Symptomatic and asymptomatic rotavirus and norovirus infections during infancy in a chilean birth cohort

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Background: Rotavirus and more recently norovirus have been recognized as 2 of the most common causes of acute diarrhea in children. Comparative analysis of these infections in a birth cohort has not been performed and can provide relevant insight on clinical and viral behaviors. Methods: Mother-infant pairs from middle-low socioeconomic background living in the Metropolitan Region of Chile are being followed for 18 months in 2 outpatient clinics. Infants are evaluated monthly for asymptomatic excretion of rotavirus and norovirus and during acute diarrhea episodes (ADE) for rotavirus, norovirus, and bacterial enteropathogens. Severity of ADE is evaluated using the Vesikari score. Results: Between July 1, 2006 and September 1, 2008 a total of 198 children were followed for a mean of 15.7 months. Asymptomatic rotavirus and norovirus infections were detected in 1.3% and 8% of 2278 stool samples compromising 14% and 57% of infants, respectively. Incidence of ADE was approximately 0.8 for t