5<sup>th</sup> Global Experts Meeting on

## **Infectious Diseases**

August 08-09, 2022 | Webinar

## SCIENTIFIC TRACKS & ABSTRACTS

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Sadik Aliko, J Infect Dis Med Microbiol 2022, Volume 06

#### Evaluation of mental health of HIV patients

#### Sadik Aliko

Mother Teresa Hospital, Albania

Most patients with serious, progressive illness confront a range of psychological challenges, including the prospect of real and anticipated losses, worsening quality of life, the fear of physical decline and death, and coping with uncertainty. HIV <u>infection</u> brings additional challenges due to the rapidly changing treatment developments and outlook. The aim was to investigate the prevalence of and factors associated with anxiety and depression among adult HIV-infected patients.

**Method**: The study was conducted at <u>Infectious Disease</u> Service, University Hospital Center of Tirana during 2018 including 85 HIV-positive patients who also self-administered the Hospital Anxiety and Depression (HAD) scale; those with score >8 on HAD-A/D were considered to be at high risk of anxiety or depression.

**Results**: Associations between socio-demographic, psychosocial, and ART-related clinical factors and risk of depression or anxiety were investigated using multivariable logistic regression. Among patients assessed 28.5% had symptoms of anxiety, 34% had symptoms of depression, and 21.0% had both. Recentness of <u>HIV</u> diagnoses (p=0.03) was associated with elevated odds of anxiety. Older age (p<0.01), higher educational attainment (p<0.01), employment (p<0.01), support from family / friends (p<0.01), and sleep disturbance (p<0.01), and number of ART regimen switches (p<0.01) were associated with risk of depression, while neither sex nor transmission route showed any associations. There were no significant associations with HIV-specific clinical factors including current CD4+ T cell count and current viral load.

**Conclusion**: Individuals in HIV care should be screened and treated for depression and anxiety in integration mental health services.

#### **Biography**

I am a medical doctor, Infectious diseases specialist from Tirana, Albania. I have graduated on 1992 from the Faculty of Medicine, University of Tirana, Albania. In 2002 I commenced the four year residency in infectious diseases and work at the Service of Infectious Diseases at the University Hospital centre "Mother Teresa" in Tirana.Currently I am doing Phd in infectious diseases from Tirana University, in Tirana, Albania.

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Shkelqim Kurti, J Infect Dis Med Microbiol 2022, Volume 06

#### Evaluation of peripheral lymphadenopathy in adults

#### Shkelqim Kurti

Mother Teresa Hospital, Albania

Pathological involvement of the lymph nodes is a clinical problem, often encountered in various fields of medicine. The cause of peripheral lymphadenopathy is a significant number of benign and malignant processes, which appear in different forms at different ages. The purpose of the study is to evaluate the <u>epidemiological</u> and clinical characteristics of lymph node pathologies.

**Material and method**: This is a cross-sectional study including 132 patients who presented to the "Mother Teresa" University Hospital Center in Tirana, Albania with peripheral lymphadenopathy during the period March 2017 - March 2019. Epidemiological and clinical data of patients were collected.

**Results**: Of the 132 patients, 57 (43.2%) had hematological diseases, 45 (34.1%) <u>infectious</u> diseases and 30 (22.7%) patients had <u>breast cancer</u>. The mean age of all patients is 50.7 ( $\pm$ 18.6) years with a range of 14 to 87 years. 50% of patients are men and 50% are women. In hematological patients, the diagnosis of LLC prevails in 49.1% of patients. Of the infectious diseases, the diagnosis of retrovirosis prevails in 16 (35.6%) patients, followed by mononucleosis in 12 (26.7%) patients and brucellosis in 6 (13.3%) patients. T2N1M0 stage patients predominate in 36.7% of cases, followed by T2N2M0 stage in 20% of cases. In relation to adenopathy, the predominant ones are: cervical adenopathy (75.4%) and axillary adenopathy (64.9%), followed by femoro-inguinal adenopathy (35.1%), and abdominal adenopathy (10.5%). Hepatomegaly was found in (43.9%) patients while splenomegaly in (42.1%) patients. Most adenopathies (71%) were bilateral.

#### **Biography**

I am a medical doctor, Infectious diseases specialist from Tirana, Albania. I have graduated on 1992 from the Faculty of Medicine, University of Tirana, Albania. Afterwards I was specialized for four years in infectious diseases and work at the Service of Infectious Diseases at the University Hospital centre "Mother Teresa" in Tirana.

Currently I am doing Phd in infectious diseases from Tirana University, in Tirana - Albania.

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Amanda H Cavalheiro, J Infect Dis Med Microbiol 2022, Volume 06

#### Evaluation between SALSA and participation scale in adhesion of leprosy patients in a high complexity hospital

#### Amanda H Cavalheiro

University of Sao Paulo - USP, Brazil

As a stigmatized disease, leprosy causes, in addition to physical and social limitations, low adherence to treatment. The objective was to evaluate, through validated scales, the physical limitations (SALSA Scale), social limitations (Participation Scale) and the adherence of patients diagnosed with multibacillary leprosy and being followed up at the HCFMRP/USP. Participants were invited to an interview and the SALSA (Screening of Activity Limitation and Safety Awareness) Scales of Participation (scales the restriction to the patient's social participation, especially for those where the disease is highly stigmatized, interfering with their social activities) and Haynes-Sackett adherence were answered. The work was approved by the Ethics Committee under CAAE nº 28669720.7.0000.5440. Most patients had mild or no physical limitations (69.1%). In this study, 59.5% of the patients did not have any significant restrictions, while 9.5% had extreme restrictions in relation to their social participation. By the Haynes-Sackett adherence test, 82.5% of the patients were adherent to the treatment. It was possible to verify that there is a statistically significant difference ( $p < 0.007^*$ ) between the factors and the percentage of adherents obtained by the Haynes test, being higher in patients "No limitation" and "slight limitation" in relation to "severe limitation" (100% and 94.1%>25.0%). It was also found that patients classified as "Without limitation" or with "slight physical limitation" were 27 times more likely to adhere to treatment (p<0.001\*). As for the Participation Scale, it was noted that patients who were classified as "No restriction" or "slight restriction" were 9.2 times more likely to adhere to the treatment ( $p=0.02^*$ ).

#### Biography

Graduated in Pharmacy-Biochemistry from the University of São Paulo (USP), Research and Development Analyst for the Medicines, Cosmetics and Food Industry with project development in the Natural Products area together with USP; Specialist in Pharmacology and Drug Interactions, in health organization management and in Teaching in Higher Education. Health Instructor in education programs for patients with chronic and rare diseases. Taught classes for vocational courses. She has already been a Responsible Pharmacist in a distributor of medicines and drugstores and also worked at hospitals. She is currently Professor of Pharmacy Technician and Master in sciences by USP, working with leprosy patients. Nowadays, is finishing her MBA in Business Management.

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Armah Emmanuel Odartei, J Infect Dis Med Microbiol 2022, Volume 06

## Polymorphism of 16srrna gene and its association with pathogenecity and antimicrobial resistance of free ranged chicken

#### Armah Emmanuel Odartei

CSIR Water Research Institute, Ghana

Scavenging local chicken, Gallus domesticus are predominant among other <u>poultry</u> in African villages, owing to their relatively low input requirement in their rearing. Few researches focused on the career rate of pathogens based on housing system of poultry, and a fewer studies highlight the genetic basis for these differences.

**Objective**: This study intends to investigate the molecular and genetic differences that exists between E. coli isolated from local scavenging chicken based on their different housing systems.400 oral-pharyngeal and cloacae swabs were collected from 200 scavenging local chicken. Isolation of Escherichia coli. Procedures used were as described in the <u>Bacterial</u> Analytical Manual (BAM 2007). Extraction of DNA based on manufacturer's protocol.16SrRNA sequencing the 16S rRNA genes in the Escherichia coli isolates were detected by PCR and sequenced. Sequenced genes of E.coli from the two different housing systems produced distinct haplotypes, no two samples shared same haplotype. The phylogenic tree revealed that pathogens from the two housing systems are genetically, distinct as they are found on different clades of the tree. The sequence alignment shows that samples from the two different systems have different nucleotide sequence arrangements, an indication of genetic dissimilarity. The intensive system showed more resistance than the extensively kept ones; this may be because the former receive more vaccines whiles the later scavenge mainly for food

**Conclusion**: Thus, the 16SrRNA gene can also be used as a molecular marker to indicate the antimicrobial resistance and pathogenicity of chicken. More research should focus on scavenging local chicken

#### Biography

Emmanuel Odartei Armah is a Principal Research Technologist with the Water Research Institute, CSIR-Ghana. He holds a Master of Science in Molecular Biology and Biotechnology. His research interests include Antimicrobial resistance, Fish Health and Fish Genetics, Population Genetics in Schistosomiasis. He has a total of 12 publications. He intends to establish a Center for Antimicrobial Resistance Surveillance which would be solely responsible for conducting routine surveillance of antimicrobial resistance of relevant in human, environment and veterinary (One Health).

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Valentina A Divocha, J Infect Dis Med Microbiol 2022, Volume 06

## Presence of cellular components in vaccines and Immunobiological the preparations.

#### Valentina A Divocha

Ukrainian Research Institute for Medicine Odessa, Ukraine

Now preventive maintenance of a flu by means of <u>vaccination</u> is conventional and is supported by experts of all world. To check presence of trypsin-like proteinase and its inhibitor in antiflu and other vaccines and in immunobiological blood preparations of domestic and foreign manufacture. In work following commercial preparations have been used:" Interferon leukocytic human"," the Immunoglobulin of human placental, donor 10 %, a gonococcal vaccine a herpetic vaccine (Odessa), vaccines for preventive maintenance of a flu, a season 2002/2003 -"Influvac" which consists of <u>hemagglutinins</u> and a neuraminidase of a virus of a flu, strains: A/ Moscow/10/99 (H3N2), A/New Caledonia/20/99 (H/N), B/Hong Kong/330/2001, "Fluarix" which consists of hemagglutinins of strains (H1N1) A/New Caledonia (H3N2), A/Panama and B/Shandont 17/97 and "Vaxigrip" which consists of three strains of a <u>flu virus</u>, a vaccine for preventive maintenance of a hepatitis A - "Avaxim", a blood preparation received from a heparin (the antifactor of Ha) - "Fraxiparine", a preparation from a blood of calfs for a hemodialysis - "Solcoseryl". Preparations were investigated before the termination of a period of validity.

**Results**: Work is devoted to study presence of components of a cell-owner and its inhibitor in vaccines and blood preparations and to define presence trypsin-like proteinase and its inhibitor in vaccines and blood preparations. It is revealed that anti influenza vaccines (influvac, vaxigrip, fluarix), herpetic and <u>tularemic</u> vaccines contained an inhibitor of trypsin-like proteinase in considerable quantity. Commercial preparations from a human donor blood (an immunoglobulin, interferon, fraxiparine and solcoseryl) contained as trypsin-like proteinase, and its inhibitor. The immunoglobulin contained in 4,0 times more inhibitor, than interferon.

Hence, the modern vaccines applied to prophilaxis and treatment, are insufficiently cleared. Presence of cellular components (enzymes and inhibitors) could lead to allergization and follow complication which is not very known.

#### Biography

Valentina Divocha in 1967 graduated from I.I. Mechnikov Odessa State University, Faculty of Biology (Department of Virology). In 1973 continued her postgraduate study ate Odessa Institute of Virology and Epidemiology (specialty virology). In 1974 she was awarded her candidate degree with the thesis "Interaction of Coxsackie B viruses with sensitive cell cultures and their antigenic relationships. She has currently working as the head of the Laboratory of Experimental and Clinical Pathology for Ukrainian Research Institute of Transport Medicine, is the supervisor of the nine research programs in virology and biochemistry.

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Journal of Infectious Diseases and Medical Microbiology

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Sisay Shewasinad Yehualashet, J Infect Dis Med Microbiol 2022, Volume 06

#### Predictors of COVID 19 prevention measure adherence among communities in North Shoa Zone, Ethiopia based on health belief model

#### Sisay Shewasinad Yehualashet

Debre Berhan, Ethiopia

Coronavirus disease 2019 (COVID-19) is an emerging respiratory <u>infections</u> and is known to cause illness ranging from the common cold to severe acute respiratory syndrome. At present, the disease has been posing a serious threat to the communities, and it is critical to know the communities' level of adherence on COVID-19 prevention measures. Thus, this study aimed to identify the predictors of adherence to COVID-19 prevention measure among communities in North Shoa zone, Ethiopia by using a health belief model. Methods: Communitybased cross-sectional study design was employed. A total of 683 respondents were interviewed using a structured and pre-tested <u>questionnaire</u>. The data were collected by using a mobile-based application called "Google form." Logistic regression was performed to analyse the data. Estimates were reported in adjusted odds ratios with 95% confidence intervals (CI) and a significant association was declared at p-value of less than 0.05. Result: The overall adherence level of the community towards the recommended safety measures of <u>COVID-19</u> was 44.1%. Selfefficacy (AOR = 0.23; 95% 0.14, 0.36), perceived benefits (AOR = 0.35; 95% 0.23, 0.56), perceived barriers (AOR = 3.36; 95% 2.23, 5.10), and perceived susceptibility of COVID-19 (AOR = 1.60; 95% 1.06, 2.39) were important predictors that influenced the adherence of the community to COVID-19 preventive behaviors.

**Conclusions**: In this study, the overall adherence level of the community towards the recommended safety measures of COVID-19 was relatively low. It is vital to consider the communities' self-efficacy, perceived benefits, perceived barriers and perceived susceptibility of COVID-19 in order to improve the adherence of the community towards the recommended safety measures of COVID-19.

#### **Biography**

Mr.Sisay Shewasinad Yehualashet is lecturer in the Department of nursing in Government university at Debre Birhan University, Ethiopia. I am a graduate nurse of MadaWalabu University of undergraduate and MSc on child health nursing from Addis Abaaba University and clinical nurse at wogere and Jihur health center.

#### August 08-09, 2022 | Webinar

Anas Habeeb Mohammed Matar Al-Sharqi, J Infect Dis Med Microbiol 2022, Volume 06

#### Review of liver enzyme abnormalities in patients with SARS-CoV-2 infection

#### Anas Habeeb Mohammed Matar Al-Sharqi

Kirkul University, Iraq

**Background**: Coronavirus disease (COVID-19) is caused by severe acute respiratory syndrome <u>coronavirus-2</u> (SARS-CoV-2) infection. The infection started to appear in Wuhan, China as an outbreak of pneumonialike symptoms, and spread across the entire globe within a few weeks resulting in millions of morbidities and thousands of mortalities. While respiratory manifestations and consequences are well-defined and can be severe, GI manifestations of COVID-19 such as nausea, vomiting, diarrhea and abdominal pain are widely being recognized. <u>Liver</u> function derangements have been reported in COVID-19, but reported rates are variable. Treatment in intensive care units (ICU) has become a major challenge; therefore, early recognition of severe and critical cases is absolutely essential for timely triaging of patients.

Aim of the study: to review incidence of acute liver injury in patients with severe acute <u>respiratory syndrome</u> coronavirus-2 (SARS-CoV-2).

**Patients and methods**: obtaining clinical records and laboratory results prospectively from one hundred patients with PCR-confirmed or radiography-confirmed COVID-19, who are admitted to the isolation wards and emergency departments of three different hospitals in Baghdad from 1st of December 2020 to 31st of March 2021.

**Results**: The mean age group of the study sample was (61.2±12.36) years, males formed59%. GI manifestations were recorded in 47% of total cases, and were statistically correlated with disease severity (P value 0.001). Wide range of LFT abnormalities are found in patients with COVID-19, but none of which showed statistical significance in relation to <u>disease</u> severity. When LFT results were reviewed in relation to previous comorbidities, GGT was found to be statistically correlated with the underlying CLD (P value 0.001), and ALP with both underlying CLD and DM (P values <0.001 and 0.029, respectively) and even in the absence of underlying comorbidity (P value 0.006).

**Conclusion**: Liver enzyme derangements are increasingly reported in patients with <u>COVID-19</u>, but are not necessarily correlated with disease severity. Cholestatic picture of liver enzyme derangement is a more commonly recorded manifestation.

#### Biography

Anas Habeeb Mohammed Matar Al-Sharqi has completed his medical school at Kirkul University, Iraq at the age of 24. He started his journey as a junior doctor (what is named in some countries as foundation year doctor) in three different hospitals in Kirkuk city. Then, he became the chief physician at Kirkuk General Hospital for about a year before moving to Baghdad, the capital of Iraq, to start his specialization study in Internal Medicine at one of the greatest medical cities in the country. During COVID-19 pandemic, he was one of thousands of doctors who took part in this global war against the virus, and realized that making this study may benefit other doctors worldwide from the results achieved.

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PriyaYadav, J Infect Dis Med Microbiol 2022, Volume 06

#### Cyst-like Structures in the life cycle of Trichomonas vaginalis: A possible nonsexual mode of transmission

#### **PriyaYadav**

Indian Institute of Science, India

Trichomonas vaginalis is a parasitic protozoan known to cause a non-viral sexually transmitted infection known as Trichomoniasis. The infection encompasses a broad range of symptoms in both male and female patients ranging from acute inflammation, premature labor, low birth-weight of infants, vaginitis and increased susceptibility to life-threatening Human immunodeficiency Virus (HIV) infection, cervical neoplasia and pelvic <u>inflammatory</u> disease. Although most of the infected patients are asymptomatic, the annual incidences of Trichomoniasis are more than 170 million throughout the world.

Life cycle of the parasite has been traditionally described as consisting of motile and symptom-causing trophozoites which are sexually transmitted. In our current research, we show the formation of viable cyst- like forms in stationary phase of T. vaginalis axenic culture. Like cysts from other protozoan parasites like <u>Entamoeba</u> histolytica and Giardia lamblia, T. vaginalis cyst-like structures (CLS) appear spherical, immotile, uniquely stains with calcofluor white, is resistant to osmotic lysis and detergent treatments. We used calcofluor white, a stain which specifically binds to chitin and cellulose-containing structures, to score for the Cyst-like structures. We demonstrate and quantitate the processes of encystation as well as excystation in vitro; thus, completing the parasite's lifecycle without any chemical/ temperature alterations. We found that CLS play an important role physiologically as it is resistant to detergents, swimming pool water, and also able to convert back to trophozoites.

Finally, we show that symptomatic human patient <u>vaginal</u> swabs have presence of both T. Vaginalis trophozoites and CLS; thus, highlighting the role of cyst-like forms in clinical infections. The study highlights the plasticity of the pathogen and its rapid adaption when subjected to stressful environmental cues. Together, our findings suggest an important role of cysts-like structures in the parasite's life cycle, pathogenesis and transmission.

#### Biography

I have completed my Masters in life sciences in Indian Institute of Science at the age of 23. I am pursuing my PhD research from Indian Institute of Science in the field of neglected infectious diseases, one of which is a very common sexually transmitted infection caused by Trichomonas vaginalis.

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Shumaila Naz, J Infect Dis Med Microbiol 2022, Volume 06

#### Detection of virulence genes in antibiotic resistant bacterial pathogens of urinary tract Infections Samples

#### Shumaila Naz

University of Wah, Pakistan.

Urinary tract infections (UTIs) are common health problems in the community and healthcare-associated centers. UTIs caused by pathogenic bacteria can affect men and children but are more common in women. Biofilm formation plays a vital role in the pathogenicity of disease-causing bacteria. Biofilms involved in poor penetration of antibiotics and the emergence of multidrug-resistant organisms (MDRO) are aided by the horizontal transfer of virulence genes. Knowing the phenomena of biofilm formation and antibiotic resistance in uropathogenic helps to treat the biofilm-associated UTIs. The present study evaluated six bacterial isolates of UTIs for their biofilmforming ability, antimicrobial susceptibility pattern by microdilution method, and virulence genes detection by PCR followed by phylogenetic analysis. Biofilm formation was observed in all six isolates. Antimicrobial susceptibility showed that the isolates were more resistant to ciprofloxacin and amoxicillin/clavulanic acid than gentamycin and meropenem. The isolate Acinetobacter calcoaceticus (11A) showed resistance to all four selected antibiotics. Molecular characterization showed the presence of Acinetobacter calcoaceticus, Enterococcus gallinarum (11D), and Enterobacter hormaechei (1B) in urinary tract infection samples. The prevalence of papC, fimH, and cnf1 genes was higher than other tested virulence genes among selected bacterial isolates. The virulence gene papC was present in four isolates (4D,11A,11C, and 11D), fimH was present in two isolates (4D and 3B), and cnf1 was observed in one isolate (11A). Treating patients suffering from urinary tract infections becomes difficult due to multiple drug-resistant bodies and virulent genes. The present investigation provides information on bacterial pathogenicity associated with biofilm-forming drug-resistant uropathogens and the presence of virulent genes related to urinary tract pathogenesis.

#### Biography

Dr. Shumaila Naz is an Associate Professor Qualification: Ph.D. Biochemistry/ Biotechnology, 2009, SBS-University of the Punjab, Lahore, Pakistan. DICE-Innovative Business Plan Award: Head of the Model Project "Aquaponics" Participated and Presented innovative new business plan in a two-day Distinguished Innovation, Collaboration Entrepreneurship (DICE) themed Agriculture and Food Sciences 2017, organized by the ORIC-University of Agriculture, Faisalabad on 7-8th November, 2017. The project team won the 10th position and a cash prize among top 15 best ideas out of 126 Projects.Won the Best Science Model.