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ASTMH is an international society committed to equity and global impact through the treatment

# ABSTRACT BOOK

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but not limited to ethnicity, color, national origin, age, religion, socioeconomic status, disability, sexual orientation, gender, and gender identity or expression.

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participants aged 2 to 24 months admitted to icddr,b hospital, Dhaka, Bangladesh during January 2016 to November 2017 with SAM (weight for length <-3 SD). Enrollment was age-stratified into 2 to <6 and 6 to 24 months age groups in a 1:2 ratio. All children received SAM standard-of-care, and the SSO group was also treated with 3 g of SSO per kg body weight three times daily for 10 days. At day 10 we found, rate of weight gain was higher in the SSO than the control group [adjusted mean difference (AMD) 0.90 g/kg/day, 95% CI: -1.22 to 3.03] in the younger age stratum, but was not statistically significant. Nosocomial infection rate was significantly lower in the SSO group in the older age stratum (adjusted odds ratio 0.41, 95% CI: 0.19 to 0.85). Skin condition score improved (AMD: -14.88, 95% CI: -24.12 to -5.65) and TEWL was reduced (AMD: -2.59, 95% CI: -3.86 to -1.31) significantly in the SSO group compared to the control group at day 10. Reduction in CRP level was also significantly greater in the SSO group (median: -0.28 mg/dl) than the control group (median 0.00 mg/dl) in the younger age stratum at day 10. Topical therapy with SSO was beneficial for children with SAM when applied as an adjunct therapy. However, a community-based trial with a longer intervention period is recommended to validate these results.

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### EVALUATION OF SUSCEPTIBILITY OF CLINICAL BACTERIA ISOLATES TO HONEY, GINGER AND MUSHROOM

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Applications of honey in treatment of diseases were reported in the world's oldest medical literatures. It was reported to possess antimicrobial as well as wound healing properties. In addition, edible Mushroom has also been deployed in traditional medicine as antibacterial and antiviral therapies. Equally used in traditional medicine is Ginger, a perennial plant that has been deployed for human and animal ailments. In this study, the antibacterial properties of these products will be investigated using clinical bacteria isolates from wound care unit in a General Hospital in Southern Nigeria. The antimicrobial effect of honey, ginger and mushroom extracts was tested against each 10 identified samples of *S. aureus*, *S. Pyogenes*, *P. aeruginosa* and *E. coli* wound isolates from patients. Isolates were harvested from culture media when organisms were at their exponential phase of growth and susceptibility evaluated using serially diluted purified extracts of ginger, mushroom or honey. Inhibition of bacterial growth of the various agents was analyzed and compared. Study is ongoing, and data is being collated. Data from this study may provide rationale for further development of honey, mushroom or ginger for clinical applications in wound care units in developing countries where antibiotics are not readily available and antibiotics resistant remain a major public health concern.

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### A SYSTEMATIC REVIEW OF SOLID ORGAN TRANSPLANTATION IN ACUTE PRESENTATIONS OF TROPICAL INFECTIOUS DISEASES

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Fulminant life-threatening presentations of acute tropical infections such as yellow fever, dengue, malaria, hepatitis E, and leptospirosis, may occur, and the degree of end-organ impairment may qualify patients for solid-organ transplantation (SOT) in centres with such capacity. However, due to a paucity of synthesized data, there is a knowledge gap around indications for and outcomes in SOT for severe acute tropical infectious diseases.

We therefore aim to synthesize such knowledge, focusing on patient outcomes in order to inform triage and treatment protocols in centres where acute tropical infectious diseases and SOT capacity may intersect. Five electronic databases were searched (PubMed, Embase, Scopus, Cochrane, and LILACS) using combinations of search terms such as the following: "liver" or "hepatic" "transplant," "yellow fever" "dengue" and "*Plasmodium* spp.," from database inception to March 4, 2019. A total of 6317 articles were retrieved: 2324 articles on PubMed, 3839 on Embase, 244 on Scopus, 43 on Cochrane, and 108 on LILACS. After eliminating duplicates using Mendeley software, a total of 4944 articles remained for title screening. Titles, abstracts, and full-text articles will be systematically double screened by two reviewers with a tertiary arbitrator. The Preferred Reporting Items for Systematic Reviews and Meta-Analyses (PRISMA) will be implemented. Data extraction will be performed by two reviewers and the quality of the articles will be critically evaluated using the Grading of Recommendations Assessment, Development, and Evaluation (GRADE) approach. The data will be summarized to systematically map published literature that will illuminate the frequency, indications for, and health outcomes of SOT recipients in the treatment of acute tropical infectious diseases. Where SOT capacity exists alongside the occurrence of endemic or imported tropical infectious diseases, such synthesized information, particularly in the form of a clinical resource, is essential for appropriate resource allocation and informed clinical decision-making.

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### EPIDEMIOLOGICAL UPDATE ON FEVER IN RETURNING TRAVELERS TO ONTARIO FROM THE 'RAPID ASSESSMENT OF FEBRILE TRAVELERS' (RAFT) PROGRAM

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Fever in returning travelers may indicate a life-threatening infection, such as malaria. However, most cases are due to more benign, self-limited etiologies such as traveler's diarrhea. In the absence of a priori predictors of which febrile travelers will develop severe clinical sequelae from their imported infection, which remains undifferentiated pending confirmatory diagnostics, close follow-up and monitoring of travelers during the initial few days of illness is required. The rapid assessment of febrile travelers (RAFT) programme was implemented to standardize the evaluation and disposition of febrile returned travelers in Toronto. We herein provide an epidemiological update on travelers assessed via RAFT from 2016 to 2018, and the illnesses with which they returned from travel. Criteria for RAFT referral include: presentation to participating EDs, reported fever, and travel outside of Canada within the past year. Exclusion criteria include *Plasmodium falciparum* malaria, and fulfilment of admission criteria such as unstable vital signs or major lab derangements. Demographic, clinical, and travel-related data were collected, and analyzed using descriptive statistics. From January 2016 to December 2017, 302 ill returned travelers were evaluated via RAFT. 147(49%) were men and 155(51%) were women. Median age was 34 years (range 16-93 years). Travelers returned from 82 countries with the most represented countries being: India (25, 8%), Mexico (21, 7%), Thailand (18, 6%), Cuba (17, 6%), and Costa Rica (13, 4%). Common diagnoses included: viral syndrome (78, 26%), traveler's diarrhea (34, 11%), viral respiratory infection (27, 9%), dengue (16, 5%), lab-confirmed influenza (16, 5%), and typhoid fever (10, 3%). Among lab-confirmed cases of influenza evaluated in RAFT, off-season transmission accounted for a quarter. Cases of Zika virus (6, 2%) only occurred in 2016. An additional 207 travelers referred in 2018 will also be reported. Understanding the range of illnesses imported by febrile returned travelers will inform pre-travel counseling and both clinical and laboratory algorithmic approaches to care of such travelers.