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Poster

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Determinants of fertility differentials in Burundi: Evidence from the 2016-17 Burundi Demographic and Health Survey

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Background: Although fertility control remains a major priority for the Burundian government and most of its partners, few studies on Burundi's fertility determinants are available to guide interventions. To address this gap, our study aims to examine the most factors influencing fertility differentials in Burundi by using the latest Burundi Demographic and Health Survey data.

Methods: using data from the 2016-17 Burundi Demographic and Health Survey, one-way analysis of variance was performed to describe variations in mean number of children ever born across categories of correlate variables. Then univariable and multivariable Poisson regression analyses were carried out to identify the most factors influencing fertility differentials in Burundi.

Results: In our sample, the total number of children ever born ranged from 0 to 15 children by women with a mean number of 2.7 children (±2.8 SD). Factors such as urban residence (aIRR 0.769, 95% CI: 0.739 - 0.782, p = 0.008), increase in the level of education of both women and husbands (aIRRs of 0.718, 95% CI: 0.643 - 0.802, P <0.001 and 0.729, 95% CI: 0.711 - 0.763, p<0.001 respectively), No history of infant mortality experience (aIRR 0.722, 95% IC: 0.710 - 0.734, p<0.001) and increase in age at first marriage or first birth (aIRRs of 0.864, 95% CI: 0.837 - 0.891, P <0.001 and 0.812, 95% CI: 0.781 - 0.845, p<0.001 respectively) are associated with a low fertility rate while factors such as residence especially in Southern region (aIRR 1.129, 95% IC: 1.077 - 1.184, p<0.001), women and husband's agricultural profession (aIRRs of 1.521, 95% CI: 1.429 - 1.568, P <0.001 and 1.294, 95% CI: 1.211 - 1.316, p<0.001 respectively), household poverty (aIRR 1.117, 95% IC: 1.080 - 1.155, p<0.001), lack of knowledge of any contraceptive methods (aIRR 1.502, 95% IC: 1.494 - 1.564, p<0.001) and Non-use of modern contraceptive methods (aIRR 1.583, 95% IC: 1.562 -1.607, p<0.001) are associated with a high fertility rate.

Conclusion: The results of this study suggest that actions aimed at promoting education in general especially female education, improving child survival, women's socioeconomic status, agriculture mechanization and increasing number and scope of family planning services, could help reduce Burundi fertility rate.

Biography

Jean Claude NIBARUTA, currently a Doctor(Ph.D) in Public Health in Higher Institute of Health Sciences -Hassan First University of Settat(Morocco). He has completed BSC in Anesthesia and Intensive care, BSC in Public Health, MPH and PhD Student in public health, Maternal and child health promotion, Center for Doctoral Studies, Laboratory of Health Sciences and Technologies, Higher Institute of Health Sciences Hassan First University of Settat / Morocco.

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Case-control study of factors associated with low birth weight at the Kingasani Hospital Center, Kinshasa (Democratic Republic of Congo)

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Introduction: Low birth weight is considered one of the most important indicators for the survivability of a newborn and for a higher risk of morbidity, perinatal mortality and infant mortality. The purpose of this study was to analyze factors associated with low birth weight at the Kingasani Hospital in Kinshasa.

Methods: We conducted a retrospective case-control study. The data about the information of the parturients and their children born from 1st January to 31st December 2016 were collected from the maternity register of the Kingasani Hospital Center. In this study 458 cases (less than 2500 grams) were compared to 458 controls (2500-4000 grams). Multivariate analysis was carried out using binary logistic regression in order to identify factors associated with low birth weight.

Results: In 2016, 3451 live births were registered and the rate of underweight was estimated to 13.27%. Bivariate analysis showed that parity, the term of pregnancy, pregnancy type and infant's sex were variables significantly associated with low birth weight. After adjusting for variables integrated in multivariate analysis, parity, the term of pregnancy and pregnancy type were still significantly associated with low birth weight.

Conclusion: Given these results, new studies of all the parameters involved in the occurrence of low birth weight are necessary in order to monitor the regular evolution of this issue and its associated factors.

Biography

Jean Claude KAKA TSHINZOBE, Teacher (Community Health) Higher Institute of Medical Techniques of Kinshasa, Community Health Section, Kinshasa, Democratic Republic of Congo. He works as a Project Monitoring and Evaluation Manager in 2013 and Consultant in charge of the organization of the survey on the offer of adult literacy in Kinshasa (Faculty of Educational Sciences and Psychology) in 2012. He is the Embassy of the democratic republic of Congo in Italy and Administrative secretary and deputy manager of the cooperation program between the Konrad Adenauer Foundation and the Catholic University of Congo (Economy and Development).

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Hydatid cyst of the uterus: A rare localization

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We here report the case of B.J, a 83-year-old patient with no previous history, presenting with intermittent abdominal pain evolving over the last few months. Physical examination revealed the presence of a firm, subumbilical mass that was tender to palpation. Ultrasound showed two multivesicular hydatid cysts (Gharbi's classification type 3) located in segments III and IV of the liver and multilocular right latero-uterine cyst. Serologic test was positive. Tumor markers were negative. Abdomino-pelvic CT scan showed two adjacent multivesicular hydatid cysts in the left side of the liver measuring 60x40 mm (A) and a multivesicular right latero-uterine pelvic hydatid cyst measuring 110x80 mm pushing the bladder forward and the uterus to the left (B). Surgical exploration revealed the presence of left hepatic cysts (C) and a huge hydatid cyst arising from the right edge of the uterine body (D). Resection of the salient domes was performed. All the precautionary measures were implemented to avoid possible peritoneal dissemination. Anatomopathological examination confirmed the diagnosis of hydatid cysts. One-year CT scan did not show any local or peritoneal recurrence.

Biography

Issam Loukil General Surgery Service Tataouine, Tunisia. He is a young surgeon and researcher in digestive and cancer surgery in a hospital center in southern Tunisia.

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Fournier´s gangrene: Its management remains a challenge

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Fournier's gangrene (FG) is a rapidly progressive necrotizing bacterial dermo-hypodermitis of the perineum and external genitalia. It represents a real medical and surgical emergency requiring multidisciplinary care. Our study was based on the retrospective analysis of 18 cases of FG, collected in the Department of General and Visceral Surgery of Fattouma Bourguiba University Hospital in Monastir over an 18- year period extending from January 2000 to December 2018.Our series included 18 cases of FG collected over an 18-year period, an annual incidence of one case per year. The average age of our patients was 58 years (36 to 77). The male prevalence was clear. Diabetes and old age were found to be the major risk factors. The treatment was based on an aggressive surgical debridement remains to be the cornerstone of therapy and is commonly preceded by patient preparation for the surgical act by perioperative resuscitation and broad- spectrum antibiotic therapy, possibly accompanied by hyperbaric oxygen therapy (HBOT).The VAC (Vaccum Assisted Closure) therapy is also used, which is a non-invasive system that promotes open wound healing. Healing techniques can be once the septic risk is controlled. Dressings topical treatments, such as fatty substances or calcium alginate, in addition to skin grafts, musculo-neurotic or musculo-cutaneous cover flaps can be used. During the follow-up period, no reccurrence occurred in 14 out of the 18 cases (2 patients were lost to follow-up and 2 patients died). A colostomy was closed in 10 out of 11 cases with simple follow-ups. Restorative surgery (partial thickness skin graft) at the perineal level was performed in only one case. Despite the better understanding of its etiopathogenesis, the advent of targeted antibiotic therapy, the establishment of a better codification of surgical procedures, the contribution of hyperbaric oxygenation and reconstruction techniques, mortality rates are still high and FG remains a real health threat, thus constituting a real medical and surgical emergency.

Biography

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A rare case of primary splenic lymphoma

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A 64-year-old man, with no medical history, presented with an inflammatory syndrome without bacteriological or serological anomaly. Abdominal ultrasound finds a mediosplenic mass of 5cm, hypoechoic heterogeneous without Doppler signals. Computed tomography (CT) scan describes hypodense mass slightly enhanced at the periphery, measuring 57x60x65mm and deforming the splenic hilum, without splenomegaly nor lymphnode (A). Magnetic resonance imaging found a polylobed lesion in T1-T2 isosignal, diffusion hypersignal, crossed by fibrous spans and delimited by a thin wall in T2 hypointense taking the contrast (B, C). The fine needle biopsy was not performed and the treatment decision was to perform a splenectomy. Macroscopic examination described intra splenic tumor polycyclic whitish, crossed by fibrous septa in accordance with imaging (D). Anatomic-pathologic section concluded to a large B cell primary splenic lymphoma. The one-year CT scan did not show any recurrence.

Biography

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Solitary fibrous tumor of the prostate: A case report

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INTRODUCTION: Solitary fibrous tumors (SFTs) are rare tumor described for the first time in the pleura, urogenital localizations are exceptional, the diagnosis is mainly made by immunohistochemistry.

OBSERVATION: We report here the case of a 77 year old patient who consulted us for pollakiuria with dysuria without hematuria evolving for two months.

The rectal examination revealed a hard left prostatic mass. Biological tests were normal.

A radiological workup consisting of an ultrasound and an abdominopelvic CT scan revealed a large heterogeneous left pelvic mass, pushing the bladder forward and the rectum backward. The MRI performed to better characterize this lesion revealed a mass developed at the left seminal vesicle in T1 hypo signal, in T2 intermediate signal with a restriction in diffusion imaging, enhanced after injection of Gadolinium.

The diagnosis of solitary fibrous tumor was made after trans rectal biopsy. Immunohistochemistry showed that the cells strongly expressed CD34 and anti-Bcl2 and were stained positive for CD 99 expression, but negative for progesterone receptors: Progesterone (PR), smooth muscle actin (AML), anti-pancytokeratin(AE1/AE3), PS100 and anti-CD117 thus ruling out a primary prostate stromal tumor, a carcinomatous process, a peripheral sheath nerve tumor and a gastrointestinal stromal tumor.

The patient underwent surgery and benefited from a radical prostatectomy with lymph node dissection.

Microscopic study revealed a prostatic parenchyma with a mesenchymal proliferation well circumscribed by a conjunctive capsule with healthy surgical margins with an immunohistochemical profile of a solitary fibrous tumor (CD34, Bcl2, CD99 positive).

Conclusion: Solitary fibrous tumors are most often located in the pleura,

Prostatic localization is rare, MRI is much more sensitive than CT and ultrasound to delineate the origin of the tumor, the presence of hypointense foci in T1 and T2 is very suggestive. Anatomopathological examination, completed by an immunohistochemical study, allows confirmation of the diagnosis.

Biography

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Fractures of the pelvis causing a sore of the vagina

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Fractures of the pelvis most often occur after a violent trauma. Despite this high-velocity context, these lesions are rarely associated with vaginal wounds and data on the course are scarce. The objective of our study was to describe the anatomoclinical lesions, the treatment and the evolution of these lesions in view of the great infectious risk. We have observed five cases of vaginal sores during pelvic fracture in women over the past ten years. The patients had a mean age of 23.6 years. The main reason was accidents on the public highway. Two patients presented with linear wounds and three presented with decaying wounds. Vaginal sutures were performed in all patients. After a mean follow-up of two years, the evolution was favorable with healing of the vaginal wound without infection and the bone. Genital and obstetrical activities were not compromised. These lesions usually go unnoticed. It will be necessary to think about it in front of any trauma of the pelvis in the woman.

Biography

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Knowledge, attitude and control practices of sickle cell diseases among senior secondary students in osun state, nigeria

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Introduction: Sickle cell disease is one of the greatest public health problems of this age. This study was conducted to assess the knowledge, attitude and control practices on Sickle Cell Disease among selected secondary school students in Osun State, Nigeria.

Method: A descriptive cross-sectional study involved 420 Secondary School Students within Osogbo metropolis selected by a multistage stratified sampling technique, using self-administered structured questionnaire. Data were collected using pre-tested self-administered semi structured questionnaire. Data were analyzed using SPSS version 20.

Results: A total of 420 students were interviewed, modal age range 15-20 years. There were more females (55%) than males (45%). Majority of them were Christians (57.1%). A larger percentage of the respondents were aware of SCD (58.5%). However, comprehensive knowledge as regards the various genotypes related to SCD, tests to be done for genotype screening among the respondents is low. One third of the respondents had positive attitude towards SCD (65%) and nearly one half (48%) of the respondents had bad control practices.

Conclusion: Findings in this study shows a high level of general awareness on SCD, even though comprehensive knowledge as regards the various genotype related to SCD, tests to be done for genotype screening among others is low. The need to improve on their attitude and practice towards the disease is highly recommended because having a good knowledge is not as important as applying the knowledge in a way to stop the spread of the disease.

Biography

Temidayo Akinreni has over 5 years of quality experience in Public Health research. He is currently the Product and Research Associate at Co-Creation Hub, Nigeria after he served as the Data Manager at Epidemiology and Surveillance Unit, Ministry of Health, Ondo state, Nigeria. He has a rich blend of educational background in research and public health programming, alongside that, he is a Professional Trainer in qualitative data analysis by ATLAS.ti network in Berlin, Germany. His research interest includes genetic disorder, infectious diseases, health disparity and violence.

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Proposal of Epidemiological Cutoff Values for Tigecycline 15 µg Disk Applicable to Acinetobacter species

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Tigecycline is an antimicrobial agent restrictively used in hospitals for refractory infections. Resistance determinants to this antimicrobial agent has been described in several Enterobacterials, yet no inhibition zone-based is available to detect Acinetobacter populations. In this study, we propose disk diffusion inhibition zone of Acinetobacter species for tigecycline.

The susceptibility to tigecycline was evaluated by disk diffusion (DD) of Acinetobacter spp. comprising A. baumannii (n = 46) and A. nosocomialis (n = 72) collections from different geographic provinces of Iran. On the other hand, minimum inhibitory concentration of isolates was done by broth micro-dilution method and resistance/susceptible definition was interpreted by Food and Drug Administration criteria. Zone diameter breakpoints were calibrated to the FDA Clinical MIC Breakpoints, that the MIC ≤2 as susceptible and ≥4 as resistant.

The correlation between MICs and inhibition zones is better for A. nosocomialis than for A. baumannii. There was an area with poor separation for A. baumannii (17-21 mm), meanwhile, for A. nosocomialis 19 mm and 20 mm were defined as susceptible and resistant, respectively.

The proposed breakpoint values for tigecycline may be a valuable tool in antimicrobial resistance monitoring to identify antimicrobial resistance, specifically performing MIC for this antibacterial agent is demanding and multifactor error driven.

Biography

Himen Salimizand has completed his MSc. from Pasteur Institute of Iran and currently works in Kurdistan University of Medical Sciences as researcher. He has published more than 25 papers in reputed journals.

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Recrudescence of yellow fever in Chad: Case report of the last confirmed case on April 2020 in the health district of Lai-Chad

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Introduction: Yellow fever (YF) is a viral haemorrhagic fever, caused by the amaril virus, transmitted by mosquitoes of the genus Aedes. In Chad, in 2013 two cases of yellow fever were identified and confirmed under the national yellow fever surveillance programme during an outbreak of the disease in the Darfur border region of Sudan. Since then the country has recorded 4 confirmed cases, including one this year.

Clinical case: Mr K.M, 57 years old, without medical or surgical history and his vaccination status is unknown. He was consulted on 21 April 2020 with fever, jaundice, epistaxis of medium to low severity on 14 and 17 April 2020 and painful hepatomegaly. In the month before the onset of his illness, according to the family, he had not made any trips outside the city of Lai. His last trip was in November 2019.

The clinical examination during his hospitalisation at Bebaloum hospital revealed conjunctival jaundice, a painful hepatomegaly with a hepatic arrow of 22 cm.

In view of these signs, a notification of febrile jaundice was made to the system and the sample taken that same day revealed the amaril virus post mortem by RT-PCR; the search for trophozoids and hepatitis, particularly B & C, was also negative. The search for other arboviroses was not carried out. The blood count showed a hyperleukocytosis of 27.103/mm³ with a predominance of neutrophils of 18.103/mm³. Blood cultures were not taken.

During his hospitalisation he had received medical treatment with amoxicillin 3g/24h, Metronidazole 1.5g/24h and rehydration 3l/24h. The active search for cases of febrile jaundice in the community was carried out during the immunisation coverage survey and consisted of searching the households visited for subjects presenting with fever and jaundice and/or accompanied by bleeding. Five suspected cases were detected and sampled. The clinical evolution was marked by persistent bleeding and a disturbance of consciousness with a SOFA Q score of 3. It is in this context that death occurred after 5 days of hospitalisation.

Conclusion: This confirmed case of yellow fever is not an isolated case in Chad. Thus, the confirmation of yellow fever in this district, the low level of vaccination coverage, the reality of the virus' circulation and the presence of the vector in the country should alert us to a real threat of yellow fever re-emerging in Chad. The immediate recommendations focused on mass vaccination of the province's population and strengthening the active epidemiological surveillance system throughout the country.

Biography

I am a specialist in infectious and tropical diseases and am currently studying for a Master's degree in epidemiology and biostatistics. I am an attending physician and university assistant at the Good Samaritan Hospital N'djamena-Chad and attached to the department of Disease Control and Health Promotion at the Ministry of Public Health and National Solidarity of Chad. I am particularly interested in emerging and re-emerging pathologies, where I carry out missions of investigation and medical management of cases:

- COVID-19 in Chad;
- Yellow fever in southern Chad;
- Chikungunya in Eastern Chad
- Influenza A H1N1/2009 in Eastern Chad.

I am a member of several learned societies (IAS, SAPI, scientific committee of Chad).

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Bilateral carotid ischemia by probable strangulation in an infant: About a case and review of the literature

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Introduction: Strangling an infant is one of the most common methods of murder. Although rare, it remains a serious condition because of its complications.

Case Report: We report a 3-month-old infant, probably strangled, who was admitted to Fann's emergency service with altered consciousness 10 hours prior to admission. Computed tomography (CT) scan showed a range of hypodensity in the carotid territories. The victim died later of secondary complications

Conclusion: Infant strangulation injuries are often fatal. Management must also include forensic aspects.

Keywords: Carotid ischemia, Complications, Infant, Strangulation.

Biography

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Stringent drug regulation: Regulation and control of the importation, exportation, manufacture, advertisement, distribution, sale and the use of medicines, cosmetics, medical devices and chemicals

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The strategy of price liberalisation and privatisation had been implemented in Sudan over the last decade and has had a positive result on government deficit. The investment law approved recently has good statements and rules on the above strategy in particular to pharmacy regulations. Under the pressure of the new privatisation policy, the government introduced radical changes in the pharmacy regulations. To improve the effectiveness of the public pharmacy, resources should be switched towards areas of need, reducing inequalities and promoting better health conditions. Medicines are financed either through cost sharing or full private. The role of the private services is significant. A review of reform of financing medicines in Sudan is given in this article. Also, it highlights the current drug supply system in the public sector, which is currently responsibility of the Central Medical Supplies Public Corporation (CMS). In Sudan, the researchers did not identify any rigorous evaluations or quantitative studies about the impact of drug regulations on the quality of medicines and how to protect public health against counterfeit or low quality medicines, although it is practically possible. However, the regulations must be continually evaluated to ensure the public health is protected against by marketing high quality medicines rather than commercial interests and the drug companies are held accountable for their conducts.

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Epitope Specificity of Antibodies from Chronic Patients and Self Resolvers of HCV Infection

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Hepatitis C virus (HCV) infections occur in approximately 170 million people, respectively in the world accounting for an immense economic burden. An effective vaccine against HCV remains to be developed. In recent years, several direct acting antiviral drugs have been approved to treat HCV infections, which can clear the virus. However, their effectiveness to lower the global disease burden is limited by their cost ineffectiveness, unavailability to low-income populations, associated side effects and emergence of drug resistant viral variants.

HCV envelope glycoprotein, E2 is the primary target for immune recognition. The recombinant E2 protein-based vaccines have not been successful possibly due to a highly glycosylated nature of E2 and the presence of highly variable regions that cover the more conserved parts of the protein. The E2 protein also incorporates few highly sequentially conserved regions that constitute receptor-binding site of the virus as this protein mediates binding of the virus to its receptors. In chronically infected patients, antibodies targeting some of these conserved epitopes are produced that can neutralize a broad range of viral variants. Some of these antibodies recognize linear amino acid sequences, called linear epitopes despite they adopt specific structural and conformational features when recognized by the antibody.

Around 25% of the HCV infected patients can clear the virus without any treatment. Chronic patients (CP) trigger a robust humoral immune response against multiple epitopes. In self-resolved(SR) individuals the immune response is mounted in a directed manner. Specific epitopes are targeted to trigger immune response. In most of the cases, this reactivity is primarily for the epitope corresponding to the E2 region spanning amino acid 434-446 (the 434 epitope). The overall ED50 (effective dilution with 50% neutralization) values of the CP sera is much higher as compared to the SR sera suggesting much higher titer of total neutralizing antibodies in the CP sera. Theneutralizing activity of many of the SR sera was primarily due to the presence of 434 epitope specific antibodies. Antibodies specific for the 434 epitope play a role in spontaneous viral clearance.

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