OCCURRENCE OF INTESTINAL PARASITES IN PRESCHOOL-AGED CHILDREN IN MUNICIPAL EARLY CHILDHOOD EDUCATION CENTERS IN NATAL-RN

BIANCA POSTERLI FIRMINO[1]; VINÍCIUS TAVARES GERMANO[1]; BEATRIZ PAIVA DE ALMEIDA[1]; MARIA LUIZA DA SILVA BEZERRA[1]; CRISTINA ROCHA DE MEDEIROS MIRANDA[1]; HENRIQUE ROCHA DE MEDEIROS[1]; LILIAN GIOTTO ZAROS[1].

[1]FEDERAL UNIVERSITY OF RIO GRANDE DO NORTE, RIO GRANDE DO NORTE, BRAZIL

Intestinal parasites represent a serious public health problem, especially in preschool-aged children, due to their impact on physical and cognitive development. This study aimed to identify the frequency of intestinal parasites in children aged 1 to 6 years enrolled in Municipal Early Childhood Education Centers (CMEIs) in Natal-RN, during the years 2022-2023. Stool samples, subungual content, and perianal region imprints were collected from 81 children, with 44 in the first year and 37 in the second. Parasitological analyses were performed using the main methods. In the first study (2022), 61% of the children were parasitized, with a remarkable presence of *Ascaris lumbricoides* (44%), followed by Ancylostomatidae (33%) and *Entamoeba coli* (26%). Additionally, 40% of the children exhibited biparasitism or polyparasitism, with the most frequent association between *A. lumbricoides* and *E. coli.* In the second study (2023), 21% of the children were positive for parasites, with a predominance of *E. coli* (18.9%), followed by *A. lumbricoides* (8.1%) and *Entamoeba histolytica/dispar* (2.7%).Biparasitism was observed in 62.5% of the positive samples, with the most common association between *A. lumbricoides* and *E. coli*. The higher prevalence of helminths in the first study may be related to the socioeconomic and basic sanitation conditions in the northern region of Natal, while the predominance of protozoa in the second study may reflect better living conditions in the southern region. The results highlight the importance of continuous epidemiological studies to understand the dynamics of parasitic infections in preschool children, as well as the need for prevention, diagnosis, and treatment actions to reduce the impacts of these infections on child development. The high frequency of biparasitism underscores the complexity of treatment and the need for integrated public health interventions.

Supported by Pró-Reitoria de Pesquisa da Universidade Federal do Rio Grande do Norte

Keywords: helminths, protozoa, socioeconomic disparity.