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Prevalence of malarial parasitemia in HIV seropositive patients taking Antiretroviral drugs (ARVD) in Benue State, Nigeria

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Malaria is endemic in Nigeria, and together with HIV, poses a serious public health problem that result in high morbidity and mortality. Antimalarial drugs and antiretroviral drugs (ARVD) have been combined as a means of reducing frequency of *Plasmodium parasitemia* in parts of Sub-Saharan Africa. In this study, the prevalence of malaria (*Plasmodium*) parasitemia in HIV seropositive individuals receiving ARVD was evaluated. A total of 500 HIV seropositive patients (average age=31.4 years; median age=33 years; males=137, females=363) consisting of 400 who were receiving ARVD and 100 who were not receiving any ARVD were used for the study. The bio-data and socio-demographic characteristics of the participants were obtained using structured questionnaire. Venous blood collected from each participant was used to evaluate their immune status by the CD4 cell count testing and to determine *Plasmodium parasitemia* using the Leishman's staining technique. Parasitemia was more prevalent in patients who were not on ARVD (93.0%) than in those who were receiving the drugs (12.8%) ($p<0.05$). Parasitemia occurred most frequently in those aged 18 years and below, irrespective of whether they were on ARVD or not. About exposure to ARVDs, older adults above 40 years (92.7%) and rural dwellers used ARVD more than younger peoples (53.2%) and those who came from the cities to receive treatment. Most of those who were not on ARVDs reported that they sought doctors' prescription in times of sickness, and that they used Lumartem to treat clinical malaria. In contrast, those who were on ARVD most often resorted to self-medication. Bed nets and insecticides were used as malaria preventive measures by both those receiving ARVD and those that were not. This study highlighted some benefits associated with the use of antiretroviral drugs, and has led us to suggest that the drugs be made compulsory for HIV seropositive persons.

Biography

Umeh E U got her PhD from the University of Nigeria, Nsukka. Presently she is a Professor of Microbiology and lectures at the University of Agriculture, Makurdi, Nigeria. She is a member of the University Senate and University Senate Business Committee. She has headed a Department in her University. She supervises Masters and Doctoral research studies in her University, and is an external examiner and visiting lecturer to a number of universities. Some of the courses she teaches include bacteriology, medical microbiology, food microbiology, industrial microbiology, microbial genetics, etc. She has published articles in peer reviewed local and international journals.

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