which assessing for ongoing transmission of LF following MDA. Faster after treatment than antibodies to the previously described filarial antigen from patients infected with homologue in marker for persistent infection in the few countries with brugian filariasis. We set it requires collection of blood at night in most endemic areas. Existing antibody the microfilaria (MF) stage of the parasite that is required for ongoing transmission uses mass drug administration (MDA) of antifilarial drugs in endemic areas to kill Gary J. Sarah E. #56: A novel test for diagnosis and surveillance of intervention to improve antibiotic start time. Ongoing educational intervention refine administrators at Rebagliati hospital, which lead to develop a curriculum based on a General and targeted needs assessment was performed by the DoTT project team and historical data, mean TTA was 206 minutes (range, 137–390). Early results indicate a decrease in the TTA, although not statistically significant, likely due to the sample size. General and targeted needs assessment was performed by the DoTT project team and administrators at Rebagliati hospital, which lead to develop a curriculum based on a 5-lecture mini-course for health care providers. Conclusions. The TTA exceeds the recommended time at international level, causing the evitable morbmortality. It is necessary to perform a multidisciplinary intervention to improve antibiotic start time. Ongoing educational intervention refinement and testing of the instruments are planned.

#56: A novel test for diagnosis and surveillance of Wuchereria bancrofti infection Sarah E. Greene,1 Kurt Curtis2, Peter U. Fischer,3 Christopher L. King2, Gary J. Weil1,1 Department of Pediatric Infectious Disease, Washington University in St Louis, St Louis, Mo. 2 Department of Infectious Disease, Washington University in St Louis, St Louis, Mo. 3 Case Western Reserve University, Cleveland, OH.

Background. Elephantiasis or Lymphatic filariasis (LF) is a parasitic infection that causes significant morbidity and impacts hundreds of millions of people in 73 countries. Most LF is caused by the nematode Wuchereria bancrofti, but Brugia species cause LF in some areas of Southeast Asia. The global program to eliminate LF uses mass drug administration (MDA) of antifilarial drugs in endemic areas to kill the microfilaria (MF) stage of the parasite that is required for ongoing transmission by immature filarial worms. Better tools are needed for assessing the success of MDA, because of limitations of available diagnostic tests. MF testing is often not feasible, because it requires collection of blood at night in most endemic areas. Existing antibody and antigen tests remain positive long after effective treatment, and their results do not correlate well with current infectivity. The Brugia Rapid test detects antibodies to BmR1, a Brugia protein that is expressed by MF. These antibodies disappear 2–3 years after effective treatment, and that makes the Brugia Rapid test a useful marker for persistent infection in the few countries with brugian filariasis. We set out to develop a novel antibody test for W. bancrofti infection based on a BmR1 homologue in W. bancrofti.

Methods. We cloned, expressed and purified a Wuchereria bancrofti protein (provisional name WbN1) that is a homologue of the Brugia malayi protein BmR1. Sera from infected and infected patients infected with other closely related filarial species were tested for IgG4 antibodies to WbN1 by indirect ELISA.

Results. The ELISA has a sensitivity of 90.7% for infection with W. bancrofti based on the 80 patient samples tested thus far. Specificity was 95.0% with 59 sera samples from patients infected with Onchocerca volvulus or Loa loa, which are filarial parasites that are co-endemic with W. bancrofti in Africa. Specificity was 97.9% with North American control samples. ELISA with sera from a clinical trial in Lankan, Pakistan indicated that antibody to WbN1 develops faster after treatment than antibodies to the previously described filarial antigen, Bm14. Similar declines in antibody to WbN1 occurred after patients in Papua New Guinea received a single dose of triple drug treatment for LF with Ivermectin DDT and Albendazole, that is effective for clearing MF from the blood without clearing filarial antigenemia.

Conclusions. While additional studies are needed, this ELISA for IgG4 antibody to the recombinant protein WH1 could be a promising new surveillance tool for assessing for ongoing transmission of LF following MDA.

#58: Identification of the most frequent mistakes in the prescription of antibiotics using the “Time-out” strategy, in a pediatric hospital in Mexico City. Izvidy Mondragón1, Eduardo Arias1, Alfonso Huante1, Luisa Díaz1, 1 Instituto Nacional de Pediatría (INP).

Background. In 2019, the CDC estimated that each year more than 2.8 million anti- biotic resistant infections occur in the United States and more than 35,000 people die a result. Usually in pediatrics, antibiotics are the most prescribed, reviews have demonstrated 61% of prescriptions in children and in 20% to 50% of these prescriptions are unnecessary either the dosage or duration are incorrect. Antibiotic resistance is an increasing worldwide problem. Effective antimicrobials have been demonstrated to reduce the inappropriate use and optimize antimicrobial selection, dosing, route, and duration of therapy, limiting the consequences such adverse drug, resistance and cost. The antibiotic time-out consists in reassessment of the continuing need and choice of antibiotics when the clinical picture is clearer and we have more diagnostic information. Currently, in our institution these audits and the costs of the re-assessment are estimated at 1.6 million dollars. The goal of this project was to identify the most common prescription mistakes using the “Time-out” strategy because of its structured applicability and simplified revision that guides antimicrobial use.

Methods. From May to October 2020, we carried out a time out evaluation for different antimicrobial prescriptions in the live main wards of the INP; it consisted of data collection through a mobile application where the prescriptions were documented and evaluated. We answered three questions: 1) Based on the patient’s clinical course and diagnostic test, is the use of these antibiotics justified? 2) Is the dose, interval and route of administration correct? 3) What is the estimated duration of treatment? An infectious disease specialist evaluated the antimicrobial prescriptions daily and, if necessary, modified or adjusted it during rounds. Our evaluation was carried out between 24 and 72 hours of treatment initiation.

Results. For a 6 month period, 196 antimicrobial prescriptions were evaluated through the time-out strategy. Of them, 48% were from de group of cephalosporins followed by the glycopeptides (16%) and carbapenems (14%). In 23% of cases they were not recommended for the infection, a very high number in pediatric patients. There was a narrowing of broadening of spectrum. The prevalence of antibiotic prescription errors was 23%. In 30% of cases it was a dose per kg of body weight error, 61% total dose per day and 9% in duration of treatment. Of note, there were 26% of these prescriptions were instances where the antimicrobials were not prescribed by a pediatric infectious disease specialist where 67% was not found to be justified upon evaluation and 72% required discontinuation.

Conclusions. The implementation of an antimicrobial control program made it possible to identify the most common mistakes in antibiotic prescription in our hospital; these programs to reduce the inappropriate use of antimicrobial prescriptions, limiting the consequences such adverse effects drug, antimicrobial resistance and healthcare cost.
experts. Most respondents have very often or always adopted the recommendations discussed during online meetings for the management of patients locally. Additional materials include: a protected virtual community space for storing all CBL materials and promoting continued participant engagement; a growing index of infections with prepared PubMed searches for quick and easy navigation to peer-reviewed literature (n=9); and, written case summary reports, indexed by infection, made available to all audience members for reference (5=in draft, 12=published). During the first part of the COVID-19 pandemic, we incorporated a journal club structure to discuss emerging literature on the virus, and specifically the implications for children with / without cancer. Participants indicated that COVID-19 activities were extremely useful for discussing and digesting the rapidly evolving scientific literature for SARS-CoV-2 and being able to apply lessons learned in real-time.

**Conclusions.** A virtual platform for CBL provides a critical resource that expedites information-sharing and can potentially improve patient care by expanding access to expertise and experience for best care practices beyond geographic boundaries.

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**#60: Attention Deficit Hyperactive Disorder and Oppositional Defiant Disorder in Adolescents Living with HIV/AIDS - A Cross Sectional Study**

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**Introduction.** Perinatally HIV infected neonates are surviving into adulthood with an impact on mental and emotional health. Attention deficit hyperactive disorder (ADHD) and Oppositional Defiant disorder (ODD) are few of the common behavioral disorders, which have been found to have a higher prevalence amongst HIV infected children.

**Objectives.** The objectives were to assess the proportion of ADHD and ODD in adolescents living with HIV/AIDS and to find its association with various factors.

**Materials and Methods.** 88 adolescents aged 10–19 years living with HIV/AIDS were included in the study. The Swanson, Nolan Pelham (SNAP-IV) scale was administered to the caretakers and children were assessed for the proportion of ADHD/ODD. Association between those who scored positive with duration of treatment, CD4 counts, stage of disease and socio-demographic variables were done using statistical tests.

**Results.** Our study included 88 participants, of whom 9 scored positive in the inattention subset resulting in a proportion of 10.2%. 5 participants had symptoms of hyperactivity/impulsivity resulting in a proportion of 5.6% and 1 had combined symptoms with a proportion of 1.1%. 13 scored positive in the opposition/defiant subset resulting in a proportion of 14.7%. No statistical significance was found between duration of treatment, CD4 count, stage of disease, socio-demographic variables and ADHD/ODD.

**Conclusion.** The proportion of ADHD and ODD in this study was found to be comparable to the general population. A holistic approach to improve the long-term health of these youth is needed to ensure that our success in achieving survival of HIV-infected children from infancy is maintained into adulthood.