

Risk factors for diarrheal duration

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Abstract:

To identify child feeding behavior and household hygiene practices that are risk factors for prolonged diarrheal illness, a longitudinal community study was conducted over a 14-month period among 920 children aged 3-37 months who lived in an urban slum settlement in Nairobi, Kenya. Morbidity surveillance was done by home visits every third day in the absence of diarrhea and daily during diarrheal illness until termination of the episode. In-home observations were made to characterize maternal hygiene, cooking, and child feeding practices. Overall, 1,496 episodes of diarrhea were detected. The average diarrheal incidence was 3.5 episodes/child-year, and the incidence of diarrhea > 14 days was 3 episodes/100 child-years. Cox regression was used to examine the independent effects of covariates on time to recovery from a diarrheal episode. Adjusted behavioral factors that were observed to influence recovery from diarrhea included: uncovered water containers (rate ratio (RR) = 0.77, 95% confidence interval (CI) 0.64-0.94); giving no fluids (as opposed to oral rehydration solutions (ORS)/sugar salt solutions (SSS)) (RR = 1.42, 95% CI 1.14-1.77); and administration of diluted cow's milk during the first 3 days of an episode (RR = 1.23, 95% CI 1.00-1.52). These associations remained significant after adjusting for diarrheal severity. The authors recommend, among other measures, improvement of water storage and promotion of continued feeding with cereal-milk mix during diarrhea.