***Abstract Template***

***SEASONAL AND ENVIRONMENTAL IMPACTS OF SOIL-TRANSMITTED HELMINTH EGGS IN SOME SELECTED PRE-PRIMARY AND PRIMARY SCHOOL PLAYGROUND SOILS, BWARI AREA COUNCIL, ABUJA.***

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***Background****: Public health importance of STH infections ranks the highest in morbidity rate among school aged children who often present with heavy infections.*

***Methodology****: This study was conducted in Bwari Area Council to determine seasonal and environmental impacts of soil-transmitted helminth eggs in selected pre-primary and primary schools. A cross-sectional study design was carried out. Soil samples were collected from the randomly selected school play grounds. Sample collection was done during the dry (January to March, 2013) and wet (April to June, 2013) seasons. Twenty schools were randomly selected from ten wards comprising of 10 each of private and public owned pre/primary schools. 50 grams of soil were collected from the randomly selected playgrounds and were transported to the helminthology laboratory of Department of Veterinary Parasitology and Entomology, Ahmadu Bello University, Zaria where floatation, direct smear and sedimentation techniques were used to recover helminth eggs.*

***Results****: Overall, 6607 eggs were obtained from 400 soil samples collected out of which 4836 (100%) were geo-helminth eggs (3594[74.4%] from public schools and 1242 [25.6%] from private schools). The total number of geo-helminth eggs observed during the dry season was 1244(100%) from all schools representing 944(75.9%) from public schools and 300(24.1%) from private schools. The highest geo-helminth eggs observed was* hookworm eggs *320(25.7%) from all schools, 260(27.5%) from public schools and 120(40%) from private schools, Toxocara eggs 240(19.3) were the second highest followed by* Strongyle eggs *80(6.4%) representing 60(6.4%) from public schools and 20(6.7%) from private schools. Besides geo-helminth eggs, mite, Taenia and coccidian eggs were also observed. The total number of geo-helminth collected during the rainy season from all schools was 3592(100%), 2652(73.8%) from public schools and 940(35.4%) from private schools. The highest geo-helminth eggs collected was* hookworm eggs *representing 880(24.1%) in all schools, 620(23.4%) in public schools and 260(27.7%) in private schools. The second highest geo-helminth egg collected was* Toxocara eggs *643(17.9%) representing 443(16.7%) from public schools and 200(21.3%) from public schools. There was a significant association between the occurrence of geo-helminth egg and season (χ2 = 203.1, P = 0.0001). There was no Significant association between the environmental factors and the pupils that had helminthic infection, (χ2 = 2.462, P = 0.296).*

***Conclusion****: Public enlightenment policies and programmes should be carried out in a holistic approach in schools and Children should as much as possible encourage not to play with contaminated soil and if they do should wash their hands immediately.*

***Key words (3-5 required)****: Soil-transmitted helminths, Seasonal, Environmental impacts, Bwari*

***Subtheme: Effects of climate change on human and animal health***

***Category (Oral or Poster):*** *Oral*