrestrained animals on patios and in houses (OR=2.39, 95% CI: 1.17-4.87) were significantly different between cases and controls. Keeping cooked food uncovered (OR= 3.18, 95% CI: 1.31-7.70) and the presence of waste water (OR= 3.02, 95% CI: 1.46-6.21) in and around the houses were significantly more common among the cases. The study revealed a need to develop and implement adequate models to improve environmental sanitation at the community level.

KEY WORDS: HOUSEHOLD HYGIENE/ ENVIRONMENTAL SANITATION/ DIARRHEA/ SPOT CHECK OBSERVATION

80 pages