

**Type: Poster Presentation**

Final Abstract Number: 43.058  
 Session: Poster Session III  
 Date: Saturday, March 5, 2016  
 Time: 12:45-14:15  
 Room: Hall 3 (Posters & Exhibition)

**Moringa oleifera leaf powder role in reinfection pattern of soil-transmitted helminth infection amongst children in Nigeria**


C.N. Ogbuagu<sup>1,\*</sup>, O. Nwaorgu<sup>2</sup>, E.N. Ogbuagu<sup>3</sup>, U. Amazigo<sup>2</sup>

<sup>1</sup> Nnamdi Azikiwe University Teaching Hospital (NAUTH) Nnewi, Nnewi, Anambra State, Nigeria

<sup>2</sup> Nnamdi Azikiwe University, Awka, Nigeria

<sup>3</sup> Nnamdi Azikiwe University Teaching Hospital, Nnewi, Nigeria

**Background:** There have been several efforts at controlling soil-transmitted helminth (STH) infection with deworming programmes implemented yet, the prevalence and reinfection rates are still high among poor and rural communities. Continuous exposure to the source of infection remains the plausible explanation to the high reinfection rates. Several studies done in rural area showed that STH reinfection can occur as early as 2 months after complete deworming (Norhayati et al., 1997, Luoba et al., 2005). It has also been reported that hookworm reinfection can occur soon after treatment (Haswel-Elkins et al., 1988).

**Methods & Materials:** A total of 420 (214 male and 206 female) primary school pupils who consented and assented orally to the study protocol after obtaining ethical approval from Nnamdi Azikiwe University Teaching Hospital (NAUTH) Nnewi. The study aimed at evaluating the use of Moringa oleifera leaf powder (MOLP) in STH reinfection interval among school children in south east Nigeria. A randomized, longitudinal, double-blind, placebo control trial with multiple follow-ups using MOLP with Modified Standardized Jollof Rice (MSJR) as treatment while MSJR as control, all served as mid day lunch packs for 10 months. All the participants were dewormed with 400mg of Albendazole at the baseline before exposure.

**Results:** Data obtained was analysed using SPSS version 20 while proportion was used for descriptive data such as prevalence of STH. The overall STH infection prevalence rate using Kato Katz technique was 120 (28.6%), with 63 (52.5%) females and 57 (47.5%) males infected at base line. The prevalence of *Ascaris lumbricoides* was 61.7%, hookworm 30% while *Trichuris trichiura* was 8.3%. Stool analysis at the 2nd and 6th month recorded no STH infection in both the treatment and control groups. However, at the 10th month, overall prevalence reduced to 63 (15%), with 36 (30%) females and 27 (22.5%) males infected. Also, the post-treatment prevalence for *A. lumbricoides* was 37.5%, hookworm 0.3% while *T. trichiura* was 14.2%. Most reinfected children expelled the larvae. Interestingly, treatment groups (11.7%) recorded a marked reduction in STH reinfection compared with the control (40.8%).

**Conclusion:** MOLP has the potential of expelling the adult larvae of STH infected children with prolongation of the reinfection interval.

<http://dx.doi.org/10.1016/j.ijid.2016.02.797>

**Type: Poster Presentation**

Final Abstract Number: 43.059  
 Session: Poster Session III  
 Date: Saturday, March 5, 2016  
 Time: 12:45-14:15  
 Room: Hall 3 (Posters & Exhibition)

**Common parasites prevalent among school children in Nnobi, Idemili South Local Government Area, Anambra State, Nigeria**


F.N. Okoh<sup>1,\*</sup>, O. Odikamnoru<sup>2</sup>, I.C. Okoye<sup>3</sup>, F.C. Okafor<sup>3</sup>

<sup>1</sup> Evangel University Akaeze Abakaliki Ebonyi State, Nigeria, Enugu, Nigeria

<sup>2</sup> Ebonyi State University, Abakaliki, Ebonyi, Nigeria

<sup>3</sup> University of Nigeria Nsukka, Nsukka, Nigeria

**Background:** The distribution of parasitic diseases in any community is usually wide spread but uneven. These infections are malaria, helminthes or arthropods and their prevalence among the various population segments is said to be tilted heavily towards women and children of school age due to obvious reasons: higher exposure to infective agents. Many surveys abound as to the situation in many communities in various parts of Nigeria. This paper presents a study conducted in Nnobi, a major town in Idemili South Local Government Area of Anambra state, using zinc sulphate flotation method and microscopy to determine and expose the parasites prevalent among school children in the area.

**Methods & Materials:** The study population was 200 school-aged children of Nnobi town including, 105 males and 95 females, aged within 5-20 years. A total of 200 stool samples used, were collected into sterile sample bottles, each bottle contained 5g of morning stool in few drops of formalin/ethanol as preservatives. Stool samples were processed using Zinc-sulphate flotation method and microscopy. Data on health/hygiene habits like hand washing, shoe wearing and swimming habit, presence of latrine and its usage, water sources for domestic use and other risk factors around were also collected. Other information such as sex, age of children, and occupation of parents were also recorded and data analyzed using frequency distribution table.

**Results:** Out of the 200 stool samples examined, 85 (42.5%) were infected with Hookworm; 53(26.5%) had *S. stercoralis*; 21(10.5%) had *A. lumbricoides* and 29(14.5%) children had both *A. lumbricoides* and *T. trichiuria* (mix infection). The prevalence of *Girdia. Intestinales* 7(3.5%) and *Entaemoba histolytica* 5(2.5%) were statistically not significant (P>0.05).

**Conclusion:** The results of the study deduced that parasitic helminthes are prevalent in the study area. Therefore, public health intervention programme should be adopted to help in the control and eradication of this problem.

<http://dx.doi.org/10.1016/j.ijid.2016.02.798>