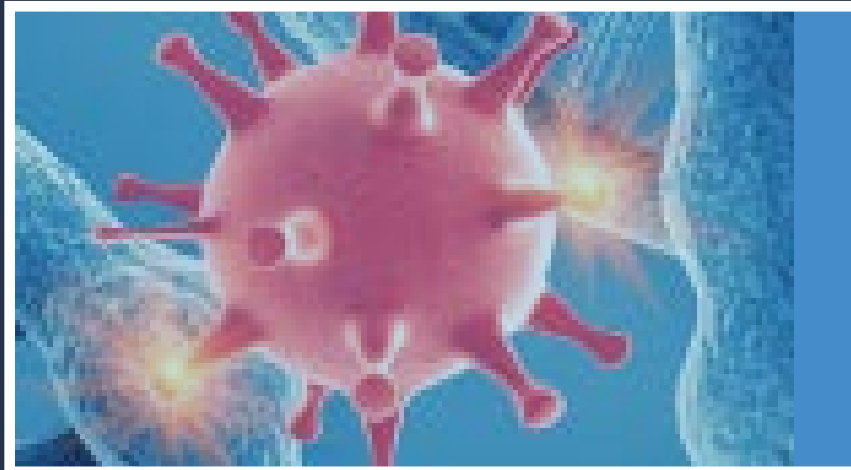
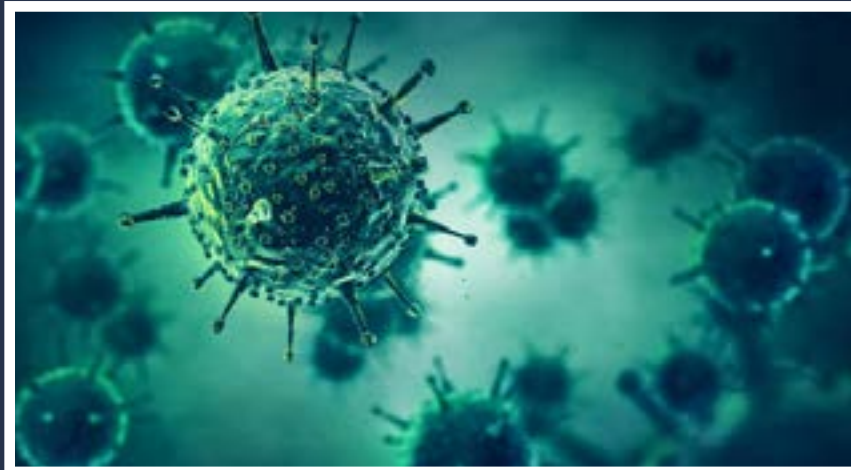


21st International conference on
Infectious Diseases

Scientific Sessions

March 01-02, 2023
Webinar



Infectious Diseases Week 2023

Platelet to lymphocyte ratio as a tool for determining the severity of SARS-CoV-2 infection among hospitalized patients

Aida-Isabela Adamescu^{1,2*}, Catalin Tiliscan^{1,2}, Daniela Neagu², Oana Ganea^{1,2}, Nicoleta Mihai^{1,2}, Sebastian Ciobanu^{1,3}, Mihai Lazar^{1,2}, Cristina Grosu², Alexandru Croitoru¹, Angelica Visan^{1,2}, Stefan Sorin Arama^{1,2} and Victoria Arama^{1,2}

¹Carol Davila University of Medicine and Pharmacy, Romania

²National Institute of Infectious Diseases "Prof. Dr. Matei Bals", Romania

³Bucharest University Emergency Hospital, Romania

There are several markers used for determining SARS-CoV-2 disease severity and evolution. Recent studies highlighted the Platelet to Lymphocyte Ratio (PLR) as a tool for assessing the risk of progression to severe disease.

The aim of our study was to evaluate the PLR together with SARS-CoV-2 associated clinical, biological and imagistic markers and to determine its value in assessing the infection severity.

Positive SARS-CoV-2 adult patients hospitalized in INBI were enrolled in the study. PLR, clinical parameters (clinical disease, dyspnea etc.), biological parameters (hemogram, inflammatory markers, liver injury marker enzymes etc.) as well as imagistic parameters (CT pneumonia pattern) were evaluated.

395 patients were enrolled in the study, among which 147 women (AA: $61,3 \pm 14,1$ years) and 248 men (AA: $65,49 \pm 14,8$ years). The median of the PLR values was significantly higher in the cases of patients requiring oxygen supplementation upon admission (178 vs. 232 among those without, $p=0.000$), patients having severe clinical disease (248 vs. 186 among those with mild disease, $p=0.000$), as well as among patients with severe chest CT lung abnormalities (271 vs. 218 among those presenting moderate chest CT lung abnormalities and 154 for those with mild abnormalities, $p=0.000$).

Higher median PLR values were found among patients exhibiting dyspnea (225 vs. 185 in the case of patients without it, $p=0.003$), among patients presenting polypnea (232 vs. 197 among those without it, $p=0.001$), as well as among patients requiring antibiotic treatment (212 vs. 189, $p=0.002$).

The presence of symptoms ($p=0.7$), obesity ($p=0.44$), asthenia ($p=0.37$), liver cytolysis during the admission ($p=0.709$) and high ferritin blood levels ($p=0.52$) provided no statistically significant correlations.

PLR correlates with clinical, biological and imagistic markers of SARS-CoV-2 disease severity and could therefore be readily used as a tool for determining the severity of SARS-CoV-2 infection even in underdeveloped healthcare systems, especially considering its cost-efficiency and ease of use.

Biography

Aida-Isabela Adamescu is affiliated to Carol Davila University of Medicine and Pharmacy, Bucharest, Romania and National Institute of Infectious Diseases Prof. Dr. Matei Bals, Infectious Diseases Department, Bucharest, Romania.

Scoping transformative changes in antimicrobial stewardship: Insights from devolved government hospitals and mission hospitals in a lower-middle income setting

Frank N. Ndakala

Ministry of Education, Kenya

Statement of problem:

Poor coordination of the One Health concept contributes to antibiotic misuse, leading to antimicrobial resistance in LMICs. Lack of AMR data in local settings is a major hurdle to implementing National Policies and Action Plans.

Objective:

To evaluate the impact of Antimicrobial Stewardship (AMS) in 11 referral hospitals in 9 counties throughout Kenya.

Methods:

Impact assessment was conducted through the lens of [Transformative Innovation Policy, Basic Science and One Health Approaches](#). The survey team collected data using four tools: (1) National and County Assessment Tool (2) Healthcare Facility Assessment Tool (3) Laboratory Assessment of Antibiotic Resistant Testing Capacity (LAARC) and (4) WHO's Point Prevalence Survey (PPS). The team also conducted Focus Group Discussions (FGDs) with 6-12 healthcare practitioners and 8-12 community members.

Results:

A common AMS structure, resources and process existed in participating counties. Seven counties demonstrated partial or full implementation of the AMS guidelines. In six counties, AMS Interagency Committees (CASICs) were partially or fully established. A total of [six hospitals reviewed and updated AMS clinical guidelines](#). Nine laboratories can perform culture and disk diffusion tests. Digital innovations, One Health, directionality, societal goals and inclusiveness were integral to nearly all AMS interventions. Learning, reflexivity and conflict resolution are lacking in the interventions. Among the 5,574 surveyed records, 81% of patients had used at least one antibiotic. The most

commonly prescribed antibiotics for [obstetric or gynecological infections](#) were Ceftriaxone (32%; n=1,793) and Benzyl-penicillin (18%; n=996).

Conclusion:

The study reveals that, most county governments set up AMS interventions using existing structures and resources. Government hospitals and mission hospitals are at different stages of implementation. Moreover, antibiotic prescription rates, especially among young female patients, are high and antibiotic misuse is increasing. Consequently, county governments must incorporate learning and reflexivity into their AMS and address conflicts between practitioners.

Biography

Frank N. Ndakala holds a PhD in Infectious Diseases and an MSc in Medical Parasitology from the University of Nairobi and a Postgraduate Diploma in Translational Medicine from the University of Edinburgh, Scotland. He is an Assistant Director in the State Department of University Education and Research (SDUE&R), Ministry of Education (MoE) in Kenya. Also, he is the current Project Lead and Principal Investigator for Pfizer Quality Improvement project on hospital treatment programmes in Kenya. He has served for over 15 years at Senior Management positions in the public and private sectors. Furthermore, he has previously coordinated research and projects at national, regional and international levels, including collaboration with Science Policy Research Unit (SPRU), University of Sussex, UK, Pfizer Global Medical Grants and Horizon Europe on research and innovation. He has served in the Board of Management of three National Public Institutions and one University Council.

Sero-prevalence of Syphilis, Hepatitis B virus and associated factors among adult people receiving antiretroviral therapy at Batu town in Ethiopia

Girma Mulisa

Addis Ababa University, Ethiopia

Introduction:

Treponema pallidum, *Hepatitis B Viruses* (HBV) and *Human Immuno Virus* (HIV) shares common transmission mechanisms and their co-infection increase the risk of HIV transmission, HIV treatment failure and treatment associated adverse among people receiving Anti-Retroviral Therapy (ART). No documented data on the extent of *Treponema pallidum*, Hepatitis B Viruses and their associated risk factors of infections among people receiving ART at Batu City of Ethiopia.

Objective:

To assess prevalence of Syphilis, HBV and associated factors among adults attending ART service at Batu City.

Methods:

Four hundred two patients on ART were randomly selected from health care facility in Batu town from June 1 to August 30, 2021. Data was collected using structured questionnaire. Five ml whole blood was collected and plasma was separated for detecting *Treponema pallidum* and HBV by an enzyme-linked immune sorbent assay. Data were entered into Epi-Info-7 then exported to SPSS version 21 for cleaning and analysis. Descriptive statistics was used to explore participants' characteristics. The association between the predictors and outcome variables was assessed using logistic regression model.

Results:

The prevalence of Syphilis and HBV among people receiving ART was 11.2% and 16% respectively. Multiple sexual partners (AOR=7.38, 95% CI: 2.85,19.1), non-condom uses (AOR=5.83, 95% CI: 1.04,32.54), were significantly associated with Syphilis and HBV among people receiving ART while drug injection is also the predictor of HBV infection (AOR=7.59, 95% CI: 2.72,21.19).

Conclusion:

The prevalent sero-positivity of Syphilis and HBV among people receiving ART in Batu city highlights the necessity of regular screening for these infections and giving awareness on associated prevention.

Biography

Girma Mulisa is a PhD student at Addis Ababa University and employee of Adama Hospital Medical College at the rank of assistant professor in Medical Microbiology. He is interested and work research on infectious diseases and drug resistance, co-infection and treatment challenge, synergy of infectious disease and chronic disease. He also teach and advancing medical students and muster students in microbiology.

Analysis of the etiological structure and antibiotic resistance of infectious agents isolated from hospital patients

Mahira Guliyeva^{1*} and Nigar Mutalibova²

¹Khazar University, Azerbaijan

²Azerbaijan State Advanced Training Institute for Doctors A. Aliyev, Azerbaijan

Background:

The inappropriate use of antibiotics may lead to emergence of antibiotic-resistant bacterial strains and is a serious global health problem. The aim of our study was to examine the etiological structure of several bacterial infections and their resistance to antibiotics.

Methods:

We analyzed samples from 51 hospital inpatients at Bonada Hospital with isolated bacterial pathogens, using an automated microbiological analyzer Vitek2 and mass spectrometry microbiological identification system Vitek MS. The sensitivity of bacteria to antibiotics was studied by the disk diffusion method.

Results:

Among 51 patients, we identified that 13 (25.5%) patients had *Escherichia coli*, 12 (23.5%) had *Klebsiella pneumoniae*, eight (15.7%) patients had *Pseudomonas aeruginosa*, four (7.8%) had *Acinetobacter baumannii*, four (7.8%) had *Enterococcus faecalis*, three (5.9%) had *Staphylococcus aureus*, three (5.9%) had *Citrobacter freundii*, two (3.9%) had *Enterobacter cloacae*, one (1.9%) had *Klebsiella oxitoca* and one (1.9%) had *Burkholderia vietnamiensis*. Two types of enterobacteria, *Klebsiella pneumoniae* and *Escherichia coli* were surprisingly resistant to fluoroquinolones (ciprofloxacin and norfloxacin) while susceptible to amikacin and gentamicin drugs of the second and third generations of aminoglycosides. Meropenem, which belongs to the class of

carbapenems, had a high bactericidal effect on three enterobacteria (*Klebsiella pneumoniae*, *Escherichia coli*, *Citrobacter freundii*) and two non-fermenting bacteria (*Acinetobacter baumannii*, *Pseudomonas aeruginosa*). The bactericidal effect of colistin on all gram-negative bacteria was found.

Conclusion:

Both examined gram-negative and gram-positive bacteria had strong hypersensitivity to Trimethoprim-Sulfamethoxazole. Considering that amoxicillin/clavulanic acid is often a drug of choice to treat the upper respiratory tract infections, resistance to *Klebsiella pneumoniae* and *Staphylococcus aureus* to amoxicillin/clavulanic acid found in our study is a matter of concern and suggests that further research is needed. The issue of varying degrees of susceptibility of bacteria to antibiotics highlights the need for regular monitoring of the etiological spectrum of pathogens and their susceptibility to antibiotics.

Biography

Mahira Guliyeva is experienced Microbiologist with a demonstrated history of working in the hospital & health care industry. Now she is working in JCI certificated Liv Bona Dea International Hospital in Baku. She is a strong research professional graduated from Medical University Azerbaijan. She knows English, Russian, Turkish fluently, German B1 level. She is member of Azerbaijan Society of Infection Diseases and Clinic Microbiology.

March 01-02, 2023

Webinar

Journal of Infectious Diseases & Therapy

ISSN: 2332-0877

Knowledge, attitudes and practices of the population on the correct wearing of masks against COVID-19 in the Commune of Kenya, city of Lubumbashi, DR Congo in 2021

Mbutshu Lukuke Hendrick* and Malonga Kaj Francoise*University of Lubumbashi, Democratic Republic of Congo***Context:**

The Corona Virus Disease 2019 (COVID-19) pandemic is taking a heavy toll on individuals, families, communities and societies around the world. The objectives assigned in this study were to determine the knowledge, attitudes and practices of the population on the correct wearing of masks against COVID-19 in Lubumbashi.

Methods:

With a qualitative mixed method and quantitative, to achieve these objectives, we conducted a cross-sectional descriptive study during a period from February 22 to September 30, 2021. Our study population consisted of the habitats of the Kenya Commune. For the collection of data we used the phenomenological approach of a workforce of 32 respondents whose structure is based on the direct analysis of the experience lived by a subject and a sample of 422 inhabitants for the free interview using a self-administered questionnaire.

Results:

For the quantitative part, on this sample of 422 inhabitants, we found that 100% knew the signs of COVID-19, the main sources of information were television with 78.9% and radio 44.7%. The signs of the disease most listed by the respondents were: dry cough (100%), intense fever (100%), difficulty breathing (57.5%) and asthenia (19.2%). Nearly 78.9% of respondents had a hand-washing device in their households, the barrier gestures against COVID-19 listed by respondents were: wearing a mask (100%), social distancing (76.3%), hydro-alcoholic friction (62.0%), hand washing with soap (24.4%) and confinement (8.0%) and not fucking each other (5.2%).

The circumstances where they could wear the mask are: in public transport, at the shopping center, in pedestrian traffic jams, at school or university and at the service. The observation revealed that less than 10% wore the mask correctly and 21.1% of the respondents tolerated wearing the mask all day long, for reasons such as: respiratory discomfort (74.9%). Only 38.4%

of respondents considered COVID-19 to be a real disease, the others thought that a demonic disease, God's punishment for humans and an imaginary disease. 22.7% of respondents wanted to be vaccinated against COVID-19 and the reasons given against vaccination were: fear of a deadly vaccine (43.9%), lack of confidence in vaccines produced in haste (56.1%).

For the qualitative part, after obtaining the saturation, the results were summarized on these answers: Mrs. G. I think it is a disease manufactured to destroy the economy of the poorest of which I do not even trust to these vaccines. Mr. M I have never seen a case of death from this disease from which I do not believe in all barrier measures, particularly the wearing of a mask which suffocates. Mr. W. The disease exists, but the problem is the magnitude does not correspond to the reality on the ground.

Conclusion:

The correct wearing of masks remains a concern in the city of Lubumbashi, particularly in the commune of Kenya, despite the efforts of the political-administrative and health authorities, many are those who continue to persist in respecting barrier measures, in particular the correct wearing of masks. The results of our study show that the population does not apply the correct wearing of masks. Health authorities should find lasting solutions to this situation.

Keywords: Knowledge, Attitude and practices, wearing a mask, COVID-19.

Biography

Mbutshu Lukuke Hendrick completed his doctorate at the age of 47 years at Lubumbashi University, where he is a Professor of hospital hygiene at the Public Health School of the same university. He has published more than 25 articles in Pan African, European and American journals.

Received: 11/22/2022 | Accepted: 11/24/2022 | Published: 03/14/2023