Interface of non-communicable diseases and infections in Africa

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This time it is non-communicable diseases first, followed by infections! The first seven papers in this December 2018 bumper issue of *African Health Sciences* are on some aspects of diabetes mellitus.

Hence Cheserek and colleagues¹ report on hyperuricemia and metabolic syndrome among university staff. They found that males were 3 times more likely to have hyperuricemia, and individuals with hyperuricemia were more likely to have metabolic syndrome and dyslipidemia. They call for programs for screening, preventing, and treating metabolic syndrome in people with hyperuricemia.

Nigerian workers, on the other hand, report on an audit of prescription patterns among diabetes mellitus patients in a tertiary institution.² Liu and colleagues report on insulin resistance and diabetes mellitus³, while Ab El-Kader and others have a treatise on weight reduction on insulin resistance and adipokines regulation among obese diabetes mellitus patients.⁴

From Egypt, we have results of widespread screening of TB patients for diabetes mellitus.⁵ Chinese authors⁶ on the other hand have written for us the lack of association between the vitamin D gene and diabetic retinopathy, while Nigerian authors report on renal and lipid profile among diabetes mellitus patients.⁷

What about other non-communicable diseases? Work from South Africa reports on diagnostic performance of biomarkers for the identification of non-communicable diseases.⁸ Other authors from South Africa highlight walking as a feasible means of bringing about changes in blood pressure and anthropometric measurements.⁹ From Morocco, we have a study on risk factors for tetralogy of Fallot¹⁰, while Ghanaian workers report on hypertension¹¹ and those from Nigeria highlight cardiovascular diseases as important causes of out of hospital deaths.¹²

Also from Nigeria, we have an interesting report on autonomic dysfunction among pre-dialysis chronic kidney disease patients.¹³ El-masry and colleagues from Egypt report breast cancer resistant protein in women with acute myeloid leukemia.¹⁴ The next four papers are on asthma,¹⁵ endometrial cancer¹⁶, red cell allo-immnization¹⁷ and predictive value of hematological parameters in the diagnosis of brucellosis.¹⁸

There are other hematology papers such as Toye's work on PCR for the diagnosis of sickle cell anemia¹⁹, carbohydrate antigen B19 in sickle cell disease,²⁰ and the effect of pan-retinal photo-coagulation²¹. Then comes mental health in practice^{22;23,24} followed by dental challenges.^{24,25} Now to infectious diseases: cytomegalovirus and HIV;²⁶, markers of severity of HIV inflammation and coagulation²⁷; curative plants used by traditional healers to treat rhinitis²⁸, as well as counselling long distance drivers for HIV²⁹ feeding challenges of HIV exposure to infants with unrepaired cleft lip.³⁰

Keeping with the infectious disease theme: Chinese authors report on TB in University freshmen³¹; while Malaysian scientists report genetic diversity of hepatitis BCDE co-ineftion.³², and Nigerians report on influenza respiratory tract infection.³³

A treatise on infectious diseases would be incomplete without malaria³⁴; brucellosis³⁵; *Candida albicans*³⁶; *Culex pipiens*;^{37,38}; antibiotic prescriptions³⁹; and antibiotic resistance with the so called super bugs!⁴⁰

Now to mother newborn and child health issues.

From Ethiopia, we have an interesting paper on low birthwieght⁴¹; while Ugandan authors report on post discharge mortality.⁴²

Tanzania researchers report on heavy metals in urine of



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children living near industries⁴³, while Tunisian authors report on exercise among cystic fibrosis children.⁴⁴ Ghanaian authors on the other hand write about geophagia in pregnancy.⁴⁵ Is domestic violence ever justifiable? See what Ethiopian researchers are saying.⁴⁶

Anaestesiologists: you have some articles to ponder: effect of remifentanil versus dexmedetomidine during surgery⁴⁷, and clonidine pre-medication and bupivacaine spinal anaesthesia.⁴⁸

The treatise ends with two disparate but interesting immunology papers^{49,50}. As we go to press, East Africa is facing a number of unexpected challenges: a very serious boat accident on Lake Victoria that claimed innocent lives plus the danger posed by the war and Ebola epidemic in Eastern DRC. Watch the space!

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