

Infections, reproductive health, non - communicable diseases and health systems dominate articles in this June issue of African Health Sciences.

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Infections: Ugandan researchers report on the burden, and factors contributing to peri-portal fibrosis in HIV-infected patients in a bilharzia endemic area in Uganda¹. They report a very high prevalence of *S. mansoni* and periportal fibrosis, especially among the not so young. Still with HIV, Nigerian authors² share with us their findings on the effect of vitamins A and C supplementation on oxidative stress in HIV and HIV-TB co-infection in Lagos, while their country folk muse over opportunistic infections among patients with HIV^{3,4}. A study on risk factors for superficial fungal infections in school children is of interest to parents and those concerned with schools, adolescents and public health⁵. Researchers from South Africa refresh us with findings of their study on the effect of smoking on acute phase reactants, stress hormone responses and vitamin C in pulmonary tuberculosis. Very relevant information as countries, communities and individuals struggle with the dangers of smoking.⁶

The emergence of anti-microbial resistance has reached epidemic proportions, with its obvious threat to lives of millions worldwide. We bring you work from Tunisia on dissemination and genetic support of broad-spectrum beta-lactam-resistant *Escherichia coli* strain isolated from two hospitals. A must read.⁷ A similar article by Alabi and colleagues⁸ on molecular screening of antibiotic-resistant determinants among multidrug-resistant clinical isolates of *Proteus mirabilis* from Southwest Nigeria also makes interesting reading.

We conclude this infectious diseases section with two interesting papers: osteopontin as a marker for response to pegylated interferon Alpha-2b treatment in chronic HCV Saudi patients⁹, and a VAR2CSA: CSP conjugate malaria vaccine capable of inducing dual specificity antibody responses¹⁰.

Reproductive health: Now our launch into reproductive health issues. From Iran we have a very interesting article on sexual health education among engaged couples¹¹. The authors identified predominant themes: socio-cultural changes; social pathologies; limited sexual knowledge; challenges in sexual health services provision; individual and social consequences.

Articles from Nigeria¹² and Malawi¹³ shed some light on the determinants of universal access to antenatal and natal health services. From the Gambia, we have a study on the uptake of long-acting reversible contraceptive devices with Depo Provera, and implants as the most commonly used¹⁴. We conclude this section with a controversial but disturbing article¹⁵ on 'evidence for decreasing sperm count in African population from 1965 to 2015.'

Non communicable diseases and conditions: Now over to non-communicable diseases. South African scientists¹⁶ report on allostatic load and heart rate variability as health risk indicators while from Turkey, we have a report on sleep disorders among older adults.¹⁷

There is a dearth of data on mineral and bone disorders in patients with chronic kidney disease in sub-Saharan Africa. Bala and colleagues report that secondary hyperparathyroidism and 25-OH vitamin D deficiency were common in haemodialysis patients; and that hypocalcaemia and hyperphosphataemia were strong predictors of secondary hyperparathyroidism.¹⁸

The rest of the NCD articles are on: changes in mediators of inflammation and pro-thrombosis after 12 months of dietary modification in adults with metabolic syndrome¹⁹; factors associated with peripheral neuropathy among newly diagnosed Ugandan diabetic patients²⁰ and miR-126 as a novel biomarker for coronary artery disease²¹.

Health systems: From Northern Uganda, we have a report on assessment of hospital-based adult triage at emergency receiving areas. Opiro and colleagues found that very few hospitals had formal adult hospital-based triage, with staff performing subjective “eyeball” judgments²². Most countries in Africa and the Middle East have a mobile telephone penetration of over 70%. United Arab Emirates researchers studied distraction-related road traffic collisions²³. They found that about 40 percent of the distracted drivers involved in road traffic collisions were using mobile phones. The time for action is now!

Ugandan researchers report on the effect of low-dose ketamine on post-operative serum IL-6 production among elective surgical patients²⁴; while Nigerian surgeons share their experience with major limb amputations in a tertiary hospital²⁵. Trauma and diabetic foot gangrene were the commonest reason - with road traffic accidents and subsequent mismanagement by traditional bone setters as the culprits.

Next we have diverse, but interesting articles on: disordered eating attitudes²⁶; lifestyle factors influencing bone health in young women in Saudi Arabia²⁷; and secular trend of the leading causes of death in China. Cancer and cerebrovascular disease accounted for more than 67% of all deaths²⁸. Thinking of mortality: it seems that family type and domestic violence were significant predictors of under-five children mortality in Nigeria²⁹.

In an innovative study of near vision spectacle coverage and barriers to near vision correction among adults in Ghana, Ntodie and others found that there was a 64% unmet need for vision correction in the entire study population, with cost being prohibitive.³⁰

Now into the realm of therapeutics. Two articles tackle the issue of epilepsy. One is on the use of modified Atkins diet for treating epilepsy in low and middle income countries³¹, while the other is on vitamin B6, and homocysteine levels in carbamazepine treated epilepsy patients³². The other therapeutics paper reports on antitumor activity of camptothecin, from endophytic fungus *Fusarium solani* isolated from *Camptotheca acuminata*.³³

Other issues

These include: psychosocial health challenges of the elderly in Nigeria³⁴; responsible conduct of research³⁵; and effects of economic and security challenges on the Nigerian health sector.³⁶

Several case reports and a letter conclude our menu of articles in this issue: recovery from severe dysphagia in systemic sclerosis³⁷; and humidity as an ambient parameter to development of Zika virus³⁸. We end where we started: infections with an article on the emerging epidemic of drug resistant tuberculosis in vulnerable populations of low income countries.³⁹

Take your time and enjoy this bumper collection of very interesting articles relevant to the health and people of Africa and beyond. All for free!

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