Non communicable diseases and infections refuse to go away despite current knowledge and scientific advances.

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It is a pleasure to welcome you to this first issue of African Health Sciences for 2014. We bring you papers on non-communicable diseases, infections, herbal medicine, reproductive health and medical education. The paper by Adisa and Fakeye, introduces us to an interesting component of patient management in type 2 diabetes, that is, adherence to the medication. More than 75% of the patients were not aware of the indication for the prescribed medicine. Possible barriers to non-adherence included lack of knowledge, poor attitude, high cost, confusing dose of medicine, and premature discontinuation due to side effects. Saudi authors have studied the ‘impact of mild versus moderate intensity aerobic walking exercise training on markers of bone metabolism and hand grip strength in moderate hemophilia patients’. On the other hand, Ugandan authors describe histopathological types of cancer of the esophagus, while Chinese authors report on the anti-human gastric cancer effect of astragalosides.

Quality of life of patients with cancer has become a critical issue in non-communicable disease management. Chinese workers studied the quality of life in rectal cancer patients with colostomy. Keeping with Chinese scientists, Chao Ou et al report the effect of biloba extract on Cox-2 and GST-Pi in rats with hepatocellular carcinoma risk. They conclude that ‘Egb can regulate the expression of GST-Pi, but it can’t take an effect on the Cox-2 expression in the liver of HCC risk rats.’ Wang reports on the symptom clusters and quality of life in Chinese patients with lung cancer undergoing chemotherapy, while Nigerian dentists have an interesting paper on maxillofacial tumors and tumor-like lesions. Most of the tumours were benign and late presentation remains a critical issue.

The next two papers are on mundane subjects vis: removal of metallic objects from tissues and pterygium recurrence after surgery. We have emphasized this because foreign bodies and pterygium are quite common, especially in rural Africa. Cameroonian workers report on ‘dentofacial injuries in commercial motorcycle accidents’ and cost implication of care, while Feng describes the relationship between the morphology of A-1 segment of anterior cerebral artery and anterior communicating artery aneurysms. On the other hand Chen and others have studied the treatment of ruptured cerebellar artery aneurysms. We conclude this section with a seminal paper by Talay on the value of mean platelet volume in the diagnosis of acute pulmonary embolism.

We bring you very interesting papers on malaria and infections among pregnant women. Sezi discusses the use of bed nets and indoor house spraying in the control of malaria and argues that bed nets and indoor spraying have been capitulated into “a phenomenon of diminishing returns.” Nigerian authors report that herbal medicine, together with artemisate, are effective against Plasmodium berghei malaria. These two papers are important because of the challenge of rapid emergence of resistance of mosquitoes to chemicals used for spraying and malaria parasite resistance to medications used for prevention and treatment.

Abate in Ethiopia has studied syphilis among pregnant women and found that the prevalence was highest in the 21-25 age group and that students had the highest risk. The authors call for emphasis on ‘education to young people on STI risk behavioral change and partner follow up and notification for exposure to syphils and treatment.’ Hitherto, the burden of CMV amongst pregnant women has remained largely unknown. Nigerian workers found that 91% of pregnant women had evidence of CMV infection. Although the HIV status was not mentioned, it is important to regularly screen pregnant women for CMV, especially those who are HIV infected. While measles has been largely eliminated from sub-Saharan Africa, occasional epidemics occur. Kuti et al have studied the effect of supplemental measles immunization on cases of measles admitted at the Wesley guild hospital, Ilesa, Nigeria. They found that there was a remarkable reduction in the prevalence of measles cases after the introduction of supplemental immunization activities (SIAs). Zinc is a very important micro-nutrient, especially amongst children where it is involved in boosting immunity against infection. Nigerian workers report that 98 versus 64% of the children with pneumonia and without had low zinc levels.

Tanzanian workers studied the effectiveness of counseling at primary health facilities specifically looking at the level of knowledge of antenatal attendee and their attitude on Prevention of Mother to Child Transmission of HIV in primary health facilities in Dar es salaam, Tanzania.22 Peltzer describes the prevalence and factors associated with tuberculosis treatment outcome among hazardous or harmful alcohol users in public primary health care in South Africa23, while Cameroonian authors report activities of selected medicinal plants against multi-drug resistant Gram-negative bacteria.24

Chinese researchers assess the ‘in vitro evidence of baicalin’s inhibition of the metabolism of zidovudine,’25 while Nigerian workers report the haematological, hepatic and renal functions of petroleum tanker drivers in Lagos,26 Nigeria. In vitro evidence for endocrine-disrupting chemical (EDC)’s inhibition of drug metabolism27, and correlation between the cystathionine-γ-lyase (CES) and the severity of peptic ulcer disease28 are two key physiology/biochemistry papers with potential practice impact. Turkish authors review locomotor differences in Mongolian gerbils with the effects of midazolam administration in the form of eye drops29 while a review of the chemistry and pharmacology of 7-methyljugulone30 and the influence of bile acids homeostasis by cryptotanshinone-containing herbs31 completes this section.

June Bardy32 has written for us a beautiful piece on sponsorship and gifts from formula companies while Karatas has written for us on the evaluation of chromosomal abnormalities and common trombophilic mutations in cases with recurrent miscarriage;33 while Aliku34 presents a a case of anomalous origin of the left coronary artery presenting with acute myocardial infarction and cardiovascular collapse. How medical education can contribute towards the reduction of maternal mortality in Angola35, burnout and psychological distress among nurses36 in a Nigerian tertiary health institution are seminal papers needing our attention. The next set of papers concern women and children.37,38 We conclude this series with two submissions on the importance of the mean platelet volume in the diagnosis of supraventricular tachycardia,39 and the relationship between RDW levels and atrial fibrillation in hypertensive patient.40

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