

## ***Campylobacter* spp DETECTION IN CHILDREN AGED 0-36 MONTHS IN FORTALEZA, CEARA, BRAZIL.**

**Herlice do Nascimento Veras, Marília Silveira Maia Gurgel do Amaral, Pedro Henrique Quintela Soares de Medeiros, Josiane da Silva Quetz, Rafaela Chemello Pankov, Paloma Araújo Cavalcante, Ila Fernanda Nunes Lima, Alexandre Havt, Aldo Angelo Moreira Lima**

**Background:** *Campylobacter* spp. are considered important agents of enteric infections in children from developing countries, being associated with malnutrition and growth impairment. This study aimed to determine the frequency of *Campylobacter* spp. in children aged 0-36 months in a birth cohort study. **Material and Methods:** 328 children were followed longitudinally for 36 months in a birth cohort study between Aug 2010 and Mar 2014 at Parque Universitario Community in Fortaleza, Ceara, Brazil. Fecal samples were collected every month during the first year of the study, and every three months thereafter from each child. Additionally, specimens from enrolled children were collected in all diarrheal episodes. For *Campylobacter* spp. detection, samples were processed by an enzyme-linked immunosorbent assay (ELISA) using *Campylobacter ProSpect Microplate Assay* kit (Remel, USA). **Results:** 2882 fecal samples were collected and *Campylobacter* spp. were found in 8.7% (251/2882) of the samples by ELISA. 41.16% (135/328) of the children had at least one sample positive for *Campylobacter* by ELISA in different months of the study. 32.59% (44/135) of the children with *Campylobacter* positive samples were younger than six months of age, 62.96% (85/135) were between seven months and one year of age and 39.25% (53/135) were older than one year of age. 22,31% (56/135) of the children were associated with recurrent colonization (positivity for more than one sample along the cohort). Among them, 69,64% (39/56) were in the first year of life. The great majority (~95%) of these children was not experiencing diarrhea at the time of the immunoenzymatic diagnosis. **Conclusions:** There was a high frequency of *Campylobacter* spp. detection in this population, observing a significant percentage of children younger than one year of age with recurrent gut colonization of *Campylobacter* along the cohort. Furthermore, this study shows a high percentage of children without diarrhea with positive samples for *Campylobacter* spp.

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