

# Progress in infections, reproductive health and non-communicable diseases

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In this September issue of *African Health Sciences*, we bring you important aspects of research on infectious disease, reproductive and child health, as well as the ubiquitous non communicable diseases and conditions with a touch of health system challenges from Africa and elsewhere. Nigerian workers from Lagos report a very high prevalence of rifampicin resistant TB<sup>1</sup>, while from Uganda, we have an example of the interaction between tuberculosis and lipid abnormalities particularly hypocholesterolemia<sup>2</sup>.

From TB, we go to HIV/AIDS and other infections. Ugandan workers bring their experience with working with caregivers and health workers in trying to understand and explain Attention Hyperactivity Disorder (ADHD) among children and adolescents with HIV infection<sup>3</sup>. On the other hand, Zambian scientists report a 16% sero-prevalence of parvovirus B19 among blood donors: an important finding is given that this virus causes serious problems amongst those with such conditions as sickle cell anemia, HIV, cancer, and others<sup>4</sup>. The next article is on sexual behavior of adults living with HIV and receiving HAART in Botswana<sup>5</sup>. The authors conclude that availability of HAART is not associated with risky sexual behaviour, contrary to anecdotal reports.

Now to that important topic of oxidative stress. Ugandan scientists report on the effect of anti-retroviral therapy on oxidative stress in hospitalized HIV-infected adults, with and without TB<sup>6</sup>. More work from Uganda gives us a recent glimpse into the epidemiology of HIV, based on a survey and explores age, gender, number of sexual partners and frequency of testing<sup>7</sup>. And from Pakistani<sup>8</sup>, we have a report on molecular surveillance of HCV mono-infection and HCV-HBV co-infection, while Tunisian researchers highlight the burden and importance of rabies<sup>9</sup>. No doubt, a treatise on infectious diseases would be

incomplete without mention of malaria and helminths. And that is precisely what Nigerian authors have done<sup>10</sup>. They have studied the prevalence of malaria and soil transmitted helminths in Osogbo. And from Ethiopia, Tiruneh and others<sup>11</sup> have studied health seeking for malaria, while Tunisian workers highlight the importance of brain abscess, ending the section on a sad note<sup>12</sup>.

Reproductive and child health issues: This is also a recurrent theme in *African Health Sciences*, and this issue is no exception. There are articles on the association between pregnancy-specific anxiety and preterm birth<sup>13</sup>; pre-eclampsia<sup>14,15</sup>, and the effect of antenatal dexamethasone blood flow velocity in women at risk for preterm birth<sup>16</sup>. Others include: the association of periodontal disease with adverse pregnancy outcomes in Northern Tanzania<sup>17</sup>; hysterectomy and anorectal function<sup>18</sup>; cancer of the cervix<sup>19</sup>; use of contraceptives among medical students<sup>20</sup>; and reproduction in the male rat<sup>21,22</sup>.

Several genetic disorders come to the fore: cystic fibrosis in Tunisia<sup>23</sup>, autosomal dominant polycystic kidney disease<sup>24</sup>, and hemophilia<sup>25</sup>.

This slowly slips into the realm of non-communicable diseases, a ubiquitous theme in *African Health Sciences*! Hence we have a meta-analysis on phosphate binders lanthanum carbonate versus sevelamer hydrochloride in patients with end-stage renal disease undergoing hemodialysis<sup>26</sup>, followed by thyroid function and prognosis of diabetes and obesity<sup>27</sup>. Then we have a seminal paper on clinical presentation of diabetes mellitus in a rural district in Uganda<sup>28</sup>; risk of myocardial infarction in thalassemia<sup>29</sup>; and thiocyanate levels in the serum and saliva of non-smokers, ex-smokers and smokers<sup>30</sup>.

Next comes the section on nutrition and substance abuse: There are papers on vitamin A deficiency among Nigerian children<sup>31</sup>; nutrition knowledge in Ghana<sup>32</sup>; and adolescent malnutrition in Ethiopia<sup>33</sup>. Substance abuse is a real challenge in Africa reaching epidemic proportions everywhere as exemplified by two interesting papers:

Effect of tramadol addiction alone and its co-abuse with cannabis on urinary excretion of Copper, Zinc, and Calcium among Egyptian addicts<sup>34</sup>; and substance abuse among students in selected secondary schools of an urban community in Nigeria<sup>35</sup>.

There are some interesting neurology papers such as: a case report on neuroleptic malignant syndrome in a young adult female<sup>36</sup>; hypotonia assessment<sup>37</sup>; MRI for solitary fibrous tumours<sup>38</sup>; endotracheal extubation and critical respiratory events in adult patients undergoing surgery<sup>39</sup>; utility of social media by physicians<sup>40</sup>; reaction time by medical students<sup>41</sup>; and nodding syndrome in India<sup>42</sup>.

In summary we have brought you very interesting high quality papers from Africa and elsewhere, covering infectious diseases; reproductive and child health, non-communicable diseases with a touch of health systems challenges here and there.

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