Since January 2020 Elsevier has created a COVID-19 resource centre with free information in English and Mandarin on the novel coronavirus COVID-19. The COVID-19 resource centre is hosted on Elsevier Connect, the company's public news and information website.

even in patients undergoing primary infection or viral reactivation (p¿½>¿½0.05, Fisher exact test).

Conclusion: In adults undergoing EBV primary infection with symptoms, high viral load together with latency III pattern and lytic antigen expression was described. In contrast, in our primary infected patients the lack of symptoms could be related to a low viral inoculum, together with the absence of latency III and lytic viral antigens. Furthermore, viral characteristics in the primary infected group are similar to patients with viral reactivation and healthy carriers. In addition, lower viral load in older patients may reflect a recruitment of immune cells to successfully control EBV infection at the site of viral entry and reactivation, perhaps as a consequence of maturity of the immune system.

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UMP. 774

Depression as acute and chronic manifestation of dengue and chikungunya: A systematic review and meta-analysis

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Background: Recent studies have provided information regard mental impairment in chronic chikungunya patients (CHIKV) when assessed quality of life (QoL) (e.g. SF-36). However, occurrence of depression during acute phase, as well on dengue (DENV) have been neglected, at systematic reviews and meta-analyses.

Methods & Materials: A systematic review was conducted (PubMed/Scopus/Web of Science) up to November 1, 2017. The search strategy was "mental" or "psychiatric" or "depression" plus "AND" followed by "chikungunya" and "dengue". Languages: English and Spanish. Observational studies that assessed at least self-reported depression (or using questionnaires) in patients with acute or chronic chikungunya or dengue, were included. Comprehensive Meta-Analysis 3.3.070® licensed, was used for this meta-analysis.

Results: Our literature search yielded 241 citations. The pooled prevalence of depression associated to CHIKV/DENV in 8 selected studies among 1,649 patients was 39.3% (95%CI 36.6-42.1; $\tau^2 = 1.471$; $I^2 = 97.8$; $p < 0.001$). When considering just CHIK studies (n = 6), among 911 patients, estimate was 25.1%(95%CI 22.0-28.5; $\tau^2 = 1.338$; $I^2 = 96.2$; $p < 0.001$), while for DENV studies (n = 2) with 738 patients, estimate was 52.6%(95%CI 48.7-56.4; $\tau^2 = 1.664$; $I^2 = 98.9$; $p < 0.001$). For studies at acute phase (n = 4 [2 DENV, 2 CHIKV]), with 798 patients, estimate was 51.3% (95%CI 47.5-55.1; $\tau^2 = 1.730$; $I^2 = 97.2$; $p < 0.001$), whilst at chronic phase (n = 4, all CHIKV), with 851 patients, was 25.5% (95%CI 22.3-28.9; $\tau^2 = 1.378$; $I^2 = 97.6$; $p < 0.001$). Globally, the funnel plot and the Egger's regression suggested bias publication (-7.46; p = 0.06) (confirmed with Duval and Tweedie's trim and fill).

Conclusion: According to our results in the most conservative scenario, approximately one third of patients at any stage of DENV or CHIKV would report depression, being higher during acute phase and for dengue (around half of patients), in comparison to chronic chikungunya (a fifth). It is important to highlight that the findings suggest a clear need to increase the number of studies about depression and other mental disorders in these and other arboviral diseases, including also Zika, as well to use standardized and validate questionnaires, such as the Zung Self-Rating Depression Scale (SDS), Hamilton Depression Rating Scale (HDRS) and Beck Depression Inventory (BDI), among others, given consequently the implications for diagnosis and therapeutics.

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UMP. 775

Etiology of acute respiratory infections in hospitalized children in Novosibirsk, Russia, in 2013–2017

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Background: Acute respiratory infections (ARIs) poses a considerable public health problem because of their worldwide occurrence and ease of transmission. ARIs are one of the leading causes of child and adult morbidity and mortality worldwide.

There are more than 200 respiratory viruses that can cause ARTIs, including influenza A and B viruses, parainfluenza virus, respiratory syncytial virus, adenovirus, human coronaviruses and rhinovirus. In the past decade, new viruses associated with ARIs have been detected.

Methods & Materials: In this study was evaluated the prevalence, seasonality and age distribution of ARIs in hospitalized children in Novosibirsk during 4 epidemic seasons. We collected nasal and throat swabs from children 0–15 years of age presenting within 3 days of onset of illness. Detection of common respiratory viruses, including IFVA, IFVB, PIV 1-4, RSV, HMPV, HCoV-OC43, HCoV-229E, HCoVNL63, HCoV-HKU1, ADV, HRV and HBoV, was performed by using a real-time PCR Kit (Interlabservice, Russia) according to the protocols.

Results: A total of 1560 nasal and throat swab samples were collected from hospitalized children with acute respiratory tract infection. There were 52.8% of males and 47.2% of females, and the patient's ages ranged from 3 months to 15 years. Among 1560 samples, 72.3% were found positive for at least one virus. Viral co-infections were detected in 10.3%. The lowest positive rate was in the age group 7–15 years. No difference in the positive rate was observed between males and females. RSV and IFV were the most frequently detected viruses with high incidence of 23.0% and 22.1%, respectively, among all patients with ARIs. HRV was detected in 15.1%, followed by HMPV, HPIV and HBoV with the detection rates higher than 5.0%. The positivity rates of HCoV and HAdV were lower than 5.0%.

Conclusion: In summary, we performed an epidemiological investigation on respiratory viruses in children with ARIs in Novosibirsk from 2013 to 2017. We found that the prevalence of respiratory viruses decreased with age with the lowest prevalence occurred in children more than 6 year old. IFV and RSV were the dominant respiratory viruses.

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UMP. 776

Daclatasvir and Sofosbuvir with or without Ribavirin for Hepatitis C Virus Genotype 3 infection: results of a real-life cohort

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Background: Patients infected with genotype 3 hepatitis C virus (HCV), especially those with advanced liver disease, are a challenging population in urgent claim for effective therapies. Treatment with daclatasvir (DCV) and sofosbuvir (SOF) with or without ribavirin (RBV) for 12 weeks showed high efficacy in clinical trials, but data from real life studies are needed.

Methods & Materials: We included all patients with genotype 3 chronic HCV infection who initiated treatment with SOF (400 mg daily), DCV (60 mg daily) ± weight-based RBV for 12 weeks at an University hospital from December 2015 through June 2017.We prospectively collected data from medical records using standardized questionnaires and evaluated them using EpiInfo 7.1.2.0. The primary endpoint was sustained virological response at post-treatment week 12 (SVR12).

Results: We included 99 patients, 62 (62.6%) were previously treated with pegylated interferon-α and RBV, 62 (62.62%) had cirrhosis, 29 (29.3%) had advanced fibrosis, 8 (8%) had significant fibrosis, and 82 (82.8%) patients received RBV. Five patients did not enter post-treatment follow-up (1 death due to septic shock, 4 lost follow-up). The overall SRV12 was 87.2% (82 of 94). SVR12 in patients with and without cirrhosis was 84.2% (48 of 57) and 91.9% (34 of 37), respectively. SVR12 in treatment-experienced patients with and without cirrhosis was 86.5% (32 of 37) and 100% (22). SVR12 among patients without cirrhosis that had RBV and those who did not use it was equally 92% (23 of 25 and 11 of 12, respectively). Cirrhotic patients that received RBV had SVR12 of 86.5% (45 of 62) and those who did not take RBV had SVR12 of 60% (3 of 5). There were 11 relapses and 1 virological breakthrough. The most common adverse events (AEs) were anemia, fatigue, and headache. Four (4%) patients discontinued treatment due to AEs.

Conclusion: The all-oral regimen of DCV + SOF ± RBV resulted in high SVR12 after 12 weeks of treatment among genotype 3-infected patients. However, SVR12 was lower in cirrhotic patients, in which the use of RBV may contribute to a better treatment response.

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UMP. 777

Knowledge, Serological Markers and Risk Factors associated with Hepatitis B and C Virus Infection among Kuje Prison Inmates, Federal Capital Territory, Nigeria

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Background: Prisons are known to be high-risk environments for the spread of blood borne and sexually transmitted infections. Compared to the general population, prevalence of Hepatitis B and C virus (HBV/HCV) infections are disproportionately higher among penitentiary institutionalized individuals worldwide. We determined the seroprevalence and risk factors associated with HBV and HCV infection among Kuje prison inmates, Nigeria.

Methods & Materials: A cross-sectional study was conducted in 2016. Inmates who consented were randomly selected and stratified into convicts and awaiting trial stratum. Interviewer administered Questionnaires were used to obtain information on participants socio-demographic characteristics, HBV risk factors, previous HBV test and vaccination history. Blood samples were collected from all participants and analysed for HCV, HBsAg, HBsAb, HBcAb, HBeAg and HBeAb markers using rapid lateral chromatographic immunoassay kit. HBsAg positive samples were confirmed using ELISA. Epi-info version 7.2.0 was used for univariate, bivariate, and multivariate analysis.

Results: 271 inmates (63 convicts and 208 awaiting trial inmates) were recruited for the study. The mean age of the participants was 32.7 SD ± 9 years. Of the 116(42.8%) who had ever heard of HBV infection, 114 (98%) had poor knowledge of the disease. HCV sero-prevalence was found to be 5.9%, (95% CI; 3.4-9.6) and HBV 13.7%, (95% CI; 9.8-18.3). 55.4% (95% CI; 49.2-61.4) of inmates were susceptible to HBV infection, 20.7% (95% CI; 16.0-26.0) had past or resolved HBV infection while 10.3% (95% CI; 7.0-14.6) had acquired natural or artificial HBV Immunity. Factors found to be associated with HBV infection include age group ≤25 (aOR 8.0; 95% CI = 2.9-22.3), ever married (aOR = 4.2, 95% CI = 1.7-10.4) and history of alcohol consumption (aOR = 3.4, 95% CI = 1.3-8.4).

Conclusion: There is poor knowledge and high sero-prevalence of HBV and HCV infection among Kuje inmates. This study demonstrates the need for prison focused health intervention initiatives in Nigeria. We advocated HBV vaccination for all susceptible inmates and treatment for HBV positive inmates to reduce the transmission of HBV infection among inmates.

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