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Epidemiology of cryptosporidiosis in HIV positive patients treated in major tertiary/secondary hospitals in Rivers state, Southern Nigeria

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Objective: To evaluate the epidemiology of Cryptosporidiosis in HIV positive patients undergoing treatment at University of Port Harcourt Teaching Hospital(UPTH) and Zonal Hospital Ahoada (ZHA), Rivers State, Southern Nigeria.

Methodology:250 HIV positive patients were randomly recruited for the study consisting of 101 males and 149 females. Demographic data/information was obtained using a well-structured self-administered questionnaire. Stool samples were collected from each of the patients by standard methods. Modified Ziehl Neelsen (MZN) technique was employed to stain thick stool smears which were microscopically examined under high power magnification for the diagnosis of Cryptosporidium species oocysts.

Results: Out of the 250 samples, 19 were positive giving a prevalent rate of 7.6%. The age group with the highest prevalence (2.4%) was 30-40 years followed by 26-30 years (1.6%). The prevalent rate in females (5.6%) was significantly more than that of males (2%) ($P < 0.05$). Farmers were significantly more affected (3.2%) than other occupational groups ($P < 0.05$). Patients whose source of domestic water was bore hole had the highest percentage (89.5%) of infection. Personal hygiene (hand washing) had a significant effect on infection rate. Diarrhoea was the most frequent presentation of the disease.

Conclusion and recommendation: Cryptosporidiosis was prevalent in HIV positive patients who presented in UPTH and ZHA in Rivers State, Southern Nigeria. Strict environmental sanitation and provision of portable water are public health measures recommended to reduce the prevalence of this disease especially in HIV/AIDS patients.

Key words: Cryptosporidiosis, epidemiology, HIV, Rivers, Nigeria

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