J Tumwine;;;Makerere Medical School, Kampala, Uganda.   
 Editorial: African Health Sciences: The journal that will fill the evidence based practice void in Africa.  
 . Vol. 1 No. 1 (2001).   
Abstract  
 No Abstract

Joseph Erume;;;Department. of Veterinary Parasitology and Microbiology, Makerere University, Box 7062 Kampala, Uganda;;;;;Harris Partidos;;;Department of Pathology and Infectious diseases, The Royal Veterinary College, London NW1 OTU, UK.   
 Evaluation of the adjuvant effect of Escherichia coli heat-labile enterotoxin mutant (LTK63) on the systemic immune responses to intranasally co-administered measles virus nucleoprotein. Part I: Antibody responses  
 . Vol. 1 No. 1 (2001).   
Abstract  
 The adjuvanticity and immunogenicity of the heat-labile enterotoxin (LT) of Escherichia coli and of its non-toxic mutant, LTK63, was evaluated after intranasal administration of CBA mice with recombinant measles virus nucleoprotein (rMVNP) with or without LT or LTK63. Both LT and LTK63 were shown to be highly immunogenic with higher responses observed 4 weeks after the booster immunization. Although the nucleoprotein was immunogenic on its own, mice immunized with the nucleoprotein plus wild type LT produced significantly high antibody responses (p<0.01). Mice that received the rMVNP with LTK63 also generated strong antibody responses to rMVNP. These antibodies were also significantly higher than those of rMVNP alone (p< 0.05). No significant differences were observed between groups of mice immunized intranasally with rMVNP plus LT or LTK63 (p> 0.05). Data on IgG antibody isotype profiles showed that IgG 1 and IgG 2a were predominant in mice immunized with rMVNP + LT or LTK63 whereas IgG 1 predominated when rMVNP was given on its own implying that LT and LTK63 induce both Th1 and Th2-type immune responses. These results highlight the great potential of this non-toxic mutant of LT as a safe vaccine adjuvant.   
African Health Sciences 2001: 1(1): 3-8

Julius P Kiwanuka;;;Mbarara University of Science and Technology, Mbarara, Uganda;;;;;Juliet Mwanga;;;Mbarara University of Science and Technology, Mbarara, Uganda.   
 Childhood bacterial meningitis in Mbarara Hospital, Uganda: antimicrobial susceptibility and outcome of treatment  
 . Vol. 1 No. 1 (2001).   
Abstract  
 Background : The recommended antibiotic treatment of bacterial meningitis has come under scrutiny following frequent reports of in-vitro resistance by the common causative organisms to penicillin and chloramphenicol.   
Objective : The study recorded the causative organisms, antibiotic sensitivity patterns and outcome of treatment of bacterial meningitis in children and examined the impact of various factors on the recorded outcome.   
Design : This was a retrospective review of all case records of patients treated for bacterial meningitis over a one-year period.   
Setting : The study was set in the paediatric wards of Mbarara University Teaching Hospital, in south western Uganda.   
Results : A total of 77 patients were treated. Among 56 patients with available CSF results the frequency of bacterial causes was as follows: H. influenzae 13(23.2%), coliforms 7(12.5%), uncultured Gram-negative bacilli 7(12.5%), S. pneumoniae 5(8.9%) and   
N. meningitidis 3(5.4%). Most isolates tested were resistant to both penicillin and chloramphenicol, but all were sensitive to ciprofloxacin and perfloxacin. Twenty eight(36.8%) patients died, 22(28.9%) survived with sequelae and 15(19.7%) improved without sequelae. 14/18 who received perfloxacin and/or ciprofloxacin survived compared with 23/47 who did not: p=0.04).   
Conclusions : The high case-fatality rates and the high frequency of resistance to penicillin and chloramphenicol make a case for a review of the currently recommended antibiotic treatment of bacterial meningitis in this region. Fluoroquinolones need further evaluation as potential alternatives to chloramphenicol in the treatment of bacterial meningitis.   
African Health Sciences 2001: 1(1): 9-11.

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 Bioassay-guided studies on the cytotoxic and in vitro trypanocidal activities of a sesquiterpene (Muzigadial) derived from a Ugandan medicinal plant (Warburgia ugandensis)  
 . Vol. 1 No. 1 (2001).   
Abstract  
 Trypanosomosis is arguably the most important disease of man and his domesticated animals in the tropics. There are few compounds available for its treatment. This has exacerbated the development of drug resistance. There is therefore urgent need to search for newer compounds to treat this important disease. Medicinal plants represent a potential source of the drugs. This paper reports a bioassay-guided study to search for possible biological activity (cytotoxic and trypanocidal) in two Ugandan medicinal plants. The methodology adopted was the so-called ping-pong approach, involving phytochemical purification (column chromatography and preparative thin layer chromatography), alongside biological studies (cytotoxicity, antibacterial, trypanocidal and antifungal studies). Phytochemical investigations of Zanthoxylum chalybeum (seed) yielded a pure crystalline compound, 27-135D, which was characterized by 1HNMR as the alkaloid skimmianine. Studies on stem bark yielded three alkaloids 27-165A, 27-173A and 27-173B. All the above pure isolates, and the crude extracts of Z. chalybeum had neither biological activity nor cytotoxicity in the brine shrimp assay. A cytotoxic sesquiterpine, characterized as muzigadial, was isolated from W. ugandensis. It was highly toxic in the brine shrimp assay and also had in vitro trypanocidal activity against IL 3338 as well as IL1180; reference drug-resistant and drug-sensitive trypanosome strains respectively, comparable to diminazene aceturate and Geneticin (G418). Muzigadial also had antifungal activity against Candida albicans. It was concluded that the brine shrimp assay might be a useful predictor of trypanocidal activity of plant extracts and that muzigadial may be potentially valuable in the treatment of drug-resistant trypanosomosis.   
African Health Sciences 2001 1(1): 12-15

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 Knowledge, attitude and practice about sexually transmitted diseases among University students in Kampala  
 . Vol. 1 No. 1 (2001).   
Abstract  
 Background: Sexually transmitted diseases (STDs) remain an important cause of morbidity and mortality among women in the child-bearing age. In order to institute appropriate preventive measures there is need to establish the profile of knowledge of the predisposing factors and causation of STDs, attitude to sexual practice and sexual patterns among the susceptible young people, such as university students.   
Study population: Non medical university students, Makerere University   
Design: Descriptive cross sectional study   
Methods: A detailed questionnaire identifying socio-demographic characteristics, sexual patterns, knowledge of STDs as well as attitudes towards prevention of STDs was administered to 400 non-medical university students of Makerere University.   
Results: Knowledge of the clinical features of gonorrhoea and AIDS was high; most knew the predisposing factors for STDs (multiple sexual partners 90%; unprotected sexual intercourse 93%; rape 81%; sex outside marriage 78%, and sex under the influence of alcohol 73%) but not so for syphilis. Males were three times more likely to contract STDs (27%) than their female (9%) counterparts. Whereas knowledge on methods of prevention was high (>90%) it was not followed by appropriate behavioural patterns. More female (33.5%) students had heard about Trichomonas vaginalis than males (23%); (C 2 = 17.1; < 0.0001). This study has shown that more female than male students got information from their parents (C 2 = 25.3; p < 0.001) while more male students had their source of information from previous sexual intercourse (C 2 = 12.9; p = 0.001).   
Conclusion: The level of knowledge about STDs and their prevention is not matched by sexual behavioural patterns, and male students undertake more risky sexual behaviour. Sexual education should be introduced at the university as a means of increasing students' awareness about the problem and prevention of sexually transmitted diseases including HIV/AIDS.   
African Health Sciences 2001: 1(1): 16-22.

Innocent Gerald Makoba;;;Mbale Hospital, PO Box 921, Mbale, Uganda.   
 CASE REPORTS: Splenic injury following trauma: The role of ultrasonography  
 . Vol. 1 No. 1 (2001).   
Abstract  
 The spleen is the most commonly injured abdominal organ and this may follow accidental or non-accidental trauma. Three cases are presented of adult males who presented with pain in the left hypochondrium following trauma. Traumatic injury to the spleen was suspected and ultrasound confirmed this suspicion in the 3 patients. The patients did well after splenectomy. Hence ultrasound evaluation of patents with history of trauma and left hypochondrial pain should be performed urgently in order to detect possible splenic rupture.   
African Health Sciences 2001: 1(1): 23-25.

Israel Luutu;;;Department of Radiotherapy, Mulago Hospital , PB Cox 7051, Kampala, Uganda.   
 CASE REPORTS: Empty sella syndrome: Incidential findings at computerised tomography  
 . Vol. 1 No. 1 (2001).   
Abstract  
 A case is presented of a 43-year old female patient who presented with severe dizziness, neck pain and headache. Clinical examination revealed diplopia with a horizontal gaze.   
Plain skull radiographs showed an enlarged sella turcica with no abnormal intracraial calcifications. Pre and post contrast axial and post contrast coronal computerised tomography scans through the sella turcica were done. An enlarged sella turcica filled with cerebrospinal fluid was demonstrated.   
  
  
African Health Sciences 2001; 1(1): 26-27.

Florence Musoke;;;Makerere University Hospital, P. O. Box 7062 Kampala, Uganda.   
 CASE REPORTS: Spinal african histoplamosis simulating tuberculous spondylitis: A case report  
 . Vol. 1 No. 1 (2001).   
Abstract  
 Spinal histoplasmosis is a rare disease condition that must be differentiated from other common inflammatory lesions of the spine such as tuberculosis. A case is presented of a pathologically proven African spinal hisptoplasmosis in a 39-year old female.   
Paraplegia and fever were the patient clinical fingings. Cervical plain radiography demonstrated a lytic destructive process of the lower cervical spine with radiographic signs similar to tuberculosis. The surgical management and chemotherapy of histoplasmosis are briefly discussed.   
  
  
African Health Sciences 2001; 1(1): 28-29.

World Health Organization/UNAIDS;;;Geneva.   
 PRACTICE POINTS: Provisional WHO/UNAIDS Secretariat Recommendations on the Use of Cotrimoxazole Prophylaxis in Adults and Children Living with HIV/AIDS in Africa  
 . Vol. 1 No. 1 (2001).   
Abstract  
 [World Health Organization/UNAIDS] Geneva, October, 2000.   
Prophylactic treatment with cotrimoxazole can potentially enhance essential HIV care programmes in Africa by preventing several secondary bacterial and parasitic infections in people living with HIV/AIDS (PLHA). This intervention has been discussed at a UNAIDS/WHO consultation held in Harare, Zimbabwe on 29-31 March 2000. In view of the urgent need to preserve the health and well-being of HIV-infected individuals in Africa, where the HIV epidemic has its largest impact, WHO and the UNAIDS secretariat endorse the following as provisional recommendations: [ given in full in journal]  
African Health Sciences 2001; 1(1): 30-31.

Anon.   
 Nevapine: An option for preventing as well as treating paediatric HIV infection  
 . Vol. 1 No. 1 (2001).   
Abstract  
 From Drug & Ther Perspect 17(10):1-5, 2001 With permission from Adis International Limited  
  
In Brief   
Nevirapine belongs to the class of non-nucleoside reverse transcriptase inhibitors (NNRTI) of HIV. It reduces perinatal HIV transmission when administered as a 2-dose regimen, 1 dose to pregnant women during labour and 1 dose to the new born infant within 72 hours of birth. This nevirapine regimen was more effective than a short course of intrapartum and neonatal zidovudine in a randomised trial in breastfeeding women in Uganda. The 2-dose mother-infant nevirapine regimen is well tolerated and is more cost effective and easier to administer in resource-poor settings than zidovudine. In the US, guidelines for the prevention of perinatal HIV transmission suggest the use of the 2-dose nevirapine regimen as one of the possible treatment options for pregnant women who have received no previous antiretroviral therapy and whose infection is diagnosed late in pregnancy or during labour.   
Data concerning the use of nevirapine for the treatment of children with established HIV infection are still limited. It should only be used in combination with at least 2 other antiretroviral agents. In small numbers of patients nevirapine-containing triple antiretroviral combination regimens have produced reductions of HIV RNA both in plasma and the CSF.   
African Health Sciences 2001; 1(1): 32-35.

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; Uganda.   
 The retained placenta  
 . Vol. 1 No. 1 (2001).   
Abstract  
 The retained placenta is a significant cause of maternal mortality and morbidity throughout the developing world. It complicates 2% of all deliveries and has a case mortality rate of nearly 10% in rural areas.   
Ultrasound studies have provided fresh insights into the mechanism of the third stage of labour and the aetiology of the retained placenta. Following delivery of the baby, the retro-placental myometrium is initially relaxed. It is only when it contracts that the placenta shears away from the placental bed and is detached. This leads to its spontaneous expulsion. Retained placenta occurs when the retro-placental myometrium fails to contract. There is evidence that this may also occur during labour leading to dysfunctional labour. It is likely that this is caused by the persistence of one of the placental inhibitory factors that are normally reduced prior to the onset of labour, possibly progesterone or nitric oxide.   
Presently, the only effective treatment is manual removal of placenta (MROP) under anaesthetic. This needs to be carried out within a few hours of delivery to avoid haemorrhage. For women in rural Africa, facilities for MROP are scarce, leading to high mortality rates. Injection of oxytocin into the umbilical vein has been suggested as an alternative. This method relies on the injected oxytocin passing through the placenta to contract the retro-placental myometrium and cause its detachment. Despite several placebo controlled trials of this technique, no firm conclusion have been reached regarding its efficacy. This may be due to inadequate delivery of the oxytocin to the placenta. Further trials are in progress to assess the optimal dose of oxytocin as well as the efficacy of a new technique designed to improve delivery of the oxytocin to the placental bed.   
African Health Sciences 2001; 1(1): 36-41

Susan B. Rifkin.   
 Ten Best Readings on Community Participation and Health  
 . Vol. 1 No. 1 (2001).   
Abstract  
 This article reviews, in the opinion of the , the 10 most influential reading on community participation and health development. The introduction notes that some of the articles do not address health directly but still do bring crucial interpretations to the topic. All articles view community participation as an intervention by which the lives of people, particularly the poor and marginalised can be improved. In addition, they all address the issue of the value of participation to equity and sustainability. The article considers the readings under four heading: concepts and theory; advocacy; critiques and case studies. It highlights the important contributions each reading makes to the understanding of participation in the wider context of health and health development. In conclusion, the article argues that participation has not met the objectives of planners and professionals, in good part, because it is questionable as to whether viewing participation as an intervention enables them to make correct assessments of its contribution to development. The bottom line is that participation is always about power and control, an issue planners and professionals do not want explicitly to address.   
Key Words: community participation, health and development, participation as an intervention, empowerment  
African Health Sciences 2001; 1(1): 42-45.

Anon.   
 BOOK REVIEW: Neurosurgery in the Tropics: A practical approach to common problems By Jeffrey V. Rosenfeld MBBS, MS, FRACS, FRCS (Ed), FACS, FACTM and David A.K Watters ChM, FRACS, FRCS (Ed) Macmillan Education LTD 2000, Price $ 50 US ISBN 0-333-68412-5  
 . Vol. 1 No. 1 (2001).   
Abstract  
 Neurosurgery in the Tropics is a book, aimed at the general surgeon in a remote setting. As a surgical trainee in East Africa, the possibility of practicing in a remote setting is real. It is with this background that together with a surgeon who has worked in remote areas of Western Africa, we write this review.   
African Health Sciences 2001; 1(1): 46

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 LETTER TO THE EDITOR: Paediatric and Neonatal Resuscitation  
 . Vol. 1 No. 1 (2001).   
Abstract  
 Resuscitation:   
Saving lives is the primary responsibility of secondary care services. Many patients arrive in hospitals when they are acutely ill and are hoping for rescue treatment that will save their lives, but also deal with the primary cause of the acute illness. It is therefore important that all staff involved in the care of such patients is adequately trained and proficient in delivering that service.   
Resuscitation can be defined as the act of reviving. Many of our patients who are acutely ill do require resuscitation, if further treatment is to be effective and successful. Thus, the necessity for resuscitation is not questionable.   
In Mulago teaching hospital many children are admitted via the acute care unit (assessment unit) and babies in the maternity unit as well as those in special care baby unit do require resuscitation. In this paper I have tried to discuss the various components of resuscitation, provide experience of the training programme, that has recently been performed and the results. [FULL LETTER IN JOURNAL]  
African Health Sciences 2001; 1(1): 47-48

J Tumwine.   
 Editorial: December 2002  
 . Vol. 2 No. 3 (2002).   
Abstract  
 No Abstract

Andrew Weeks;;;Visiting Lecturer in Obstetrics, Makerere University, Kampala, Uganda.   
 Editorial: Clarifying the role of misoprostol in obstetrics  
 . Vol. 1 No. 2 (2001).   
Abstract  
 No abstract

James Tumwine;;;Makerere University Medical School, Kampala, Uganda.   
 Editorial: In this issue  
 . Vol. 2 No. 2 (2002).   
Abstract  
 Happy birthday African Health Sciences! Today we celebrate the first birthday of our journal with humility but also with a sense of satisfaction. In our continent where the infant mortality rate for both humans and journals is very high, survival ushers in a sense of satisfaction and increased responsibility for the future.   
We are particularly grateful to Nelson Sewankambo the dean of Makerere University Faculty of Medicine, Drs Walker and Samba of the WHO for seeing us through this first year. Many thanks also to all our editorial colleagues and referees both in Uganda and abroad for giving us the confidence to publish only vigorously reviewed work. And of course to you our reader who gives us the reason for existing: we thank you very much!   
Talking of the future: we have in plan to make African Health Science available to our readers on the Internet. That will be a subject of future discussion.   
Back to this birth-day issue of our journal. We have a selection of very interesting articles both general and specific. Dr. Dan Kaye's article on gestational trophoblastic disease following complete hydatidiform mole1, gives a glimpse of the clinical epidemiology, prevention and treatment of that condition. Although it occurs in just over 3 per 1000 deliveries, hydatidiform mole occurs in women with high fertility and is associated with mortality and protean complications of treatment. This is interesting information since there seems to be strong evidence from the 2001 Uganda Demographic Health Survey results linking high fertility rates and poverty.   
Underlying our commitment to promoting evidence based practice, we publish Dr. Wabinga's article in which he compares the reliability of Giemsa stain with immunohistochemistry in the demonstration of H.pylori: the germ linked to duodenal ulcer and gastric carcinoma2. Despite the relatively small numbers of patients studied, indications from this study are that Giemsa stain had high positive and negative predictive values with good agreement between the two tests. Given that Giemsa stain is cheap and easily available in most laboratories in the developed countries, recommending its use, as Webbing does, is not altogether out of place.   
To our old friend: cotrimoxazole! Now ubiquitously used in primary care settings for treatment of acute respiratory infections and for the prevention of Pneumocystis carinii pneumonia in HIV infected children and adults, cotrimoxazole seems destined to stay. Of major concern however is quality control of our products in an environment where sophisticated and time-consuming procedures may not always be possible. Balyejjussa, Adome and Musoke3 have used a rapid method (derivative spectrophotometry) for getting assays of the two components of cotrimoxazole with success.   
In their article on monitoring the severity of iodine deficiency disorders in Uganda, Bimenya, Olio-Okui and colleagues4 found that the prevalence of goitre has declined with the introduction of iodised salt in the country in in the early 1990s. Despite this significant fall, the rates are much higher than those recommended by the WHO and therefore iodine deficiency disorders are still of public health significance. The over consumption of iodine and its possible association with hyperthyroidism in some districts of Uganda needs urgent investigation.   
It is probably appropriate to end this review with two papers: one on eye disorders amongst school children and the other on the role of community health workers in DOTs in South Africa. Drs. Kawuma and Mayeku5 have found a high prevalence of astigmatism and, surprisingly, not short sight! The implications of these refractive disorders are discussed. Kironde and Bajunirwe6 leave us with an interesting debate of a re-emerging health problem with an old solution: using community health workers in DOTs. When you follow the history of primary health care and Alma Ata, you cannot but help beat off the sense of dejavu. Nobody will blame you!

Michael Kawooya.   
 Editorial: African Health Sciences in Medline and “on-line full text publishing”  
 . Vol. 3 No. 2 (2003).   
Abstract  
 No abstract

Edward Bitarakwate;;;Department of Paeditrics and Child Health, Makerere University Medical School;;;;;Edison Mworozi;;;Department of Paeditrics and Child Health, Makerere University Medical School;;;;;Addy Kekitiinwa;;;Department of Paeditrics and Child Health, Makerere University Medical School.   
 Serum zinc status of children with persistent diarrhoea admitted to the diarrhoea management unit of Mulago Hospital, Uganda  
 . Vol. 3 No. 2 (2003).   
Abstract  
 Introduction: Despite great advances in the management of diarrhoeal diseases, persistent diarrhoea remains a major problem in developing countries due to its syndromic nature. Zinc depletion ranks high among the factors contributing to the detrimental effects of persistent diarrhoea on the human body. This however, has not been investigated in the Ugandan population.  
Objective: To determine the serum zinc status of children with persistent diarrhoea.  
Design: Cross-sectional descriptive study.  
Methods: Children aged 6-36 months with persistent diarrhoea were enrolled from the diarrhoea management unit of Mulago hospital. Socio-demographic and morbidity data were collected, and laboratory investigations were carried out after recruitment. Healthy children of similar age and sex were recruited to determine reference levels of serum zinc for comparison.  
Results: The mean serum zinc level in the children with persistent diarrhoea was 5.83mol/l while that of children without diarrhoea was 8.99mol/l with no age or sex difference. The serum zinc concentration of children with persistent diarrhoea was significantly lower than that of children without diarrhoea (p<0.001). The prevalence of zinc deficiency in children with persistent diarrhoea was 47.9%. Of the children with persistent diarrhoea, 64 (66.7%) were stunted, wasted or both. However no significant association was observed between nutritional status and serum zinc levels. Only hypoproteinaemia was significantly associated with serum zinc levels in these children (p=0.03).  
Conclusion: There is a high prevalence of zinc deficiency and malnutrition among Ugandan children with persistent diarrhoea.  
African Health Sciences 2003 3(2); 54-60

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 Effect of chloroquine on human immunodeficiency virus (HIV) vertical transmission  
 . Vol. 3 No. 2 (2003).   
Abstract  
 Introduction: Over 2 million children globally are HIV positive. More than 90% are infected in utero from their mothers. Current pharmacological methods to reduce the rate of vertical transmission are too expensive for the developing world. Chloroquine, a cheap, widely available drug, has ant-HIV properties. We conducted a pilot study to determine if chloroquine can reduce HIV vertical transmission.  
Methods: 287 samples of stored, frozen cord blood from a cohort of Ugandan infants born to HIV positive mothers were analyzed for concentrations of chloroquine and its two major metabolites, monodesethylchloroquine and didesethylchloroquine. The HIV status of each infant was determined by ELISA with Western Blot confirmation at 15 and 18 months of age.  
Results: 49% of samples had measurable chloroquine or metabolite. Of those with measurable drug, the higher concentrations of chloroquine and its metabolites were more frequently associated with HIV negative infants. However, only the median concentration of didesethylochloroquine was significantly higher in HIV negative infants vs. HIV positive infants (1.6ng/ml vs. 0.9ng/ml, p=0.05).  
Conclusions: Nearly half of all infants in a Ugandan cohort are exposed to chloroquine in the last trimester of pregnancy. Such random maternal chloroquine use may be associated with a decreased rate of HIV vertical transmission. The issue of maternal chloroquine use requires controlled study before any clinical conclusions may be drawn.  
Funding: This work was supported by an AIDS International Training and Research Program at Case Western Reserve University (TW00011) Fogarty Grant.  
African Health Sciences 2003 3(2); 61-67

W Wanzala;;;Division of Parasitology and Immunology, Department of Zoology, University of Nairobi, P.O. Box 30197, Nairobi, Kenya;;;;;J A Onyango-Abuje;;;National Veterinary Research Centre, Muguga, P.O. Box 32, Kikuyu, Kenya;;;;;E K Kang'ethe;;;Department of Public Health, Pharmacology & Toxicology, University of Nairobi, P.O. Box 29053, Nairobi, Kenya;;;;;K H Zessin;;;Department of International Animal Health, Freie University Berlin, FB Veterinarmedizin, Luisenstrasse 56, D-10117 Berlin, Germany;;;;;N M Kyule;;;Department of Public Health, Pharmacology & Toxicology, University of Nairobi, P.O. Box 29053, Nairobi, Kenya; Department of International Animal Health, Freie University Berlin, FB Veterinarmedizin, Luisenstrasse 56, D-10117 Berlin, Germany;;;;;H Ochanda;;;Division of Parasitology and Immunology, Department of Zoology, University of Nairobi, P.O. Box 30197, Nairobi, Kenya;;;;;L JS Harrison;;;Centre for Tropical Veterinary Medicine, University of Edinburgh, Easter Bush, Roslin, Midlothian, EH25 9RG, Scotland, U.K..   
 Control of Taenia saginata by post-mortem examination of carcasses  
 . Vol. 3 No. 2 (2003).   
Abstract  
 Background: A study to curb transmission cycle of a zoonotic Taema cestodiasis between humans and cattle is presented.  
Objective: To evaluate the reliability of meat inspection procedure in detecting carcasses of cattle with T. saginata cysticercosis.  
Methods: A total of 55 cattle divided into two groups of artificially (n =30) and naturally (n = 25) infested animals were utilized. Total dissection method was used as a gold standard of validity.  
Results: Meat inspection insensitively revealed cysticerci in 12 carcasses in each group compared with 24 and 23 carcasses revealed by total dissection in natural and artificial infestations, respectively. Sites of oncosphere invasion showed great variations with the two groups of cattle. In the predilection sites, most cysticerci were found in the heart, Triceps brachii, tongue and head muscles in that order. However, non-predilection sites (neck and back, hind limbs, chest, pelvic and lumbar regions, lungs and liver) considerably harboured high numbers of cysticerci. Observations indicated that except for the dead, degenerate or calcified cysticerci a careless meat inspector will most likely miss out quite a number of viable cysticerci, which blend the pinkish-red colour of the meat and be passed on for human consumption, becoming the source of bovine cysticercosis.  
Conclusions: The results confirmed that in spite of the time and efforts taken by meat inspectors looking for cysticerci at specified predilection sites of carcasses, this method is insensitive and inaccurate. To effectively improve meat inspection procedures, there is need to increase the area and number of predilection sites observed during inspection and vary them according to the nature of the animals, their husbandry history and the target human population for consumption. In addition, other control approaches such as vaccination, chemotherapy and immunodiagnosis should be developed and implemented to complement meat inspection procedures.  
African Health Sciences 2003 3(2); 68-76

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 The cardiotonic effect of the crude ethanolic extract of Nerium oleander in the isolated guinea pig hearts  
 . Vol. 3 No. 2 (2003).   
Abstract  
 Cardiovascular diseases are increasingly becoming one of the leading diseases causing morbidity and mortality in Uganda. Ethnographic evidence suggests that these diseases are often first managed by indigenous and related herbs before patients are referred for allopathic forms of management. One such herb of interest is Nerium oleander. Therefore the crude ethanolic extracts of the dried leaves of this herb were tested against the following parameters in the isolated guinea pig hearts: force of contraction, heart rate and cardiac flow. The extracts brought about dose-dependent increases in all these parameters from their baseline readings. Compared with graded doses of digoxin the effects closely mirrored the activities in a dose dependent manner. At the mechanism of action level, it would appear the extract works in the same as digoxin since their dose-contraction-reponse curves are parallel. This finding would tend to provide a strong rationale for the herb's traditional use in cardiovascular illness.  
African Health Sciences 2003 3(2); 77-82

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 Ocular manifestations in paediatric HIV/AIDS patients in Mulago Hospital, Uganda  
 . Vol. 3 No. 2 (2003).   
Abstract  
 Background: In Uganda the prevalence of HIV averages 12% as was reported to the STD/AIDS control surveillance unit. In Uganda there are approximately 30,000 HIV infected infants per year. The burden of HIV disease is high in Uganda and patients present with ocular complications. However, there is paucity of information and knowledge concerning ocular manifestations in the paediatric HIV/AIDS population and how they may differ from those of adults.  
Objectives : To describe the ocular manifestations of HIV/AIDS infection in an African paediatric population. Generally the study will record the external ocular manifestations seen but specifically to document the intra-ocular lesions, in particular the retinal changes associated with paediatric HIV/AIDS.  
Design: A cross-sectional hospital based study.  
Setting: The study was conducted at the Paediatric Infectious Disease Clinic at Upper Mulago Hospital, in Kampala, Uganda.  
Patients: Patients are those with positive HIV sero status, with or without symptoms and signs of AIDS. Parents/caretakers of the children were interviewed to obtain the socio-demographic data of the patients and a general physical as well as an ophthalmic examination were conducted to document any ocular problems.  
Results: A total of 158 HIV-infected children were examined. The overall rate of ophthalmic involvement was 35%. The most common finding was a non-purulent conjuctivitis, observed in 12% of the patients, followed by perivasculitis of the peripheral retinal vessels, in 12 % of patients and molluscum contagiosum.  
African Health Sciences 2003 3(2); 83-86

Norbert Anyama;;;Department of Pharmacy, Faculty of Medicine Makerere University, P. O. Box 7072 Kampala, Uganda;;;;;R O Adome;;;Department of Pharmacy, Faculty of Medicine Makerere University, P. O. Box 7072 Kampala, Uganda.   
 Community pharmaceutical care: an 8-month critical review of two pharmacies in Kampala  
 . Vol. 3 No. 2 (2003).   
Abstract  
 Background: The concept of pharmaceutical care is neither well developed nor adequately documented in Uganda.  
Objectives: This study is therefore an attempt to identify and quantify the various service components of community pharmacy practice in Kampala, Uganda's capital city.  
Setting: Two pharmacies operating retail outlets were chosen out of about 110 in Kampala. The city itself is fairly small with a rather congested population. It is Uganda's economic hub with the greatest number of private sector health facilities and pharmacy outlets.  
Methods: This study involved an 8-month observation period at the two pharmacies, combined with a data collection form to record demographic characteristics of respondents and parameters such as self-medication, pharmacy initiated therapy, prescription filling, patient/non-patient clients and treatment received.  
Results: 567 observations were made. Missing data for parameters studied were omitted during analysis, thus yielding different totals for the various sets of variables. Just less than half of 564 respondents (44.3%), were females compared to males (55.7%). The study found that clients over the age of 12 years seeking pharmaceutical services were 8-fold (93.1%) more likely to be the very patients compared to children (OR = 8.3; 95% CI, 3.7-18.7). Slightly ove r thirty percent of respondents (32.3%) were third party patients. About fifteen percent (14.7%) of respondents came to fill prescriptions, 28.8% to receive pharmacy-initiated therapy and 56.5% came for self-medication with all drugs including antibiotics at 22.4%. Most clients (75.2%) received treatment.The availability of a drug at the pharmacy was found to be a significant predictor of whether treatment was received, with the client age acting as a confounding variable (OR = 59.7; 95% CI 25.9-137.6).  
African Health Sciences 2003 3(2); 87-93

Cole P Dodge;;;Facilitator/Advisor, Makerere University;;;;;Nelson Sewankambo;;;Dean of the Faculty of Medicine, Makerere University;;;;;Edward Kanyesigye;;;Head, Human Resource Division, Ministry of Health, Kampala.   
 SPECIAL ARTICLE: Participatory planning for the transformation of the Faculty of Medicine into a College of Health Sciences  
 . Vol. 3 No. 2 (2003).   
Abstract  
 No abstract  
African Health Sciences 2003 3(2); 94-101

Samson Kironde;;;Sandown, Sandton 2196, South Africa;;;;;John Lukwago;;;Axios International Consultants Ltd, P.O.Box 6924, Kampala, Uganda;;;;;Richard Ssenyonga;;;Department of Community Medicine, Makerere University, P.O.Box 7072, Kampala, Uganda.   
 Scaling the frontier - should traditional birth attendants also be used to provide nevirapine for PMTCT in Uganda?  
 . Vol. 3 No. 2 (2003).   
Abstract  
 no abstract  
  
African Health Sciences 2003 3(2); 102-103

J Tumwine;;;Makerere Medical School, Kampala, Uganda.   
 Editorial: African Health Sciences: The journal that will fill the evidence based practice void in Africa.  
 . Vol. 1 No. 1 (2001).   
Abstract  
 No Abstract

Joseph Erume;;;Department. of Veterinary Parasitology and Microbiology, Makerere University, Box 7062 Kampala, Uganda;;;;;Harris Partidos;;;Department of Pathology and Infectious diseases, The Royal Veterinary College, London NW1 OTU, UK.   
 Evaluation of the adjuvant effect of Escherichia coli heat-labile enterotoxin mutant (LTK63) on the systemic immune responses to intranasally co-administered measles virus nucleoprotein. Part I: Antibody responses  
 . Vol. 1 No. 1 (2001).   
Abstract  
 The adjuvanticity and immunogenicity of the heat-labile enterotoxin (LT) of Escherichia coli and of its non-toxic mutant, LTK63, was evaluated after intranasal administration of CBA mice with recombinant measles virus nucleoprotein (rMVNP) with or without LT or LTK63. Both LT and LTK63 were shown to be highly immunogenic with higher responses observed 4 weeks after the booster immunization. Although the nucleoprotein was immunogenic on its own, mice immunized with the nucleoprotein plus wild type LT produced significantly high antibody responses (p<0.01). Mice that received the rMVNP with LTK63 also generated strong antibody responses to rMVNP. These antibodies were also significantly higher than those of rMVNP alone (p< 0.05). No significant differences were observed between groups of mice immunized intranasally with rMVNP plus LT or LTK63 (p> 0.05). Data on IgG antibody isotype profiles showed that IgG 1 and IgG 2a were predominant in mice immunized with rMVNP + LT or LTK63 whereas IgG 1 predominated when rMVNP was given on its own implying that LT and LTK63 induce both Th1 and Th2-type immune responses. These results highlight the great potential of this non-toxic mutant of LT as a safe vaccine adjuvant.   
African Health Sciences 2001: 1(1): 3-8

Julius P Kiwanuka;;;Mbarara University of Science and Technology, Mbarara, Uganda;;;;;Juliet Mwanga;;;Mbarara University of Science and Technology, Mbarara, Uganda.   
 Childhood bacterial meningitis in Mbarara Hospital, Uganda: antimicrobial susceptibility and outcome of treatment  
 . Vol. 1 No. 1 (2001).   
Abstract  
 Background : The recommended antibiotic treatment of bacterial meningitis has come under scrutiny following frequent reports of in-vitro resistance by the common causative organisms to penicillin and chloramphenicol.   
Objective : The study recorded the causative organisms, antibiotic sensitivity patterns and outcome of treatment of bacterial meningitis in children and examined the impact of various factors on the recorded outcome.   
Design : This was a retrospective review of all case records of patients treated for bacterial meningitis over a one-year period.   
Setting : The study was set in the paediatric wards of Mbarara University Teaching Hospital, in south western Uganda.   
Results : A total of 77 patients were treated. Among 56 patients with available CSF results the frequency of bacterial causes was as follows: H. influenzae 13(23.2%), coliforms 7(12.5%), uncultured Gram-negative bacilli 7(12.5%), S. pneumoniae 5(8.9%) and   
N. meningitidis 3(5.4%). Most isolates tested were resistant to both penicillin and chloramphenicol, but all were sensitive to ciprofloxacin and perfloxacin. Twenty eight(36.8%) patients died, 22(28.9%) survived with sequelae and 15(19.7%) improved without sequelae. 14/18 who received perfloxacin and/or ciprofloxacin survived compared with 23/47 who did not: p=0.04).   
Conclusions : The high case-fatality rates and the high frequency of resistance to penicillin and chloramphenicol make a case for a review of the currently recommended antibiotic treatment of bacterial meningitis in this region. Fluoroquinolones need further evaluation as potential alternatives to chloramphenicol in the treatment of bacterial meningitis.   
African Health Sciences 2001: 1(1): 9-11.

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 Bioassay-guided studies on the cytotoxic and in vitro trypanocidal activities of a sesquiterpene (Muzigadial) derived from a Ugandan medicinal plant (Warburgia ugandensis)  
 . Vol. 1 No. 1 (2001).   
Abstract  
 Trypanosomosis is arguably the most important disease of man and his domesticated animals in the tropics. There are few compounds available for its treatment. This has exacerbated the development of drug resistance. There is therefore urgent need to search for newer compounds to treat this important disease. Medicinal plants represent a potential source of the drugs. This paper reports a bioassay-guided study to search for possible biological activity (cytotoxic and trypanocidal) in two Ugandan medicinal plants. The methodology adopted was the so-called ping-pong approach, involving phytochemical purification (column chromatography and preparative thin layer chromatography), alongside biological studies (cytotoxicity, antibacterial, trypanocidal and antifungal studies). Phytochemical investigations of Zanthoxylum chalybeum (seed) yielded a pure crystalline compound, 27-135D, which was characterized by 1HNMR as the alkaloid skimmianine. Studies on stem bark yielded three alkaloids 27-165A, 27-173A and 27-173B. All the above pure isolates, and the crude extracts of Z. chalybeum had neither biological activity nor cytotoxicity in the brine shrimp assay. A cytotoxic sesquiterpine, characterized as muzigadial, was isolated from W. ugandensis. It was highly toxic in the brine shrimp assay and also had in vitro trypanocidal activity against IL 3338 as well as IL1180; reference drug-resistant and drug-sensitive trypanosome strains respectively, comparable to diminazene aceturate and Geneticin (G418). Muzigadial also had antifungal activity against Candida albicans. It was concluded that the brine shrimp assay might be a useful predictor of trypanocidal activity of plant extracts and that muzigadial may be potentially valuable in the treatment of drug-resistant trypanosomosis.   
African Health Sciences 2001 1(1): 12-15

Wilberforce Kigongo Sekirime;;;Department of Obstetrics and Gynaecology, Makerere Medical School, P. O .Box 7072, Kampala, Uganda;;;;;Jerome Tamale1;;;Department of Obstetrics and Gynaecology, Makerere Medical School, P. O .Box 7072, Kampala, Uganda;;;;;John C Lule;;;Department of Obstetrics and Gynaecology, Makerere Medical School, P. O .Box 7072, Kampala, Uganda;;;;;Fred Wabwire-Mangen;;;Institute of Public Health, Makerere University, P. O. Box 7072 Kampala.   
 Knowledge, attitude and practice about sexually transmitted diseases among University students in Kampala  
 . Vol. 1 No. 1 (2001).   
Abstract  
 Background: Sexually transmitted diseases (STDs) remain an important cause of morbidity and mortality among women in the child-bearing age. In order to institute appropriate preventive measures there is need to establish the profile of knowledge of the predisposing factors and causation of STDs, attitude to sexual practice and sexual patterns among the susceptible young people, such as university students.   
Study population: Non medical university students, Makerere University   
Design: Descriptive cross sectional study   
Methods: A detailed questionnaire identifying socio-demographic characteristics, sexual patterns, knowledge of STDs as well as attitudes towards prevention of STDs was administered to 400 non-medical university students of Makerere University.   
Results: Knowledge of the clinical features of gonorrhoea and AIDS was high; most knew the predisposing factors for STDs (multiple sexual partners 90%; unprotected sexual intercourse 93%; rape 81%; sex outside marriage 78%, and sex under the influence of alcohol 73%) but not so for syphilis. Males were three times more likely to contract STDs (27%) than their female (9%) counterparts. Whereas knowledge on methods of prevention was high (>90%) it was not followed by appropriate behavioural patterns. More female (33.5%) students had heard about Trichomonas vaginalis than males (23%); (C 2 = 17.1; < 0.0001). This study has shown that more female than male students got information from their parents (C 2 = 25.3; p < 0.001) while more male students had their source of information from previous sexual intercourse (C 2 = 12.9; p = 0.001).   
Conclusion: The level of knowledge about STDs and their prevention is not matched by sexual behavioural patterns, and male students undertake more risky sexual behaviour. Sexual education should be introduced at the university as a means of increasing students' awareness about the problem and prevention of sexually transmitted diseases including HIV/AIDS.   
African Health Sciences 2001: 1(1): 16-22.

Innocent Gerald Makoba;;;Mbale Hospital, PO Box 921, Mbale, Uganda.   
 CASE REPORTS: Splenic injury following trauma: The role of ultrasonography  
 . Vol. 1 No. 1 (2001).   
Abstract  
 The spleen is the most commonly injured abdominal organ and this may follow accidental or non-accidental trauma. Three cases are presented of adult males who presented with pain in the left hypochondrium following trauma. Traumatic injury to the spleen was suspected and ultrasound confirmed this suspicion in the 3 patients. The patients did well after splenectomy. Hence ultrasound evaluation of patents with history of trauma and left hypochondrial pain should be performed urgently in order to detect possible splenic rupture.   
African Health Sciences 2001: 1(1): 23-25.

Israel Luutu;;;Department of Radiotherapy, Mulago Hospital , PB Cox 7051, Kampala, Uganda.   
 CASE REPORTS: Empty sella syndrome: Incidential findings at computerised tomography  
 . Vol. 1 No. 1 (2001).   
Abstract  
 A case is presented of a 43-year old female patient who presented with severe dizziness, neck pain and headache. Clinical examination revealed diplopia with a horizontal gaze.   
Plain skull radiographs showed an enlarged sella turcica with no abnormal intracraial calcifications. Pre and post contrast axial and post contrast coronal computerised tomography scans through the sella turcica were done. An enlarged sella turcica filled with cerebrospinal fluid was demonstrated.   
  
  
African Health Sciences 2001; 1(1): 26-27.

Florence Musoke;;;Makerere University Hospital, P. O. Box 7062 Kampala, Uganda.   
 CASE REPORTS: Spinal african histoplamosis simulating tuberculous spondylitis: A case report  
 . Vol. 1 No. 1 (2001).   
Abstract  
 Spinal histoplasmosis is a rare disease condition that must be differentiated from other common inflammatory lesions of the spine such as tuberculosis. A case is presented of a pathologically proven African spinal hisptoplasmosis in a 39-year old female.   
Paraplegia and fever were the patient clinical fingings. Cervical plain radiography demonstrated a lytic destructive process of the lower cervical spine with radiographic signs similar to tuberculosis. The surgical management and chemotherapy of histoplasmosis are briefly discussed.   
  
  
African Health Sciences 2001; 1(1): 28-29.

World Health Organization/UNAIDS;;;Geneva.   
 PRACTICE POINTS: Provisional WHO/UNAIDS Secretariat Recommendations on the Use of Cotrimoxazole Prophylaxis in Adults and Children Living with HIV/AIDS in Africa  
 . Vol. 1 No. 1 (2001).   
Abstract  
 [World Health Organization/UNAIDS] Geneva, October, 2000.   
Prophylactic treatment with cotrimoxazole can potentially enhance essential HIV care programmes in Africa by preventing several secondary bacterial and parasitic infections in people living with HIV/AIDS (PLHA). This intervention has been discussed at a UNAIDS/WHO consultation held in Harare, Zimbabwe on 29-31 March 2000. In view of the urgent need to preserve the health and well-being of HIV-infected individuals in Africa, where the HIV epidemic has its largest impact, WHO and the UNAIDS secretariat endorse the following as provisional recommendations: [ given in full in journal]  
African Health Sciences 2001; 1(1): 30-31.

Anon.   
 Nevapine: An option for preventing as well as treating paediatric HIV infection  
 . Vol. 1 No. 1 (2001).   
Abstract  
 From Drug & Ther Perspect 17(10):1-5, 2001 With permission from Adis International Limited  
  
In Brief   
Nevirapine belongs to the class of non-nucleoside reverse transcriptase inhibitors (NNRTI) of HIV. It reduces perinatal HIV transmission when administered as a 2-dose regimen, 1 dose to pregnant women during labour and 1 dose to the new born infant within 72 hours of birth. This nevirapine regimen was more effective than a short course of intrapartum and neonatal zidovudine in a randomised trial in breastfeeding women in Uganda. The 2-dose mother-infant nevirapine regimen is well tolerated and is more cost effective and easier to administer in resource-poor settings than zidovudine. In the US, guidelines for the prevention of perinatal HIV transmission suggest the use of the 2-dose nevirapine regimen as one of the possible treatment options for pregnant women who have received no previous antiretroviral therapy and whose infection is diagnosed late in pregnancy or during labour.   
Data concerning the use of nevirapine for the treatment of children with established HIV infection are still limited. It should only be used in combination with at least 2 other antiretroviral agents. In small numbers of patients nevirapine-containing triple antiretroviral combination regimens have produced reductions of HIV RNA both in plasma and the CSF.   
African Health Sciences 2001; 1(1): 32-35.

Andrew D Weeks;;;Visiting Lecturer, Dept of Obstetrics and Gynaecology,  
; Makerere University,  
; Kampala,  
; Uganda.   
 The retained placenta  
 . Vol. 1 No. 1 (2001).   
Abstract  
 The retained placenta is a significant cause of maternal mortality and morbidity throughout the developing world. It complicates 2% of all deliveries and has a case mortality rate of nearly 10% in rural areas.   
Ultrasound studies have provided fresh insights into the mechanism of the third stage of labour and the aetiology of the retained placenta. Following delivery of the baby, the retro-placental myometrium is initially relaxed. It is only when it contracts that the placenta shears away from the placental bed and is detached. This leads to its spontaneous expulsion. Retained placenta occurs when the retro-placental myometrium fails to contract. There is evidence that this may also occur during labour leading to dysfunctional labour. It is likely that this is caused by the persistence of one of the placental inhibitory factors that are normally reduced prior to the onset of labour, possibly progesterone or nitric oxide.   
Presently, the only effective treatment is manual removal of placenta (MROP) under anaesthetic. This needs to be carried out within a few hours of delivery to avoid haemorrhage. For women in rural Africa, facilities for MROP are scarce, leading to high mortality rates. Injection of oxytocin into the umbilical vein has been suggested as an alternative. This method relies on the injected oxytocin passing through the placenta to contract the retro-placental myometrium and cause its detachment. Despite several placebo controlled trials of this technique, no firm conclusion have been reached regarding its efficacy. This may be due to inadequate delivery of the oxytocin to the placenta. Further trials are in progress to assess the optimal dose of oxytocin as well as the efficacy of a new technique designed to improve delivery of the oxytocin to the placental bed.   
African Health Sciences 2001; 1(1): 36-41

Susan B. Rifkin.   
 Ten Best Readings on Community Participation and Health  
 . Vol. 1 No. 1 (2001).   
Abstract  
 This article reviews, in the opinion of the , the 10 most influential reading on community participation and health development. The introduction notes that some of the articles do not address health directly but still do bring crucial interpretations to the topic. All articles view community participation as an intervention by which the lives of people, particularly the poor and marginalised can be improved. In addition, they all address the issue of the value of participation to equity and sustainability. The article considers the readings under four heading: concepts and theory; advocacy; critiques and case studies. It highlights the important contributions each reading makes to the understanding of participation in the wider context of health and health development. In conclusion, the article argues that participation has not met the objectives of planners and professionals, in good part, because it is questionable as to whether viewing participation as an intervention enables them to make correct assessments of its contribution to development. The bottom line is that participation is always about power and control, an issue planners and professionals do not want explicitly to address.   
Key Words: community participation, health and development, participation as an intervention, empowerment  
African Health Sciences 2001; 1(1): 42-45.

Anon.   
 BOOK REVIEW: Neurosurgery in the Tropics: A practical approach to common problems By Jeffrey V. Rosenfeld MBBS, MS, FRACS, FRCS (Ed), FACS, FACTM and David A.K Watters ChM, FRACS, FRCS (Ed) Macmillan Education LTD 2000, Price $ 50 US ISBN 0-333-68412-5  
 . Vol. 1 No. 1 (2001).   
Abstract  
 Neurosurgery in the Tropics is a book, aimed at the general surgeon in a remote setting. As a surgical trainee in East Africa, the possibility of practicing in a remote setting is real. It is with this background that together with a surgeon who has worked in remote areas of Western Africa, we write this review.   
African Health Sciences 2001; 1(1): 46

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; Phone 01642 854869 Fax 01642 854636  
; Email: M.S.Kibirige@ncl.ac.uk.   
 LETTER TO THE EDITOR: Paediatric and Neonatal Resuscitation  
 . Vol. 1 No. 1 (2001).   
Abstract  
 Resuscitation:   
Saving lives is the primary responsibility of secondary care services. Many patients arrive in hospitals when they are acutely ill and are hoping for rescue treatment that will save their lives, but also deal with the primary cause of the acute illness. It is therefore important that all staff involved in the care of such patients is adequately trained and proficient in delivering that service.   
Resuscitation can be defined as the act of reviving. Many of our patients who are acutely ill do require resuscitation, if further treatment is to be effective and successful. Thus, the necessity for resuscitation is not questionable.   
In Mulago teaching hospital many children are admitted via the acute care unit (assessment unit) and babies in the maternity unit as well as those in special care baby unit do require resuscitation. In this paper I have tried to discuss the various components of resuscitation, provide experience of the training programme, that has recently been performed and the results. [FULL LETTER IN JOURNAL]  
African Health Sciences 2001; 1(1): 47-48

J Tumwine.   
 Editorial: December 2002  
 . Vol. 2 No. 3 (2002).   
Abstract  
 No Abstract

Andrew Weeks;;;Visiting Lecturer in Obstetrics, Makerere University, Kampala, Uganda.   
 Editorial: Clarifying the role of misoprostol in obstetrics  
 . Vol. 1 No. 2 (2001).   
Abstract  
 No abstract

James Tumwine;;;Makerere University Medical School, Kampala, Uganda.   
 Editorial: In this issue  
 . Vol. 2 No. 2 (2002).   
Abstract  
 Happy birthday African Health Sciences! Today we celebrate the first birthday of our journal with humility but also with a sense of satisfaction. In our continent where the infant mortality rate for both humans and journals is very high, survival ushers in a sense of satisfaction and increased responsibility for the future.   
We are particularly grateful to Nelson Sewankambo the dean of Makerere University Faculty of Medicine, Drs Walker and Samba of the WHO for seeing us through this first year. Many thanks also to all our editorial colleagues and referees both in Uganda and abroad for giving us the confidence to publish only vigorously reviewed work. And of course to you our reader who gives us the reason for existing: we thank you very much!   
Talking of the future: we have in plan to make African Health Science available to our readers on the Internet. That will be a subject of future discussion.   
Back to this birth-day issue of our journal. We have a selection of very interesting articles both general and specific. Dr. Dan Kaye's article on gestational trophoblastic disease following complete hydatidiform mole1, gives a glimpse of the clinical epidemiology, prevention and treatment of that condition. Although it occurs in just over 3 per 1000 deliveries, hydatidiform mole occurs in women with high fertility and is associated with mortality and protean complications of treatment. This is interesting information since there seems to be strong evidence from the 2001 Uganda Demographic Health Survey results linking high fertility rates and poverty.   
Underlying our commitment to promoting evidence based practice, we publish Dr. Wabinga's article in which he compares the reliability of Giemsa stain with immunohistochemistry in the demonstration of H.pylori: the germ linked to duodenal ulcer and gastric carcinoma2. Despite the relatively small numbers of patients studied, indications from this study are that Giemsa stain had high positive and negative predictive values with good agreement between the two tests. Given that Giemsa stain is cheap and easily available in most laboratories in the developed countries, recommending its use, as Webbing does, is not altogether out of place.   
To our old friend: cotrimoxazole! Now ubiquitously used in primary care settings for treatment of acute respiratory infections and for the prevention of Pneumocystis carinii pneumonia in HIV infected children and adults, cotrimoxazole seems destined to stay. Of major concern however is quality control of our products in an environment where sophisticated and time-consuming procedures may not always be possible. Balyejjussa, Adome and Musoke3 have used a rapid method (derivative spectrophotometry) for getting assays of the two components of cotrimoxazole with success.   
In their article on monitoring the severity of iodine deficiency disorders in Uganda, Bimenya, Olio-Okui and colleagues4 found that the prevalence of goitre has declined with the introduction of iodised salt in the country in in the early 1990s. Despite this significant fall, the rates are much higher than those recommended by the WHO and therefore iodine deficiency disorders are still of public health significance. The over consumption of iodine and its possible association with hyperthyroidism in some districts of Uganda needs urgent investigation.   
It is probably appropriate to end this review with two papers: one on eye disorders amongst school children and the other on the role of community health workers in DOTs in South Africa. Drs. Kawuma and Mayeku5 have found a high prevalence of astigmatism and, surprisingly, not short sight! The implications of these refractive disorders are discussed. Kironde and Bajunirwe6 leave us with an interesting debate of a re-emerging health problem with an old solution: using community health workers in DOTs. When you follow the history of primary health care and Alma Ata, you cannot but help beat off the sense of dejavu. Nobody will blame you!

Michael Kawooya.   
 Editorial: African Health Sciences in Medline and “on-line full text publishing”  
 . Vol. 3 No. 2 (2003).   
Abstract  
 No abstract

Edward Bitarakwate;;;Department of Paeditrics and Child Health, Makerere University Medical School;;;;;Edison Mworozi;;;Department of Paeditrics and Child Health, Makerere University Medical School;;;;;Addy Kekitiinwa;;;Department of Paeditrics and Child Health, Makerere University Medical School.   
 Serum zinc status of children with persistent diarrhoea admitted to the diarrhoea management unit of Mulago Hospital, Uganda  
 . Vol. 3 No. 2 (2003).   
Abstract  
 Introduction: Despite great advances in the management of diarrhoeal diseases, persistent diarrhoea remains a major problem in developing countries due to its syndromic nature. Zinc depletion ranks high among the factors contributing to the detrimental effects of persistent diarrhoea on the human body. This however, has not been investigated in the Ugandan population.  
Objective: To determine the serum zinc status of children with persistent diarrhoea.  
Design: Cross-sectional descriptive study.  
Methods: Children aged 6-36 months with persistent diarrhoea were enrolled from the diarrhoea management unit of Mulago hospital. Socio-demographic and morbidity data were collected, and laboratory investigations were carried out after recruitment. Healthy children of similar age and sex were recruited to determine reference levels of serum zinc for comparison.  
Results: The mean serum zinc level in the children with persistent diarrhoea was 5.83mol/l while that of children without diarrhoea was 8.99mol/l with no age or sex difference. The serum zinc concentration of children with persistent diarrhoea was significantly lower than that of children without diarrhoea (p<0.001). The prevalence of zinc deficiency in children with persistent diarrhoea was 47.9%. Of the children with persistent diarrhoea, 64 (66.7%) were stunted, wasted or both. However no significant association was observed between nutritional status and serum zinc levels. Only hypoproteinaemia was significantly associated with serum zinc levels in these children (p=0.03).  
Conclusion: There is a high prevalence of zinc deficiency and malnutrition among Ugandan children with persistent diarrhoea.  
African Health Sciences 2003 3(2); 54-60

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 Effect of chloroquine on human immunodeficiency virus (HIV) vertical transmission  
 . Vol. 3 No. 2 (2003).   
Abstract  
 Introduction: Over 2 million children globally are HIV positive. More than 90% are infected in utero from their mothers. Current pharmacological methods to reduce the rate of vertical transmission are too expensive for the developing world. Chloroquine, a cheap, widely available drug, has ant-HIV properties. We conducted a pilot study to determine if chloroquine can reduce HIV vertical transmission.  
Methods: 287 samples of stored, frozen cord blood from a cohort of Ugandan infants born to HIV positive mothers were analyzed for concentrations of chloroquine and its two major metabolites, monodesethylchloroquine and didesethylchloroquine. The HIV status of each infant was determined by ELISA with Western Blot confirmation at 15 and 18 months of age.  
Results: 49% of samples had measurable chloroquine or metabolite. Of those with measurable drug, the higher concentrations of chloroquine and its metabolites were more frequently associated with HIV negative infants. However, only the median concentration of didesethylochloroquine was significantly higher in HIV negative infants vs. HIV positive infants (1.6ng/ml vs. 0.9ng/ml, p=0.05).  
Conclusions: Nearly half of all infants in a Ugandan cohort are exposed to chloroquine in the last trimester of pregnancy. Such random maternal chloroquine use may be associated with a decreased rate of HIV vertical transmission. The issue of maternal chloroquine use requires controlled study before any clinical conclusions may be drawn.  
Funding: This work was supported by an AIDS International Training and Research Program at Case Western Reserve University (TW00011) Fogarty Grant.  
African Health Sciences 2003 3(2); 61-67

W Wanzala;;;Division of Parasitology and Immunology, Department of Zoology, University of Nairobi, P.O. Box 30197, Nairobi, Kenya;;;;;J A Onyango-Abuje;;;National Veterinary Research Centre, Muguga, P.O. Box 32, Kikuyu, Kenya;;;;;E K Kang'ethe;;;Department of Public Health, Pharmacology & Toxicology, University of Nairobi, P.O. Box 29053, Nairobi, Kenya;;;;;K H Zessin;;;Department of International Animal Health, Freie University Berlin, FB Veterinarmedizin, Luisenstrasse 56, D-10117 Berlin, Germany;;;;;N M Kyule;;;Department of Public Health, Pharmacology & Toxicology, University of Nairobi, P.O. Box 29053, Nairobi, Kenya; Department of International Animal Health, Freie University Berlin, FB Veterinarmedizin, Luisenstrasse 56, D-10117 Berlin, Germany;;;;;H Ochanda;;;Division of Parasitology and Immunology, Department of Zoology, University of Nairobi, P.O. Box 30197, Nairobi, Kenya;;;;;L JS Harrison;;;Centre for Tropical Veterinary Medicine, University of Edinburgh, Easter Bush, Roslin, Midlothian, EH25 9RG, Scotland, U.K..   
 Control of Taenia saginata by post-mortem examination of carcasses  
 . Vol. 3 No. 2 (2003).   
Abstract  
 Background: A study to curb transmission cycle of a zoonotic Taema cestodiasis between humans and cattle is presented.  
Objective: To evaluate the reliability of meat inspection procedure in detecting carcasses of cattle with T. saginata cysticercosis.  
Methods: A total of 55 cattle divided into two groups of artificially (n =30) and naturally (n = 25) infested animals were utilized. Total dissection method was used as a gold standard of validity.  
Results: Meat inspection insensitively revealed cysticerci in 12 carcasses in each group compared with 24 and 23 carcasses revealed by total dissection in natural and artificial infestations, respectively. Sites of oncosphere invasion showed great variations with the two groups of cattle. In the predilection sites, most cysticerci were found in the heart, Triceps brachii, tongue and head muscles in that order. However, non-predilection sites (neck and back, hind limbs, chest, pelvic and lumbar regions, lungs and liver) considerably harboured high numbers of cysticerci. Observations indicated that except for the dead, degenerate or calcified cysticerci a careless meat inspector will most likely miss out quite a number of viable cysticerci, which blend the pinkish-red colour of the meat and be passed on for human consumption, becoming the source of bovine cysticercosis.  
Conclusions: The results confirmed that in spite of the time and efforts taken by meat inspectors looking for cysticerci at specified predilection sites of carcasses, this method is insensitive and inaccurate. To effectively improve meat inspection procedures, there is need to increase the area and number of predilection sites observed during inspection and vary them according to the nature of the animals, their husbandry history and the target human population for consumption. In addition, other control approaches such as vaccination, chemotherapy and immunodiagnosis should be developed and implemented to complement meat inspection procedures.  
African Health Sciences 2003 3(2); 68-76

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 The cardiotonic effect of the crude ethanolic extract of Nerium oleander in the isolated guinea pig hearts  
 . Vol. 3 No. 2 (2003).   
Abstract  
 Cardiovascular diseases are increasingly becoming one of the leading diseases causing morbidity and mortality in Uganda. Ethnographic evidence suggests that these diseases are often first managed by indigenous and related herbs before patients are referred for allopathic forms of management. One such herb of interest is Nerium oleander. Therefore the crude ethanolic extracts of the dried leaves of this herb were tested against the following parameters in the isolated guinea pig hearts: force of contraction, heart rate and cardiac flow. The extracts brought about dose-dependent increases in all these parameters from their baseline readings. Compared with graded doses of digoxin the effects closely mirrored the activities in a dose dependent manner. At the mechanism of action level, it would appear the extract works in the same as digoxin since their dose-contraction-reponse curves are parallel. This finding would tend to provide a strong rationale for the herb's traditional use in cardiovascular illness.  
African Health Sciences 2003 3(2); 77-82

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 Ocular manifestations in paediatric HIV/AIDS patients in Mulago Hospital, Uganda  
 . Vol. 3 No. 2 (2003).   
Abstract  
 Background: In Uganda the prevalence of HIV averages 12% as was reported to the STD/AIDS control surveillance unit. In Uganda there are approximately 30,000 HIV infected infants per year. The burden of HIV disease is high in Uganda and patients present with ocular complications. However, there is paucity of information and knowledge concerning ocular manifestations in the paediatric HIV/AIDS population and how they may differ from those of adults.  
Objectives : To describe the ocular manifestations of HIV/AIDS infection in an African paediatric population. Generally the study will record the external ocular manifestations seen but specifically to document the intra-ocular lesions, in particular the retinal changes associated with paediatric HIV/AIDS.  
Design: A cross-sectional hospital based study.  
Setting: The study was conducted at the Paediatric Infectious Disease Clinic at Upper Mulago Hospital, in Kampala, Uganda.  
Patients: Patients are those with positive HIV sero status, with or without symptoms and signs of AIDS. Parents/caretakers of the children were interviewed to obtain the socio-demographic data of the patients and a general physical as well as an ophthalmic examination were conducted to document any ocular problems.  
Results: A total of 158 HIV-infected children were examined. The overall rate of ophthalmic involvement was 35%. The most common finding was a non-purulent conjuctivitis, observed in 12% of the patients, followed by perivasculitis of the peripheral retinal vessels, in 12 % of patients and molluscum contagiosum.  
African Health Sciences 2003 3(2); 83-86

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 Community pharmaceutical care: an 8-month critical review of two pharmacies in Kampala  
 . Vol. 3 No. 2 (2003).   
Abstract  
 Background: The concept of pharmaceutical care is neither well developed nor adequately documented in Uganda.  
Objectives: This study is therefore an attempt to identify and quantify the various service components of community pharmacy practice in Kampala, Uganda's capital city.  
Setting: Two pharmacies operating retail outlets were chosen out of about 110 in Kampala. The city itself is fairly small with a rather congested population. It is Uganda's economic hub with the greatest number of private sector health facilities and pharmacy outlets.  
Methods: This study involved an 8-month observation period at the two pharmacies, combined with a data collection form to record demographic characteristics of respondents and parameters such as self-medication, pharmacy initiated therapy, prescription filling, patient/non-patient clients and treatment received.  
Results: 567 observations were made. Missing data for parameters studied were omitted during analysis, thus yielding different totals for the various sets of variables. Just less than half of 564 respondents (44.3%), were females compared to males (55.7%). The study found that clients over the age of 12 years seeking pharmaceutical services were 8-fold (93.1%) more likely to be the very patients compared to children (OR = 8.3; 95% CI, 3.7-18.7). Slightly ove r thirty percent of respondents (32.3%) were third party patients. About fifteen percent (14.7%) of respondents came to fill prescriptions, 28.8% to receive pharmacy-initiated therapy and 56.5% came for self-medication with all drugs including antibiotics at 22.4%. Most clients (75.2%) received treatment.The availability of a drug at the pharmacy was found to be a significant predictor of whether treatment was received, with the client age acting as a confounding variable (OR = 59.7; 95% CI 25.9-137.6).  
African Health Sciences 2003 3(2); 87-93

Cole P Dodge;;;Facilitator/Advisor, Makerere University;;;;;Nelson Sewankambo;;;Dean of the Faculty of Medicine, Makerere University;;;;;Edward Kanyesigye;;;Head, Human Resource Division, Ministry of Health, Kampala.   
 SPECIAL ARTICLE: Participatory planning for the transformation of the Faculty of Medicine into a College of Health Sciences  
 . Vol. 3 No. 2 (2003).   
Abstract  
 No abstract  
African Health Sciences 2003 3(2); 94-101

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 Scaling the frontier - should traditional birth attendants also be used to provide nevirapine for PMTCT in Uganda?  
 . Vol. 3 No. 2 (2003).   
Abstract  
 no abstract  
  
African Health Sciences 2003 3(2); 102-103

JK Tumwine.   
Editorial It's now official: we are on MEDLINE and Index Medicus  
 . Vol. 3 No. 1 (2003).   
Abstract  
 (African Health Sciences: 2003: 3(1): 1-2)

JK Tumwine.   
Editorial Sexual behaviour  
 . Vol. 3 No. 3 (2003).   
Abstract  
 (African Health Sciences: 2003 3(3): 106-107)

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 Has the HIV/AIDS epidemic changed sexual behaviour of high risk groups in Uganda?  
 . Vol. 3 No. 3 (2003).   
Abstract  
Background: Uganda, was the first country in sub-Saharan Africa to reverse its HIV/AIDS epidemic. Long distance drivers, prostitutes and barmaids have been identified as the groups that engage in risky sex, which promotes HIV transmission in Uganda and other countries across the continent. This paper investigates whether and why there were changes of sexual behaviour and practices among five risky groups in Uganda as a consequence of HIV/AIDS epidemic.  
Methodology: The paper is based on data generated from a survey on ‘resistance to sexual behaviour change in the African AIDS epidemic', which was conducted in the districts of Kabale, Kampala and Lira in 1999. For purposes of this paper, only data from the focus group discussions with high-risk groups have been analysed. These include commercial sex workers, street children, long haul truck drivers, bar maids and adolescents in three towns of Uganda (Kabale, Kampala, Lira).  
Results:Results indicate that despite the HIV/AIDS epidemic, these groups had only changed their sexual behaviour a little, and they reported to be continuing with multiple sexual partners for a variety of reasons. The adolescents and street children were under peer pressure and a lot of sexual urge; commercial sex workers and bar maids attributed their risky behaviour to the need to survive due to the existing poverty; and the truck drivers reflected on the need for female company to reduce their stress while on the long lonely travels across Africa. Nevertheless, they are all aware and perceive people with multiple sexual partners as being highly vulnerable to contracting HIV and they all reported to have adopted condom use as an HIV preventive strategy. They also observed that married people were at a high risk of contracting HIV due to non-use of condoms in marital relationships and unfaithfulness of spouses.  
Conclusions: Females engage in high-risk sexual relations as a means of economic survival, and perceive their acts as a strategy to improve their socio-economic well being. On the contrary, men in these high-risk categories do such acts out of pleasure and as avenues for attaining fulfilled sexual lives. The search for money among women and the constant desire for men to have sexual pleasure, which are greatly facilitated by their financial status are the forces behind reckless sexual behaviour among high-risk groups.  
(African Health Sciences: 2003 3(3): 107-116)

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 Sexual practices of women within six months of childbirth in Mulago hospital, Uganda  
 . Vol. 3 No. 3 (2003).   
Abstract  
Objectives: To establish the sexual practices and their associated morbidity among women within 6 months of childbirth in Kampala Uganda.  
Design: Cross-sectional descriptive study.  
  
Setting: The three Mulago hospital child immunization clinics.  
  
Participants: Two hundred and seventeen eligible mothers took part in the study from November to December 2001.   
  
Outcome measures: Time to resumption of sexual intercourse after childbirth, reasons for resumption and problems associated with it.  
  
Methods: Partially coded questionnaires  
Results: Sexual intercourse was resumed by 66.4% of the women within six months of childbirth. Of these 49.3% did so during the puerperium. The main reasons for early resumption of sexual intercourse were husbands' demands, cultural demands and inherent inability to do without sexual intercourse but not level of education of mothers. Of the mothers who resumed sexual intercourse 22.2% had sexual problems. The problems included vaginal pain (62.5%), discharge (18.8%), bleeding (15.6%) and bruises or tears (3.1%). Perineal or genital damage at the time of delivery was not associated with a delayed resumption of sexual intercourse with (OR1.08, 95% CI 0.51-2.30). Of those who had sexual intercourse and had problems only 59.4% sought medical assistance. The reasons for not resuming sexual intercourse within six months of delivery included advise from health workers (38.4%), husbands were away (21.9%), no interest (21.9%) and not feeling well(17.8%).  
Conclusion: Most women resumed sexual intercourse within six months of childbirth and had high morbidity. There is need for appropriate postpartum sexual practice advice.  
(African Health Sciences: 2003 3(3): 117-124)

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 Acute toxicity effects of the methanolic extract of Fagara zanthoxyloides (Lam.) root-bark  
 . Vol. 3 No. 3 (2003).   
Abstract  
Background: Fagara zanthoxyloides is a well known medicinal plant in Uganda. It is used extensively in malaria and other infections. However nothing is known about its toxicity.  
Objective: The objective of the study was to evaluate the acute toxicity of the methanolic extract of the root-bark of F. zanthoxyloides, in mice.  
  
Methods: Methanolic extract of the root-bark of the plant was administered orally to mice at various dose levels to determine the acute toxic effects and the median lethal dose (LD50) in mice.  
Results: The LD50 of the methanolic extract was found to be5.0 g/Kg body weight within 95 % confidence limits. The mice showed signs of cerebral irritation before dying. Histopathological examinations of the viscera showed congestion and focal necrosis of the liver and renal tubules.  
Conclusion: It was concluded that the extract of F. zanthoxyloides is safe, however the cerebral mechanism that lead to the death of the mice need to be investigated further.  
(African Health Sciences: 2003 3(3): 124-126)

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 Imaging features of brain tuberculoma in Tanzania: case report and literature review  
 . Vol. 3 No. 3 (2003).   
Abstract  
 Brain tubercluomas are a rare manifestation of mycobacterium tuberculosis infection usually resulting from hematogenous spread of the bacteria from a primary focus elsewhere in the body. A 29-year-old female with no history of pulmonary tuberculosis or signs of pulmonary infection presented with signs and symptoms of raised intracranial pressure.  
  
She underwent CT and MR imaging where multiple enhancing lesions were revealed in the brain parenchyma. The features of tuberculoma on CT and MR imaging may mimic the appearance of several other brain lesions. Histological diagnosis of tuberculoma was obtained. In areas where tuberculosis is endemic, the imaging features of brain tuberculoma have to be readily recognized by attending doctors.  
(African Health Sciences: 2003 3(3): 131-135)

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 Nutritional update: relevance to maternal and child health in East Africa  
 . Vol. 3 No. 3 (2003).   
Abstract  
 In this review of recent advances in nutrition, we shall follow the ‘life cycle' with special attention to maternal and foetal nutrition, linear growth, and nutritional assessment. We also consider nutrition, infection and micronutrients, and recent concepts of the pathophysiology and management of protein energy malnutrition PEM.  
(African Health Sciences: 2003 3(3): 136-145)

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 Adequacy and efficiency of nursing staff in a child-welfare-clinic at Umtata General Hospital, South Africa  
 . Vol. 3 No. 3 (2003).   
Abstract  
 Background: South Africa has a serious shortage of human and financial resources to provide primary healthcare services especially in the historically under-served areas. It is a tedious task to carry out healthcare delivery for the masses without rationalizing human resources in the form of re-allocation and re-deployment of healthcare personnel. This study aimed to establish the level of adequacy and efficiency of nursing staff in the former Transkei region. The study was carried out in the child and family welfare clinic of the Umtata General Hospital.  
Objective: To assess adequacy and efficiency of nursing staff in a child welfare clinic.  
Method: This was a retrospective study. The workload of two nurses allocated to the child welfare clinic at Umtata General Hospital South Africa was calculated based on the patient numbers and hours of work per week. Calculations excluded time breaks for tea, lunch and annual leave. This work load was compared to the norms of standard examination time that is 12 minutes per patient obtained from the sub directorate of Natalia Office of the Department of Health. Information regarding number of patients attended to by the nurses and their disease conditions was obtained from retrospective review of hospital records.   
Results: While each nurse was on duty for 8 hours per day each had only 6 reproductive hours. The two nurses examined only 310 patients giving staff utilization of 2.46% (i.e. 310/12600) and adequacy of staff of 0.0492 or 310/6300.  
Conclusion: There is under-utilization of the staff in Umtata General Hospital, South Africa.   
Recommendation: To increase utilization of the nurses a process of sharing and merging with a clinic or a ward with similar type of work is recommended.   
Keywords: Efficiency, adequacy, utilization, re-allocation, and re-deployment.  
African Health Sciences 2003; 3(3): 127 - 130

James K Tumwine.   
 Editorial: New challenges and opportunities in health and development in Africa  
 . Vol. 4 No. 1 (2004). No abstract

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 Vitamin A deficiency among Moroccan women and children  
 . Vol. 4 No. 1 (2004).   
Abstract  
 Background: Vitamin A deficiency (VAD), attributable to an inadequate food intake, constitutes a problem in developing countries. The determination of plasma vitamin A (VA) is a reliable method for assessing VA status of the population. In this context, high performance liquid chromatography (HPLC) has become the method of choice for VA analysis.   
Objectives: We describe the VAD profile of Moroccan children and women, obtained by specific HPLC analysis of VA.   
Subjects and Methods: The study involved 2457 participants: 1453 children and 1004 women from different areas of Morocco. Vitamin A was assessed by HPLC. Validation was conducted by comparison of the analysis of VA achieved in two laboratories.   
Results: The prevalence of VAD in children (n = 1453) was 40.4% [37.8% - 43.0%] against 10.9 % [8.4% - 14.1%] of women in the Gharb (n = 494) and 6.3 % [4.4% - 8.8%] in women of Doukkala (n = 510). The VA distribution of the children was low compared to distributions among women. Children had significantly lower VA levels (0.773 ± 0.252 µmol/l) than women of Gharb (1.17 ± 0.43 µmol/l) and women of Doukkala (1.308 ± 0.453 µmol/l). Analytical performance was good: the reproducibility and recovery rates were respectively 1.97 % and 98.7 ± 3.1 %. The comparison of the mean VA and the cases of VAD obtained by the two laboratories showed no significant difference.   
Conclusion: Vitamin A deficiency is severe among children and moderate among women. The absence of the stratum having comfortable averages in vitamina A (plasma VA>3.49µmol/l) indicates likely inadequate alimentary habits for a suitable vitamin A intake. The use of HPLC analysis of vitamin A, on a large scale for the first time in Morocco, has demonstrated that vitamin A deficiency is a public health problem. The recycling of mobile phase has reduced the costs of HPLC. This analytical method is useful in the evaluation of intervention programs against vitamin A deficiency and in future epidemiological studies.   
African Health Sciences 2004; 4(1): 3-8

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 Maternal and fetal outcome of gestational diabetes mellitus in Mulago Hospital, Uganda  
 . Vol. 4 No. 1 (2004).   
Abstract  
 Objective: To determine the maternal and foetal outcomes in mothers with gestational diabetes mellitus attending antenatal clinics in Mulago Hospital Kampala Uganda.  
 Design: This was a cohort study.  
 Setting: Mulago Hospital antenatal clinics.  
 Participants: Ninety mothers with gestational ages between 24-32 weeks were recruited from April to September 2001.They were followed up to the time of delivery. The WHO criterion for the diagnosis of gestational diabetes was used. Thirty mothers with a 2 hrs post prandial capillary blood sugar more than 140 mg/dl were the exposed group and 60 mothers with less than 140 mg/ dl were the unexposed group. Blood sugar was measured using a one touch glucometer.   
Outcome variables: Socio demographic characteristics, maternal complications, mode of delivery and the foetal outcomes.   
Results: The mean age of mothers in both groups was similar: 28.6 years vs 27.5 years. Both groups had similar body mass index more than 26. The mothers with gestational diabetes mellitus (GDM) were four times more likely to have hypertensive disease(p=0.04) and nine times more likely to have vaginal candidiasis(p=0.002). The modes of delivery were similar in both groups but genital injuries were more common among mothers with GDM. The indications of Caesarian section in mothers with GDM were two times more likely to be due to big babies and obstructed labour. The babies for mothers with GDM were more likely to be macrocosmic, still born, and have shoulder dystocia than those of normal mothers.  
Conclusion: Gestational diabetes mellitus exists in Uganda and is associated with adverse maternal and foetal outcomes. There is need to routinely screen mothers for gestational diabetes in this environment.   
African Health Sciences 2004; 4(1): 9-14

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 Salivary gland tumors in Uganda: clinical pathological study  
 . Vol. 4 No. 1 (2004).   
Abstract  
 Background: The incidence of salivary gland tumors is claimed to be influenced by geographical and racial factors. The pathological classification and nomenclature of salivary gland tumors as defined by WHO classification (1991), is accepted world-wide but little is available in the literature regarding the spectrum of salivary gland tumors in Africa in the basis of this classification. Such efforts would allow comparison and justify any differences between the black African population and the rest of the world.  
 Objective: To outline the clinicopathological features of salivary gland tumors in Uganda. Setting: Makerere University, Faculty of Medicine, Department of Pathology.   
Methods: All epithelial tumors from major and minor salivary glands accessioned from 1979 to 1988 were analyzed in respect to sex and age of patients, anatomical location of the tumor and histological type. The histological diagnosis of each individual tumor was based on the 1991 WHO classification of salivary gland tumors.  
 Results: During the span of 10 years, 268 cases of salivary gland tumors were diagnosed. Of these, 113 (42.2%) were males, 148 (55.2%) females and in the remaining seven (2.6%) cases, the sex was not specified. The age range of the 247 patients with recorded ages was from 0.5 to 80 years. The mean age at diagnosis was 38.1 (SD =17.03) with the median of 38.0 years. Thirty four percent of tumors originated from the parotid, 33.2% from the submandibular and 32.8% from minor salivary glands. No tumor was implicated from the sublingual gland. There were a total of 125 (46.6%) malignant tumors and 143 (53.4%) benign tumors. The mean age of patients with malignant lesions (43.1 years; SD=16.75; median=44.00 years) was 9.6 years older than those with benign tumors (mean=33.5 years; SD=16.0; median=30.00 years). Pleomorphic adenoma was the most common benign tumor (74.8%), followed by myoepithelioma (9.8%). No Whartin's tumor was encountered. The malignant tumors were dominated by adenoid cystic carcinoma (28.8%) followed by mucoepidermoid carcinoma (21.6%).   
Conclusion: The pattern of distribution of salivary gland tumors in black African population seems to differ from that of Western series in that; i) females are more affected than males, ii) there is a low proportion of tumors from the parotid gland and high proportion of tumors from the submandibular and minor salivary glands, iii) the parotid and minor salivary gland tumors have more probability of being malignant than those tumors from the submandibular gland iv) the newly categorized pathological entities are common and v) Whartin's tumor is extremely rare in black African population.   
African Health Sciences 2004; 4(1): 15-23

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;Netherlands, and Graduate School of Social Work, University of Houston, Houston, Texas, 77204-4013, USA.   
 Temperament characteristics of street and non-street children in Eldoret, Kenya  
 . Vol. 4 No. 1 (2004).   
Abstract  
 Objective: To examine the interaction of temperament and environment and how these impact on the psychological function of street children and non-street children in Eldoret Kenya.   
Method: This was a cross-sectional study conducted in Eldoret town. A Revised Dimensions of Temperament Survey (DOTSR) a 54 item, factor-analytically-developed self-report instrument that measures nine temperament dimensions was used.   
Results: The statistical analysis showed that the largest significant level was on the approach/withdrawal dimension (F = 12.38, p<.001) the activity level-sleep (F = 4.20, p<.01) and the task orientation (F = 3.62, p<.01) dimensions were next in rank in terms of significance. The highest mean score on activity level-general (17.88) and the activity level-sleep (9.65) were in the “of” the street children that is consistent with their scavenging lifestyle and sleeping patterns. They have to be vigilant when sleeping on shop verandas, run down buildings, and trash-bins.   
Conclusion: These results support earlier research on street children. Counter to public opinion and hostility, the children are resilient, adaptable and flexibile in the face of adversity and remaining well adjusted as individuals.   
African Health Sciences 2004; 4(1): 24-30

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 Health Providers' Counselling of Caregivers in the Integrated Management of Childhood Illness (IMCI) Programme in Uganda  
 . Vol. 4 No. 1 (2004).   
Abstract  
 Background: IMCI was launched in Uganda in June 1995 and has so far been implemented in most districts. However, reports indicate that counselling is poorly performed and that health providers find IMCI counselling the most difficult component to implement.   
Objectives: The study was carried out to assess IMCI-trained health providers' counselling of caregivers and to determine factors that facilitate or constrain counselling.   
Methods: A cross-sectional study utilizing quantitative and qualitative methods was carried out in 2000 in 19 health units in Mukono District. The study involved 37 health providers in 161 IMCI counselling sessions.   
Results: Health providers performed well in assessing the child's problem (85%); listening (100%); use of simple language (95%); use of kind tone of voice (99%); showing interest in caregivers (99%); giving feeding advice (76%); and giving advice on return immediately (78%), for follow up (75%), and for immunization (97%). Performance was poor in praising the caregivers (43%); asking feeding questions (65%); explaining feeding problems (50%); explaining health problems (62%); advising on fluid intake (44%); advising on medication (61%), and using mothers' cards (44%). Most health providers (99%) did not address caregivers' health problems. Cadre of health provider, IMCI experience, number of supervisory visits and praise of health provider were independent predictors of using mothers' cards, advising on medication, inviting questions from caregivers, and advising on fluid intake respectively. Twelve percent of the children were referred but most health facilities did not have drugs to treat the children before referring them.  
 Conclusions: The performance of health providers was good in 9 out of 20 IMCI counselling items, and cadre of health provider, IMCI experience, number of supervisory visits and praise of health provider were associated with IMCI counselling. Improvements in IMCI counselling could be achieved through emphasis on use of IMCI job aids; strengthening support supervision and providing positive feedback to health providers. The issue of availability of pre-referral drugs should be addressed by ensuring that these drugs are part of the essential drug kit. Finally, health providers should be trained and encouraged to address the health of the caregivers as well.   
Keywords: Child, preschool; infant; health-provider; caregiver; counselling; IMCI-counselling; Uganda  
 African Health Sciences 2004; 4(1): 31-39

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 Gender issues in contraceptive use among educated women in Edo state, Nigeria  
 . Vol. 4 No. 1 (2004).   
Abstract  
 Background: While traditional contraception is widely used, in southern Nigerian modern contraception is a relatively recent phenomenon. Modern contraception is more wide spread among the educated and sexually active youth in Nigeria. Few studies have been done on contraception among educated women in Nigeria   
Objectives: This study was carried out in December 2000 to determine factors that influence the choice of contraceptives among female undergraduates at the University of Benin and Edo State University Ekpoma. Methods: Data was collected from a sample of 800 female undergraduates matched ethnic group, socio economic status, religion and rural urban residence. Subjects were selected by proportional representation and the instrument used was closed ended questionnaire.   
Results: The responses obtained were analysed using Spearman Rank Correlation co-efficient and regression analysis. Findings revealed the highest correlation for availability (r = .96) vis a vis the use of various types of artificial contraceptive and cost (r =.96), next was safety (r = .95) and effectiveness (r = .95). Others were peer group influence (r = .80) and convenience (r = .77).   
Conclusion: An important step in improving women's reproductive health is the involvement of men. Health programmes should conduct campaigns to educate men about reproductive health and the role they can assume in family planning.   
African Health Sciences 2004; 4(1) 40- 49

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 Manifestations, Quality of Emergency Care and Outcome of Severe Malaria in Mulago Hospital, Uganda  
 . Vol. 4 No. 1 (2004).   
Abstract  
 Background: About 100,000 children die annually from severe malaria in Uganda and more than 75% of health unit based deaths occur within 24 hours of admission. Most of these deaths are associated with poor resuscitation systems, delays within the units by health workers and lack of essential drugs and supplies.  
Objective: To describe the manifestations and quality of care children with severe malaria receive in Mulago Hospital Paediatric emergency unit and evaluate its impact on outcome.  
Methods: A cohort of 784 children with severe malaria was recruited at admission and followed up. Selected measures of quality were the exposure factor and death, the outcome measure.  
Results: Only 22.5% of the children were brought at night. The commonest defining manifestations were severe anaemia (39.4%), respiratory distress (17.1%), multiple generalized convulsions (13.3%), hypoglycaemia (11.4%) and cerebral malaria (7.2%). Over 50% lacked an essential drug or supply needed for resuscitation and 23.4% were seen within 1 hour of arrival. Commonly lacking items were intravenous cannulae (53.1%) syringes (23.3%) and blood transfusion sets (15.0%). Children brought at night took a shorter time before being seen by a doctor (1.9 SD 2.4 vs 2.5 SD 2.0 hours, p=0.002), received the first dose of quinine earlier (4.1 SD 3.2 vs 5.2 SD 3.2 hours, p<0.0001), fewer lacked essential drugs and supplies (45% vs 57.9%, p=0.003) and fewer died (0.6% vs 3.8%, p=0.028). Children who lacked an item for resuscitation took 30 minutes longer to receive the first dose of quinine. Caretaker satisfaction was predictive of mortality in the unit.  
Conclusions: Quality of care for severe malaria in Mulago paediatric emergency unit is still poor although nighttime services are comparatively better. Caretakers buy at least one resuscitation item in over 50% of cases and their level of satisfaction is predictive of mortality.  
Recommendations: The unit should set targets for quality improvement to include increased staffing and supplies, a time limit within which children should be seen and measures of decongestion. Determination of blood sugar in patients with severe malaria should be made a basic requirement.  
African Health Sciences Vol.4(1) 2004: 50-57

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 Treatment of fissure in ano-revisited  
 . Vol. 4 No. 1 (2004).   
Abstract  
 Introduction: Fissure in ano is a troubling and painful condition that affects a great majority of the population world over. The nature and anatomy of fissure in ano is quite clear, and much is known about the various predisposing and contributing factors that lead to initiation and progression of the disease. The preferred method of treating them, one that results in optimal clinical results and the least pain and inconvenience to the patient, however, has been open to debate.  
Methods: This paper outlines a brief account of the present scenario of different techniques available for the treatment of chronic anal fissure.  
Conclusion: Medical manipulation of the internal sphincter should be a first-line treatment in anal fissure. When this fails or fissures recur, lateral subcutaneous internal sphincterotomy should be the preferred options for the treatment of chronic fissure in ano. Nevertheless, all the option should be presented to the patient with complete information about the method, cure rates, complications, and recurrence of the disease.  
Key Words: fissure-in-ano, sphincterotomy, recurrence, anal spasm  
African Health Sciences Vol.4(1) 2004: 58-62

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 Moyer's method of mixed dentition analysis: a meta-analysis  
 . Vol. 4 No. 1 (2004).   
Abstract  
 Background: Mixed dentition analysis forms an essential part of an orthodontic assessment. Moyer's method which is commonly used for this analysis is based on data derived from a Caucasian population. The applicability of tables derived from the data Moyer used to other ethnic groups has been doubted. However no meta-analyses have been done to statistically prove this.  
Objective: To assess the applicability of Moyer's method in different ethnic groups.  
Study design: A meta-analysis of studies done on other populations using Moyer's method.  
Method: The seven articles included in this study were identified by a literature search of Medline (1966-June 2003) using predetermined key words, inclusion and exclusion criteria. 195 articles were reviewed and meta-analyzed.  
Results: Overall the correlation coefficients were found to be borderline in variation with a p-value of 0.05. Separation of the articles into Caucasian and Asian groups also gave borderline p-values of 0.05.  
Conclusion Variation in the correlation coefficients of different populations using Moyer's method may fall either side. This implies that Moyer's method of prediction may have population variations. For one to be sure of the accuracy while using Moyer's method it may be safer to develop prediction tables for specific populations. Thus Moyer's method cannot universally be applied without question.  
Key Words: meta-analysis, mixed dentition analysis, Moyer's method   
African Health Sciences Vol.4(1) 2004: 63-66

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 Gender inequality and domestic violence: implications for human immunodeficiency virus (HIV) prevention  
 . Vol. 4 No. 1 (2004).   
Abstract  
 Domestic violence and human immunodeficiency virus (HIV) infection are problems of great public health worldwide, especially sub-Saharan Africa and much of the developing countries. This is due to their far reaching social, economic and public health consequences. The two problems have gender inequality and gender power imbalances as the driving force behind the “epidemics”. HIV infection is mainly acquired through heterosexual relations, which themselves are greatly influenced by socio-cultural factors, underlying which are gender power imbalances. Unfortunately gender relations, and gender issues in general, have not been given much emphasis in the medical perspective, especially in efforts for prevention and control of HIV infection. There is thus a need to mainstream gender relations in reproductive health. This article aims at emphasizing the intersection between domestic violence, gender inequality and HIV infection.  
African Health Sciences Vol.4(1) 2004: 67-70

Charles Wendo;;;The New Vision Printing and Publishing Corporation, Kampala, Uganda.   
 From cardiothoracic surgeon to village health advocate  
 . Vol. 4 No. 1 (2004).   
Abstract  
 Uganda's Director General of Health Services, Prof. Francis Omaswa says that abolition of user fees in his country has enabled more people to access health services. “Development partners now agree that it was a mistake to require people to pay for health services ... the rest of the world should go that way”  
From high tech practice in the UK and Nairobi, Prof Omaswa established a model rural operation theatre in a poor rural area in Ngora, Eastern Uganda that became the envy of East Africa. He established model village health teams to provide the backbone of a district health system. When he became the head of Uganda's ministry of health he pushed for these teams country wide. This, together with President Museveni's open and multi sectoral approach to the HIV/AIDS epidemic, has contributed to Uganda's success story: HIV prevalence rates have plummeted from 30% to 5%.  
Charles Wendo caught up with him and gives a rare glimpse into this remarkable son of Africa: surgeon, public health advocate with rare leadership skills.  
African Health Sciences Vol.4(1) 2004: 71-74

Antoine Loutfi;;;Associate Professor of Surgery and Oncology, Department of Surgery, McGill University, Montreal, Quebec.   
 Book Review: Surgical care at the district hospital. World Health Organization  
 . Vol. 4 No. 1 (2004).   
Abstract  
 No abstract available  
African Health Sciences Vol.4(1) 2004: 75-75

James K Tumwine.   
 Editor's choice: Post traumatic stress, HIV and malaria: contemporary issues explored in depth  
 . Vol. 4 No. 2 (2004).   
Abstract  
 No Abstract available  
African Health Sciences Vol.4(2) 2004: 79-79

Seggane Musisi;;;Department of Psychiatry, Makerere University Medical School & Mulago Hospital.   
 Editorial: Mass trauma and mental health in Africa  
 . Vol. 4 No. 2 (2004).   
Abstract  
 No Abstract Available  
African Health Sciences Vol.4(2) 2004: 80-82

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 Traumatic events and symptoms of post-traumatic stress disorder amongst Sudanese nationals, refugees and Ugandans in the West Nile  
 . Vol. 4 No. 2 (2004).   
Abstract  
 Objectives: To compare the incidence of traumatic events and its association with symptoms of post-traumatic stress disorder in three population groups in northern Uganda and southern Sudan.  
Methods: Household and individual level data collected through a single-round cross-sectional demographic survey.  
Setting: The sub-counties of Yivu, Odupi and Midia in the northern Ugandan district of Arua and of Otogo in Yei River district in southern Sudan.  
Participants: Residents of these Ugandan and Sudanese sub-counties were categorized on the basis of citizenship and refugee status (i.e. as Ugandan nationals, Sudanese nationals or Sudanese refugees). The random sample population consisted of 3,323 adults (mean age: 30 years; 75% female) from 1,831 national and refugee households.  
Results: Sudanese refugees reported the highest number of violent events experienced or witnessed ever and in the past one year. Witnessing of traumatic events, ever and in the past year, significantly predicted PTSD in surveyed population. Sex, age, education and occupation were also significantly associated with the development of PTSD symptoms. The population prevalence of PTSD was estimated to be 48% for Sudanese stayees, 46% for Sudanese refugees and 18% for Ugandan nationals.  
Conclusions: Symptoms of PTSD in war-affected Sudanese populations can be partly explained by traumatic event exposures. The high prevalence of violence and symptoms of PTSD in refugee populations highlight the need for better protection and security in refugee settlements. Humanitarian agencies must consider the provision of mental health services for populations affected by war and forced migration.   
Key Words: forced migration, traumatic events, post-traumatic stress disorder, PTSD, Uganda, Sudan, refugees  
African Health Sciences Vol.4(2) 2004: 83-93

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 Total lymphocyte count of 1200 is not a sensitive predictor of CD4 lymphocyte count among patients with HIV disease in Kampala, Uganda  
 . Vol. 4 No. 2 (2004).   
Abstract  
 Introduction: Total Lymphocyte Count (TLC) has been found to be an inexpensive and useful marker for staging disease, predicting progression to AIDS and death and monitoring response to ART. However, the correlation between TLC and CD4 has not been consistent. Access to HAART is expanding in Kampala, Uganda, yet there are no published data evaluating the utility of TLC as inexpensive surrogate marker of CD4 cell count to help guide therapeutic decisions.  
Objective: To evaluate clinical illnesses and total lymphocyte count (TLC) as surrogate markers of the CD4 cell count in HIV infected persons being considered for ART.  
Methods: A total of 131 patients were enrolled and evaluated by clinical assessment, TLC and CD4 count. Clinical illnesses and TLC dichotomized at various cut-point values were used to determine the sensitivity, specificity, and positive and negative predictive values (PPV and NPV) for the diagnosis of CD4 count <200 cells/mm3 among 100 participants fulfilling criteria for WHO clinical stage 2 and 3.  
Results: A strong correlation was observed between TLC and CD4 (r = 0.73, p<0.0001). For all clinical syndromes, except pulmonary tuberculosis, the positive predictive values (PPV) for a CD4 count <200 cells/mm3 were high (>80%) but the negative predictive values (NPV) were low. Using the WHO recommended TLC cut-off of 1200 cells/mm3 to diagnose a CD4 less than 200 cells/mm3, the PPV was 100%, and the NPV was 32%.  
Conclusion: Our data showed a good correlation between TLC and CD4 cell count. However, the WHO recommended TLC cut-off of 1200 did not identify the majority of WHO stage 2 and 3 patients with CD4 counts less than 200 cells/mm3. A more rational use of TLC counts is to treat all patients with WHO stage 2 and 3 who have a TLC <1200 and to limit CD4 counts to patients who are symptomatic but have TLC of >1200.   
Key Words: CD4 cell count, total lymphocyte count, clinical algorithm, antiretroviral therapy, resource limited settings   
African Health Sciences Vol.4(2) 2004: 94-101

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 “We have our own special language.” Language, sexuality and HIV / AIDS: a case study of youth in an urban township in South Africa  
 . Vol. 4 No. 2 (2004).   
Abstract  
 Background: Despite the fact that most South African youth know about HIV/AIDS and how it can be prevented, there is a high prevalence of HIV/AIDS amongst youth in South Africa. Generally youth do not practice safe sex, and youth sexuality is characterised by multiple sexual partners, not using condoms and transactional sex.  
Objectives: To minimize the risk of HIV infection, it is necessary to understand youth sexuality. In this paper I explore youth sexuality with a specific focus on how language influences sexuality.  
Methods: I use discourse analysis and qualitative research techniques. Purposive sampling, a form of non-probability sampling was used. I interviewed seventy youth individually or in groups and used in-depth semi-structured interviews.  
Results: The use of language influences youth sexuality. Youth have developed a specialised language to talk about sex and sexuality and this language has become part of the daily discourse, so that unsafe sexual practices become norms and are justified.  
Conclusions: The realm of language can be a creative way for peer and HIV/AIDS educators to work with youth towards creating a healthier sexuality. However, as language always occurs in a material context, it is also necessary to work towards changing the material environment, such as poverty. This environment not only facilitates the development of a particular language but it also encourages unsafe sexual practices such as transactional sex.  
African Health Sciences Vol.4(2) 2004: 102-108

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 Collaboration between the national tuberculosis programme and a non governmental organisation in TB/HIV care at a district level: experience from Tanzania  
 . Vol. 4 No. 2 (2004).   
Abstract  
 Background: The increase in tuberculosis and HIV/AIDS patients in many countries in Africa including Tanzania, is outstripping the ability of public health services to cope. This calls for a closer collaboration between tuberculosis programmes and other stakeholders involved in HIV/AIDS care.  
Objective: To determine the feasibility of establishing collaboration between the tuberculosis programme and an NGO in TB/ HIV care at a district level in Tanzania.  
Methods: Quantitative and qualitative study designs involving TB as well as HIV suspects and patients together with health workers, were conducted between December, 2001 and September, 2002.  
Results: A total of 72 patients and 28 key informants were involved. The collaboration was in the following areas; voluntary counselling and testing for HIV, diagnosis and treatment of TB, referral and follow up of patients and suspects, home based care, psychological support and training. Both the tuberculosis programme and NGO benefited from the collaboration. TB case detection among PLWA increased more than three folds and TB treatment was integrated in home based care of NGO. The main barriers identified in this study were; poor communication, poor referral system and lack of knowledge and skills among health staff.  
Conclusion: The study has shown that it is possible for a tuberculosis programme and a non governmental organisation to collaborate in TB/HIV care. The study has also identified potential areas of collaboration and barriers that needed to be overcome in order to provide such comprehensive services at a district level.   
Key Words: tuberculosis, Human Immunodeficiency Virus, collaboration, non governmental organisation, Tanzania   
African Health Sciences Vol.4(2) 2004: 109-114

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 Urinary schistosomiasis in Zimbabwean school children: predictors of morbidity  
 . Vol. 4 No. 2 (2004).   
Abstract  
 Background: The morbid effects of urinary bilharziasis are becoming more evident with the advent of sophisticated diagnostics such as ultrasound. However, such diagnosis of Schistosoma haematobium morbidity is often hampered by lack of funds, proper equipment, or training.  
Objective: We performed a cross-sectional investigation of schoolchildren in a highly endemic area of east central Zimbabwe in order to assess the utility of a number of simple clinical indicators to predict Schistosoma haematobium morbidity.  
Methods: Prevalence and intensity of S. haematobium infection was determined in 551 schoolchildren, with ultrasound examination of the kidneys and bladder performed on 222. The association of a number of demographic, parasitological, and clinical parameters with clinical outcome was evaluated.  
Results: Overall, 60% of the children were infected with S. haematobium. Although lacking specificity, proteinuria and parasite eggs count best predicted bladder pathology. Presence of kidney dilation was associated with fatigue and pain upon urination, but these variables were not very sensitive.  
Conclusions: None of the variables assessed were ideal predictors of morbidity. However, the results suggest that a combination of inexpensive, simple indicators may allow for improved targeting of S. haematobium treatment to those with severe morbidity and better monitoring of the progress of control campaigns when more expensive diagnostic methods are not available.  
African Health Sciences Vol.4(2) 2004: 115-118

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 Health-seeking behavior for malaria among child and adult headed households in Rakai district, Uganda  
 . Vol. 4 No. 2 (2004).   
Abstract  
 Background The number of orphans in Rakai district, Uganda is estimated to be 34,902 (OCBO, 2000) which translates into 28% of children under the age of 18 years. Young people who have been orphaned and as a result became heads of households must look after themselves and their siblings. These children are likely to be faced with several health problems and have to take crucial life decisions without parental/adult guidance.  
Objectives This study was conducted in order to understand how child-headed households, Rakai district in Uganda recognize malaria, their health-seeking behavior when malaria is suspected and reasons for the type of behavior compared to the adult-headed households.  
Methods A comparative cross-sectional study was conducted in 300 households in Rakai district, Uganda, in which 8/23 (35%) of sub-counties and 150 child-headed households were included. The closest neighborhood adult-headed household to each child-headed household was selected for comparison. Individual interview was carried out with the respondents using semi-structure questionnaire. Key informant interview and focus group discussions were also conducted.  
Results The main findings were that the respondents in child-headed households had less knowledge on signs and symptoms of simple and severe malaria compared to adult heads of households. Respondents in child-headed households were less likely to seek health care from health facilities (OR=0.59, CI=0.36-0.97, p-value=0.028). There was no significant difference in the time lag before taking first action in the two types of households (OR=0.72, CI=0.42-1.22, p-value=0.194). The respondents in child-headed households were six times (OR=5.70,CI=2.75-11.91, p-value<0.001) more likely to use local herb for treatment of malaria than the adult heads households. Major reasons stated by the respondents for choosing where health care is sought included distance to source of health care, cheap or free treatment, availability of drugs, and quick services to patients.  
Conclusion The respondents in child-headed households had less knowledge on signs and symptoms of simple and severe malaria and receive too little or late health care from health professionals compared to the adult heads of households probably due to lack of knowledge and money. Information Communication and Education programs should be designed and target the child-headed households and supply home packs.  
Key Words: health seeking behavior, child-headed households, adult-headed households, AIDS, orphans, Rakai, Uganda   
African Health Sciences Vol.4(2) 2004: 119-124

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 Alterations in fruit and vegetable β-carotene and vitamin C content caused by open-sun drying, visqueen-covered and polyethylene-covered solar-dryers  
 . Vol. 4 No. 2 (2004).   
Abstract  
 This study investigated the effects of three drying methods (open sun drying, visqueen-covered solar dryer and polyethylene-covered solar dryer) on β-carotene and vitamin C content of edible portions of mango fruit (Mangifera indica) and cowpea leaves (Vigna unguiculata). Commercial samples were analysed for vitamin C by titrimetry and β-carotene by spectrophotometery at 450nm. Differences in vitamin retention and loss associated with the three drying methods were assessed by analysis of variance and least significant difference (LSD) at (p<0.05. The fresh cowpea leaf β-carotene and vitamin C content was 140.9 and 164.3 mg / 100g DM respectively and decreased (p<0.05) with drying. Open sun drying method caused the greatest β-carotene and vitamin C loss (58% and 84% respectively), while the visqueen-covered solar dryer caused the least loss (34.5% and 71% respectively). Blanching cowpea leaves improved β-carotene and vitamin C retention by 15% and 7.5% respectively. The β-carotene and vitamin C content of fresh ripe mango fruit was 5.9 and 164.3 mg/100g DM respectively. Similar to effects on cowpea leaves, the mango micronutrient content decreased (p<0.05) with drying. The open sun drying method caused the greatest β-carotene (94.2%) and vitamin C (84.5%) loss, while the visqueen-covered solar dryer caused the least (73 and 53% respectively). These results show that the three solar drying methods cause significant loss of pro-vitamin A and vitamin C in dried fruits and vegetables. However, open sun drying causes the most loss and the visqueen-covered solar dryer the least, making the later a probable better drying technology for fruit and vegetable preservation. The drying technologies should be improved to enhance vitamin retention.  
African Health Sciences Vol.4(2) 2004: 125-130

annet Kutesa-Mutebi;;;Makerere University, Faculty of Medicine, Department of Dentistry;;;;;Yusuf I Osman;;;Dept of conservative Dentistry University of the Western Cape, CapeTown.   
 Effect of the ferrule on fracture resistance of teeth restored with prefabricted posts and composite cores  
 . Vol. 4 No. 2 (2004).   
Abstract  
 Background: The ferrule effect in root treated teeth requiring cast posts and cores has been shown to greatly improve fracture resistance. Studies have also shown that in the case of a cast post and core, the longer the ferrule, the greater the fracture resistance. However few studies have considered the effect of different ferrule designs on prefabricated post and composite core systems.  
Aim: This study investigated the effect of different ferrule designs on the fracture resistance of teeth incorporating prefabricated posts and composite cores. It also assessed the necessity of a post in the restoration of endodontically treated teeth.  
Methodology: Sixty-two extracted maxillary incisors (centrals and laterals) and canines were randomly assigned into three groups and restored. Two groups had a prefabricated post and composite core with varying ferrule designs. A third group had a core with composite packed into the root canal but no post. An Instron universal testing machine was used to apply compressive loads until failure occurred.  
Results: There was no significant difference amongst the three groups as regards fracture resistance. The two groups with prefabricated posts and composite core required a mean force of 931N, std ±283 and 931N, Std ±242 to fracture. The third with no post group required a mean force of 1036N, std ±269 to fracture.  
Conclusion: In the restoration of an anterior endodontically treated tooth with a prefabricated post and composite core and where there is at least 2 mm or more of remaining coronal dentine, a ferrule may not be necessary.  
Key Words: endodontically treated teeth, fracture resistance, preformed post, composite core, ferrule design, ferrule effect, ferrule length, shoulder, bevel, contra-bevel   
African Health Sciences Vol.4(2) 2004: 131-135

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 Reiters syndrome – a case report and review of literature  
 . Vol. 4 No. 2 (2004).   
Abstract  
 The occurrence of Reiter's Syndrome is rare and not commonly reported in Nigeria. This paper reports a case of a 35yr old male Nigerian with Reiter's Syndrome, occurring 1-2 weeks after a bout of a dysenteric illness. The patient presented with fever, conjunctivitis, dysentery, urethritis and arthralgia. The joint pains involved the left wrist (which was swollen), the right knee and ankle joints. The patient was managed conservatively. The case is presented with a view to documenting the occurrence of Reiter's Syndrome in an African Nigerian.  
Key Words: Reiters syndrome; Nigerian   
African Health Sciences Vol.4(2) 2004: 136-138

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 Spontaneous rupture of bladder in puerperium  
 . Vol. 4 No. 2 (2004).   
Abstract  
 Spontaneous rupture of bladder and extravasation of urine in the peritoneum without evidence of trauma is rare. This condition is an emergency. It presents in a unique way therefore, the diagnosis and treatment is usually delayed. This patient presented with an acute abdominal pain and oliguria. She had delivered normally eight days before re-admission. Investigations were done and an exploratory laparotomy was performed. There was a tear in the fundus of the bladder and the peritoneal cavity contained urine. Peritoneal lavage was done and the bladder was repaired in layers. She was put on continuous bladder drainage for three weeks followed by bladder training. The bladder resumed its normal function. Early diagnosis and appropriate management decreases the morbidity and mortality associated with this condition.  
African Health Sciences Vol.4(2) 2004: 138-139

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 Prevalence of hepatitis B virus (HBV) infection among Makerere University medical students  
 . Vol. 5 No. 2 (2005).   
Abstract  
 Background: Medical students in the course of their clinical work are at risk of acquiring hepatitis B virus (HBV) infection or transmitting it to their patients. HBV immunization for medical students in Uganda is recommended but not strictly enforced. It is important to assess the prevalence of HBV infection in medical students in order to improve on the interventions to control this infection among them.  
Objectives: The objective of the study was to assess the seroprevalence rates of HBsAg and anti-HBc among clinical and preclinical medical students.  
Methods: This was a cross-sectional study done over three months from November 2000 to January 2001 among Makerere University Medical students. A random sample of medical students was recruited from both the pre-clinical and clinical years. Blood samples from each participant were tested for HBsAg and anti-HBc.  
Results: The overall prevalence was 11.0% for HBsAg and 65.9% for anti HBc. Nine pre-clinical students (12.2%) were positive for HBsAg compared to 11 (10.2%) clinical students. This difference was not statistically significant. However, clinical students were more likely to have been exposed to HBV with 86 (79.6%) testing positive for anti-HBc compared to 34 (45.9%) among preclinical students (p-value <001). Risk factors associated HBV infection included having a sexual relationship, accidental needlestick injuries, and unprotected exposure to patients' body fluids.  
Conclusion: Medical students need to be offered more sensitization and support regarding prevention of HBV infection including vaccination and the use of universal precautions for infection control.  
African Health Sciences Vol.5(2) 2005: 93-98

James K Tumwine;;;Editor, African Health Sciences.   
 Editor\'s Choice: Tackling HIV, malaria, tuberculosis and others together  
 . Vol. 4 No. 3 (2004).   
Abstract  
 No Abstract Available  
African Health Sciences Vol.4(3) 2004: 143

Philipa Musoke;;;Department of Paediatrics and Child Health, Makerere University.   
 Recent advances in prevention of mother to child (PMTCT) of HIV  
 . Vol. 4 No. 3 (2004).   
Abstract  
 No Abstract Available  
African Health Sciences Vol.4(3) 2004: 144-145

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 Effectiveness of nevirapine and zidovudine in a pilot program for the prevention of mother-to-child transmission of HIV-1 in Uganda  
 . Vol. 4 No. 3 (2004).   
Abstract  
 Background: Single dose nevirapine and a short course of zidovudine (AZT) are now administered in most hospitals in Uganda to prevent mother-to-child transmission (MTCT) of HIV. The effectiveness of these antiretroviral (ARV) regimens has been shown in the clinical trials but has not been demonstrated outside the clinical trials setting in this country.  
Objectives: The study evaluated the effectiveness of short course ARV regimens in a pilot program to prevent mother-tochild transmission of HIV and determined the risk factors for perinatal transmission.  
Methods: Cross-sectional study design was used to compare perinatal transmission rates of HIV in two sets of mothers: ARV-treated mothers and ARV-untreated mothers.  
Results: 109 treated and 90 naïve mother-infant pairs were recruited. HIV transmission rates were similar in the nevirapine (10/61) and AZT (8/48) groups (16.4% vs. 16.7%) respectively but higher in the naïve group (43/90 48%, p= 0.0001). ARV therapy offers a protective effect against MTCT of HIV (Adjusted Odds Ratio 0.22 95%CI 0.09, 0.54) but mothers in Stage 1 and 2 of disease were more likely to benefit from this intervention than mothers in Stage 3 and 4.  
Conclusion: In this community-based observational study, ARV reduces the risk of perinatal transmission of HIV but does not eliminate the risk completely. Early screening of asymptomatic pregnant women will identify a group of mothers more likely to benefit from the intervention.  
Key Words: HIV-1, mother, child, transmission, antiretroviral therapy   
African Health Sciences Vol.4(3) 2004: 146-154

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 Likely stakeholders in the prevention of mother to child transmission of HIV/AIDS in Blantyre, Malawi  
 . Vol. 4 No. 3 (2004).   
Abstract  
 Objectives: To determine potential partners for pregnant women in the prevention of mother to child transmission of HIV and to determine pregnant women\'s perceptions towards selected potential HIV prevention efforts  
Design: Cross sectional, questionnaire-administered study  
Setting: Ante-natal clinics of eleven public health centers and the major referral and university teaching hospital of Queen Elizabeth Central Hospital (QECH) in Blantyre, Malawi  
Subjects: A total of 321 pregnant women attending ante-natal clinics  
Results: Antenatal women in Blantyre, Malawi obtain health information on HIV/AIDS from the radio (96.3%), health workers (82.2%), religious gatherings (66.7%), friends (54.8%) and newspapers (39.3%). The majority intend to be accompanied by own mother and sister for delivery (52.4% and 15.4% respectively). Almost all (99%) planned to breast feed with 91.8% reporting an intended breastfeeding period of at least 6 months. About 97% of married women reported desire to tell spouse in case of HIV sero-positive results while only 65.1% had ever discussed about HIV with spouse, and only 5.2% had ever attended antenatal clinic with spouse. Whether woman had ever discussed about HIV/AIDS with spouse or not did not influence desire to disclose HIV status to spouse.  
Conclusion: Close relatives, spouse and the media are important stakeholders in the health of pregnant women. Programs aimed at prevention of mother to child transmission of HIV should give serious consideration to these partners.  
Key Words: Mother-to-child transmission of HIV, anti-retrovirals   
African Health Sciences Vol.4(3) 2004: 155-159

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 Quality of care provided to febrile children presenting in rural private clinics on the Kenyan coast  
 . Vol. 4 No. 3 (2004).   
Abstract  
 Background: Private sector health facilities are diverse in nature, and offer widely varying quality of care (QOC).  
Objectives: The study aimed to describe the QOC provided to febrile children at rural private clinics on the Kenyan coast and stakeholder perspectives on standards of practice and opportunities for change.  
Methods: Data collection methods were structured observations of consultations; interviews with users on exit from clinic and at home and in depth interviews with private practitioners (PP) and district health managers.  
Findings: Private clinics have basic structural features for health care delivery. The majority of the clinics in this study were owned and run by single-handed trained medical practitioners. Amongst 92 observed consultations, 62% of diagnoses made were consistent with the history, examinations and tests performed. 74% of childhood fevers were diagnosed as malaria, and 88% of all prescriptions contained an antimalarial drug. Blood slides for malaria parasites were performed in 55 children (60%). Of those whose blood slide was positive (n=27), 52% and 48% were treated with a nationally recommended first or second line antimalarial drug, respectively. Where no blood slide was done (n=37), 73% were prescribed a nationally recommended first line and 27% received a second line antimalarial drug. Overall, 68 % of antimalarial drugs were prescribed in an appropriate dose and regime. Both private practitioners and district health managers expressed the view that existing linkages between the public and private health sectors within the district are haphazard and inadequate.  
Conclusions: Although rural PPs are potentially well placed for treatment of febrile cases in remote settings, they exhibit varying QOC. Practitioners, users and district managers supported the need to develop interventions to improve QOC. The study identifies the need to consider involvement of the for-profit providers in the implementation of the IMCI guidelines in Kenya  
Key Words: Quality of care, febrile illness, malaria, private practitioners, private clinics   
African Health Sciences Vol.4(3) 2004: 160-170

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 Antimalarial drug use among caregivers in Ghana  
 . Vol. 4 No. 3 (2004).   
Abstract  
 Background: Chloroquine remains the first line antimalarial drug in Ghana. However, the emergence of Plasmodium falciparum resistance to chloroquine is a major obstacle to the national control strategy of case management. This study provides information on some of the reasons underlying chloroquine treatment failure in the country.  
Methodology: Household surveys, using multi-stage sampling, were conducted in 2 sentinel districts, Wassa West and Kassena Nankana, established to monitor chloroquine resistance in the country. Five hundred caregivers were interviewed in each district to determine patterns of antimalarial drug use among caregivers of children under 10 years. Inventory on home-kept drugs was conducted.  
Results: Two hundred and four households in the Wassa West district kept a cumulative total of 248 drugs, whereas 228 households in the Kassena Nankana district kept a cumulative total of 410 drugs. One hundred and ninety-nine (80.2%) of the drugs kept in the Wassa West district and 181 (44.2%) of drugs kept in the Kassena Nankana district were antimalarials. The most commonly kept antimalarial drug in homes was chloroquine (88% and 96% in the Wassa West and Kassena Nankana districts respectively). Reasons given for keeping antimalarials were mainly “leftover after previous treatment”. Caregivers\' descriptions of the amount of chloroquine given to family members suspected to have malaria within the 2-week period preceding the survey were mostly inappropriate in the 2 districts. However, the proportion of appropriateness of doses was significantly lower in the Wassa West district (11.1% vs 36.4%; p < 0.0001).  
Conclusions: The significantly higher proportion of inappropriateness of chloroquine use in the Wassa West district could be a factor influencing the lower sensitivity of Plasmodium falciparum to chloroquine in the district compared to the Kassena Nankana district.  
African Health Sciences Vol.4(3) 2004: 171-177

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 Structural findings at hysterosalpingography in patients with infertility at two private clinics in Kampala, Uganda  
 . Vol. 4 No. 3 (2004).   
Abstract  
 Introduction: Hysterosalpingography (HSG) is still a commonly used investigation in the evaluation of the female genital tract and the main indication for HSG is infertility.  
Objective: The purpose of this study was to find the pathology detected at HSG in patients with infertility in our setting.  
Materials and Methods: A retrospective review of 289 consecutive patients who underwent hysterosalpingography using ionic water-soluble contrast media was done at 2 private x-ray units in Kampala. Clinical notes and radiological findings were analysed for demographic data, uterine status, tubal and pelvic pathology.  
Results: The commonest age group seen was 26–30yrs. Most were of low parity. Secondary infertility was commoner than primary infertility. Abnormal findings at hysterosalpingography were found in 83.4%. The commonest finding was tubal blockage.  
Conclusion: The commonest pathology found on HSG in women presenting with infertility in Kampala is tubal blockage possibly secondary to chronic pelvic inflammation. The fact that secondary infertility is common points to pelvic infection complicating mismanaged pregnancies, septic abortions or sexually transmitted infections. A study toestablish associated factors is recommended.  
Key Words: Hysterosalpingography, Infertility   
African Health Sciences Vol.4(3) 2004: 178-181

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 Access to continued professional education among health workers in Blantyre, Malawi  
 . Vol. 4 No. 3 (2004).   
Abstract  
 Objective: To describe the current status of continued professional development (CPD) of healthcare personnel within the Ministry of Health (MoH) health centres in Blantyre, Malawi  
Design: A cross-sectional descriptive study utilizing an interviewer-administered questionnaire.  
Subjects: Healthcare workers in public health centers in Blantyre District, Malawi.  
Results: Fifty-seven healthcare workers participated of whom 47 (82.5%) were nurses, 8 (14.0%) were either medical assistants or clinical officers, and one laboratory technician and a dental therapist. At the time of the study, 50(87.7%) were prescribers and 54 (94.7%) had ever issued a prescription for medications. Participation in workshops and seminars within the past 12 months was reported by 54 (94.7%) of the participants and 49 (86.0%) reported that their health facilities had clinical hand-over meetings. All participants indicated desire to receive professional journals for free while only 35 (61.4%) were willing to pay for a journal subscription. Current personal and institutional subscription to a journal was low, at 2 (3.5%) each. About 30% had been trained to conduct research and 23 (40.1%) had ever conducted research with only 3 (5.3%) ever written a journal or newsletter article. 47.4% had access to a working phone at work and only 3 (5.3%) had access to internet facilities at all. Only 21% were satisfied with their own knowledge on health matters.  
Conclusions: Healthcare professionals in Blantyre\'s DHO zone are using mostly clinical hand-over meetings, seminars and workshops for their CPD. There is need to improve access to relevant professional journals. The regulatory or licensing boards for healthcare professional in Malawi should seriously consider mandatory CPD credits for re-registration  
Key Words: Malawi, continued professional development   
African Health Sciences Vol.4(3) 2004: 182-184

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 Takayasu's arteritis (pulseless disease) in Uganda  
 . Vol. 4 No. 3 (2004).   
Abstract  
 We report herein the case of a 23 year old woman who was referred to Mulago National Referral and Faculty of Medicine Makerere University Teaching Hospital because of sudden collapse, left sided weakness and headache for management. The patient underwent a battery of investigations but died five days after admission. The post mortem findings were extensive infarction the right cerebrum extending from parietal to occipital lobes. There was thickening of the wall and complete obliteration of right common carotid artery. The left common carotid artery was severely stenosed with marked thickening of the wall. The subclavian artery was thickened and completely obliterated. Microscopically there was intimal thickening by fibrous connective tissue and infiltrate of chronic inflammatory cells in the walls of the three affected branches of the oarta. These gross microscopic features were compatible with Takayasu's arteritis (TA).  
African Health Sciences Vol.4(3) 2004: 185-187

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 Incomplete Reiter's Arthritis in a 23 year old nursing mother  
 . Vol. 4 No. 3 (2004).   
Abstract  
 No Abstract Available  
African Health Sciences Vol.4(3) 2004: 188

JR Ouma;;;University of the Witwatersrand, Department of Neurosurgery, Johannesburg Hospital.   
 Psychotic manifestations in brain tumour patients: 2 case reports from South Africa  
 . Vol. 4 No. 3 (2004).   
Abstract  
 Two cases are presented of adult males diagnosed with psychosis who were found to have intraventricular tumours (central neurocytomas). In both cases the psychotic manifestations disappeared following surgical removal of the tumours. The relationship between structural brain lesions and psychotic manifestations is discussed.  
African Health Sciences Vol.4(3) 2004: 189-193

Michael Kawooya.   
 Editor\'s Choice: Quality and hygiene in health service provision, water and food  
 . Vol. 5 No. 1 (2005).   
Abstract  
 No Abstract Available  
African Journal of Health Sciences Vol.5(1) 2005: 2

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 Health/hygiene, sanitation, and water: Is cleanliness next to whatever has replaced godliness?  
 . Vol. 5 No. 1 (2005).   
Abstract  
 No Abstract Available  
African Journal of Health Sciences Vol.5(1) 2005: 3

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 Promotion of handwashing as a measure of quality of care and prevention of hospital- acquired infections in Eritrea: the Keren study  
 . Vol. 5 No. 1 (2005).   
Abstract  
 A complex interplay of cognitive, socio-economic and technical factors may determine hand-washing practice among hospital-based health workers, particularly doctors, regardless of the location of the country or hospital they work in.  
Objectives: To assess quality of care with respect to handwashing practice as a routine measure of infection prevention in Keren hospital, a provincial referral hospital, second largest in Eritrea; with a view to putting in place quality standards and effective means of monitoring and evaluation.  
Design: Qualitative study with a participatory and iterative/dynamic design.  
Methods: Semi-structured interviews and focus group discussions were held with 34 members of the hospital staff; and a total of 30 patients in the medical, surgical and obstetric wards were interviewed. Direct observation of handwashing practice and facilities were also employed.  
Results: Although only 30% of health workers routinely washed their hands between patient contact, the study revealed genuine interest in training and the need to reward good practice in order to motivate health workers. Educational intervention and technical training resulted in significant improvements in health workers\' compliance with hospital infection prevention standards. Patient satisfaction with health workers\' hygiene practices also improved significantly.  
Conclusion: Hospital-based health workers\' handwashing practice needs to improve globally. There is no room for complacency, however, in Eritrea (as indeed in other African countries) where public health services need to keep patients\' welfare at heart; particularly with respect to women in childbirth, as mothers continue to bear the lion\'s share of post-war rebuilding of lives, livelihoods, and the country as a whole.  
African Journal of Health Sciences Vol.5(1) 2005: 4-13

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 The quality of water from protected springs in Katwe and Kisenyi parishes, Kampala city, Uganda  
 . Vol. 5 No. 1 (2005).   
Abstract  
 Background: In the sub-urban areas of Kampala city, springs are a major source of water for domestic use. Though spring water is considered to be aesthetically acceptable for domestic use, presence of poorly designed pit latrines, poor solid waste management as well as poor and inadequate spring protection, may lead to contamination of spring water with pathogenic bacteria.  
Objectives: The objectives of the study were to examine the bacteriological quality of water from ten springs in Katwe and Kisenyi parishes of Kampala, and to identify and quantify risks for spring water contamination with faecal bacteria.  
Methods: A cross-sectional sanitary risk assessment using a standardised format was carried out in ten randomly selected springs in the parishes of Katwe and Kisenyi parishes in Kampala. A total of 80 samples of water from these springs were collected from December 2001 to March 2002. The samples were analysed for indicators of faecal contamination: total coliforms, faecal coliforms and faecal streptococci. Physico-chemical parameters were measured.  
Results: Aggregate qualitative sanitary risk scores ranged from medium to high. The total coliform counts in 90% of the samples exceeded the WHO guideline for drinking water. All the samples had faecal coliform counts above the WHO guideline. A strong correlation (r2= 887) was observed between the median faecal coliform counts and the sanitary risk score. Sixty percent of the samples had nitrate levels above the WHO recommended limit. There was no correlation between the levels of chlorides and nitrates and levels of indicators of faecal bacterial contamination.  
Conclusions: The sanitary risk assessment score is a reliable tool for predicting the likely levels of bacterial contamination of spring water. Water from the ten protected springs studied is unsuitable for drinking without treatment.  
African Journal of Health Sciences Vol.5(1) 2005: 14-20

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 Factors that could motivate people to adopt safe hygienic practices in the Eastern Cape Province, South Africa  
 . Vol. 5 No. 1 (2005).   
Abstract  
 Background: Approximately 18 million South Africans do not have access to adequate sanitation. This problem is not unique to South Africa but is a challenge to many developing countries.  
Objectives: The purpose of this qualitative study was to gain insight and understanding of factors that could motivate people to adopt safe hygienic practices.  
Methods: A non-probability purposive sample of 122 participants was drawn from sanitation stakeholder organisations in the Eastern Cape Province. Of these, 74 were male and 48 were female. The mean age of the participants was 40.1 years. The 122 participants were divided into 15 focus groups, each consisting of about eight members. The focus group discussions were conducted using seven guiding questions. Responses were examined and clustered in terms of the primary focus group questions.  
Results: Regular water supply, provision of sanitation facilities, stakeholder participation and improvement of consumer sanitation knowledge are factors which can motivate people to adopt safe hygienic practices.  
Conclusions: There are cultural, educational, economic, institutional, environmental and psycho-social factors that could motivate people to adopt safe hygienic practices.  
Keywords: Sanitation, Safe hygienic practices, Eastern Cape, South Africa   
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 Reversal of left ventricular hypertrophy by propranolol in hypertensive rats  
 . Vol. 5 No. 1 (2005).   
Abstract  
 Background: Hypertension contributes significantly to the development of left ventricular hypertrophy. Left ventricular hypertrophy is associated with increased incidence of sudden cardiac death. Recognition and management of hypertension is, therefore, imperative.  
Objective: To establish whether propranolol can reverse left ventricular hypertrophy in hypertensive rats.  
Methods: Hypertension was induced in male albino rats by giving them 1% NaCl solution as their only drink for four weeks. Propranolol was then administered orally to one of the four groups of rats used in this study. Systolic blood pressure of each rat was measured twice a week using a modified tail-cuff method. Each rat was then sacrificed, its heart excised from the chest cavity and geometric studies carried on the left ventricle.  
Results: Excessive intake of sodium salt by the rats caused an increase in their systolic blood pressure which was accompanied by left ventricular hypertrophy. The elevated blood pressure (139.4 ± 0.5 mm Hg) was, however, brought back to normal (108.4 ± 0.2 mm Hg) by propranolol. Data on weight, thickness, and volume of the left ventricle strongly indicated that propranolol can reverse ventricular hypertrophy.  
Conclusion: Propranolol reverses left ventricular hypertrophy besides lowering elevated systolic blood pressure in rats.  
African Journal of Health Sciences Vol.5(1) 2005: 29-32

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 Use of sulfonamides in layers in Kampala district, Uganda and sulfonamide residues in commercial eggs  
 . Vol. 5 No. 1 (2005).   
Abstract  
 Background: Use of antimicrobials like sulfonamides in production of layers is a public health risk since it inevitably results in sulfonamide residues in eggs. The presence of the residues may be influenced by knowledge, attitudes and practices of farmers regarding use of sulfonamides (and other antimicrobials) in poultry.  
Objective: The study aimed at assessing the possible contribution of the knowledge, attitudes and practices of poultry farmers to the presence/levels of sulfonamide residues in hen eggs.  
Methods: A descriptive cross sectional study was done in the 5 political divisions (and surroundings) of Kampala district. Sixty farmers were systematically sampled from a list of poultry farmers in Kampala and a semi-structured questionnaire administered. Each farmer provided sixty eggs for analysis of sulfadiazine and sulfamethazine residues. Whole eggs were homogenized in acetonitrile and centrifuged twice, extracts evaporated and residues dissolved in mobile phase (32:68, methanol: potassium di-hydrogen phosphate). Fats were removed using hexane while anhydrous sodium chloride was added to break emulsions. Extracts were analyzed by reverse phase high performance liquid chromatography with photodiode array detector.  
Results: Ninety-five percent of the farmers never observed withdrawal periods although 80% of them knew the importance of withdrawal periods. However, farmers noted that they play a great role in ensuring a safe food supply. Most farmers attributed the non-observance of withdrawal periods to poverty and fear to lose their investments. Ninety-eight percent of the samples had detectable levels of the sulfonamides. Meanwhile, 98.3% of the samples that had detectable sulfonamide residues came from farmers who applied antimicrobials in feeds/ water.  
Conclusion: Consumers of hen eggs in Kampala district are at high risk of sulfonamide residue exposure due to poor farming/ regulatory practices.  
Key words: Farmers\' knowledge, attitudes and practices, residues, sulfonamides, Kampala   
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 Traditional herbal remedies used in the management of sexual impotence and erectile dysfunction in western Uganda  
 . Vol. 5 No. 1 (2005).   
Abstract  
 Background: The utilisation of ethnobotanical indigenous knowledge is vital in male sexual reproductive health care delivery in western Uganda. Reproductive health care is the second most prevalent health care problem in Africa. However, this concept of reproductive health care has been focusing mainly on women disregarding men. Thus, some diseases such as sexual impotence and erectile dysfunction that deserve mention are regarded as petty though important in economic productivity, family stability and sexually transmitted diseases control including HIV/AIDS.  
Objective: This study was carried out mainly to document medicinal plants used in the treatment of sexual impotence and erectile dysfunction disorders in western Uganda.  
Methods: The medical ethnobotanical indigenous knowledge were collected by visiting traditional healers and documenting the medicinal plants used and other socio-cultural aspects allied with sexual impotence and erectile dysfunction. The methods used to collect the relevant information regarding the medicinal plants used included informal and formal discussions, field visits and focused semi-structured interviews.  
Results: Thirty-three medicinal plants used in the management of sexual impotence and erectile dysfunction were documented and Citropsis articulata and Cola acuminata were among the highly utilized medicinal plants.  
Conclusion: From the researchers' point of view, the usage of herbal remedies in managing male sexual disorders is useful because of long cultural history of utilisation and the current renewed interest in natural products to sustain health globally. As a way recognising the values and roles of traditional medical knowledge in health care provision, further research into the efficacy and safety of herbal remedies in male sexual disorders is precious in Uganda and beyond. More so, the establishment of rapport between relevant government department in Ministry of Health, modern health workers through collaborative and networking ventures with traditional healers under close supervision and monitoring of herbal treatments is noble.  
Key words: Medicinal Plants, Erectile Dysfunction, Sexual Impotence, Ethnobotanical Indigenous Knowledge, Western Uganda   
African Journal of Health Sciences Vol.5(1) 2005: 40-49

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 Clinical presentation and management of alleged sexually assaulted females at Mulago hospital, Kampala, Uganda  
 . Vol. 5 No. 1 (2005).   
Abstract  
 Objective: To determine the presentation and treatment offered to sexually assaulted females attending emergency gynaecological ward in Mulago Hospital, Kampala, Uganda  
Setting: Mulago hospital gynaecological emergency ward.  
Study design: Prospective descriptive study.  
Participants: Fifty eight sexually assaulted females were recruited from 1st March 2000 to 31st December 2000. They were interviewed, examined, given appropriate treatment and followed up for three months.  
Outcome variables: Socio demographic characteristics, genital and bodily injuries, relationship to the assailant, and prevalence of sexually transmitted infections.  
Results: The mean age was 9.5 with a range of 1-35 years. Seventy two percent of the victims were children below 12 years. Fifty percent of the assault occurred at the assailant's home. The majority (79.3%) of the victims knew the assailant and cases of gang rape were only 6.9%. The injuries sustained were extra genital (19.0%), genital (75.4%). The emotional or psychological disturbance was present in 22.4% of the patients. The sexually transmitted infections found included trichomonas vaginalis (1.7%) and syphilis (3.7%). All cases received counseling and prophylactic treatment for sexually transmitted infections. Those in reproductive age group were offered emergency contraception. None of the victims got post exposure HIV therapy because it was not available in the hospital.  
Conclusion: Sexual assault is common in Uganda and is one of the most dehumanizing human crimes against women. It is associated with adverse medical and social problems. There is urgent need to sensitize the community about reporting early for medical treatment after sexual assault.  
African Journal of Health Sciences Vol.5(1) 2005: 50-54

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 Human immunodeficiency virus (HIV) seropositivity and hepatitis B surface antigenemia (HBSAG) among blood donors in Benin city, Edo state, Nigeria  
 . Vol. 5 No. 1 (2005).   
Abstract  
 Background: Human Immunodeficiency Virus and Hepatitis B virus are blood borne pathogens that can be transmitted through blood transfusion and could pose a huge problem in areas where mechanisms of ensuring blood safety are suspect. This study became necessary in a population where most of the blood for transfusion is from commercial blood donors.  
Method: A total of 130 donors comprising 120 commercial donors and 10 voluntary donors were tested for antibodies to human immunodeficiency virus and hepatitis B surface antigen in Benin city using Immunocomb HIV - 1 and 2 Biospot kit and Quimica Clinica Aplicada direct latex agglutination method respectively.  
Results: Thirteen (10%) samples were HIV seropositive and 7(5.8%) were HBsAg positive. The age bracket 18 – 25years had the highest numbers of donors and also had the highest number of HBsAg positive cases (7.8%) while the age group 29 – 38years had highest number of HIV seropositive cases.  
Conclusion: High prevalence of HIV antibodies and Hepatitis B surface antigen was found among commercial blood donors. Appropriate and compulsory screening of blood donors using sensitive methods, must be ensured to prevent post transfusion hepatitis and HIV.  
African Journal of Health Sciences Vol.5(1) 2005: 55-58

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 Evaluation criteria for the district health management information systems: lessons from the Ministry of Health, Kenya  
 . Vol. 5 No. 1 (2005).   
Abstract  
 Background: The District Health Management Information Systems (DHMISs) were established by the Ministry of Health (MoH) in Kenya more than two decades ago. Since then, no comprehensive evaluation has been undertaken. This can partly be attributed to lack of defined criteria for evaluating them.  
Objective: To propose evaluation criteria for assessing the design, implementation and impact of DHMIS in the management of the District Health System (DHS) in Kenya.  
Methods: A descriptive cross-sectional study conducted in three DHSs in Kenya: Bungoma, Murang'a and Uasin Gishu districts. Data was collected through focus group discussions, key informant interviews, and documents' review. The respondents, purposely selected from the Ministry of Health headquarters and the three DHS districts, included designers, managers and end-users of the systems.  
Results: A set of evaluation criteria for DHMISs was identified for each of the three phases of implementation: pre-implemen-tation evaluation criteria (categorised as policy and objectives, technical feasibility, financial viability, political viability and administrative operability) to be applied at the design stage; concurrent implementation evaluation criteria to be applied during implementation of the new system; and post-implementation evaluation criteria (classified as internal – quality of information; external – resources and managerial support; ultimate – systems impact) to be applied after implementation of the system for at least three years.  
Conclusions: In designing a DHMIS model there is need to have built-in these three sets of evaluation criteria which should be used in a phased manner. Pre-implementation evaluation criteria should be used to evaluate the system's viability before more resources are committed to it; concurrent (operational) – implementation evaluation criteria should be used to monitor the process; and post-implementation evaluation criteria should be applied to assess the system's effectiveness  
Key words: Evaluation Criteria, District Health Management Information System, District Health System   
African Journal of Health Sciences Vol.5(1) 2005: 59-64

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 Pattern of dental caries in Mulago Dental School clinic, Uganda  
 . Vol. 5 No. 1 (2005).   
Abstract  
 Information on dental caries among patients attending Mulago Hospital is scarce. Yet knowledge of the pattern of caries can be used to plan preventive and treatment interventions. This study describes the pattern of dental caries (in terms of age group, tooth and tooth surface and gender) among patients attending the Public Health Dental Officers School Clinic, Mulago Hospital.  
Methodology: A review of patients' treatment records for the period 1995 to 1999 was done. A total of 1800 cards were reviewed for the diagnosis of dental caries, age, gender and the data was analyzed using EPI INFO 6 program. The patients were from both urban and peri-urban settings and were aged between 10–90 years.  
Results: The results showed that the most frequently affected tooth surface was the occlusal (68.8%) followed by the interproximal (24%) and the least affected was the lingual/palatal (1.5%). The second molars were found to be the most affected of all teeth, with tooth 37(12%), 47(11%), 17(9.5%) and 27 (9.1%). The distribution of caries was higher in the lower than the upper jaw.  
There was a slight difference in sex predilection with females having 54.5% and males 45.5% of the lesions and the age group most affected was 20-29 years.  
Conclusion: The results showed a high occurrence of occlusal surface caries in molars especially the second molars in the 20-29 age group in the patients attending the Public Health Dental Officers School Clinic, Mulago Hospital.  
Key words: caries experience, tooth surfaces, occlusal   
African Journal of Health Sciences Vol.5(1) 2005: 65-68

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 Case Report: Acute brucella meningomyeloencephalo – spondylosis in a teenage male  
 . Vol. 5 No. 1 (2005).   
Abstract  
 Background Brucellosis has been known from the time of Hippocrates. In 1885 Sir David Bruce isolated the causative organism from the spleens of soldiers who had died from “Malta disease” (now brucellosis). There are 4 species of brucella pathogenic to humans and each of them has a specific types of animal reservoir: B.arbotus (cattle, buffallo),B.melitensis (goats, sheep, camels), B.suis (pigs), B.canis (Dogs). Humans are infected when they are exposed to body fluids from an infected animal. The symptoms and signs of brucellosis are protean. Diagnosis is usually dependent on clinical features and serology or culture.  
Objectives To describe a case of neurobrucellosis, raise awareness about the existence of the disease in Uganda and Africa in general and share our experiences in its diagnosis and management.  
Methods A male teenager was admitted with symptoms and signs of an acute meningo-encephalitis. He underwent clinical, laboratory and basic radiological evaluation.  
Results The un-incubated brucella titer was significantly reactive(1:160).Oblique-view cervical x-rays showed early osteophyte formation with encroachment on the vertebral foramina on the left hand side.  
A diagnosis of acute brucella meningomyeloencephalo-spondylosis was made and the patient was successfully treated using conventional therapy for brucellosis (oral doxycycline for 6weeks and IM streptomycin for 2 weeks).  
Conclusions Neurobrucellosis though said to be rare, is a reality in our health units should be considered in the differential diagnosis of neurological and psychiatric illnesses. The good news is that it is curable and is responsive to drugs used for other forms of brucellosis.  
African Journal of Health Sciences Vol.5(1) 2005: 69-72

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 Case Series: Cost effective management of duodenal ulcers in Uganda: interventions based on a series of seven cases  
 . Vol. 5 No. 1 (2005).   
Abstract  
 Background Our understanding of the cause and treatment of peptic ulcer disease has changed dramatically over the last couple of decades. It was quite common some years ago to treat chronic ulcers surgically. These days, the operative treatment is restricted to the small proportion of ulcer patients who have complications such as perforation. The author reports seven cases of perforated duodenal ulcers seen in a surgical clinic between 1995 and 2001. Recommendations on the criteria for selecting the appropriate surgical intervention for patients with perforated duodenal ulcer are given.  
Objective: To decide on the appropriate surgical interventions for patients with perforated duodenal ulcer.  
Design: These are case series of 7 patients who presented with perforated duodenal ulcers without a history of peptic ulcer disease.  
Materials and methods: Seven patients presented with perforated duodenal ulcer 72 hours after perforation in a specialist surgical clinic in Kampala were analyzed. Appropriate management based on these patients is suggested.  
Results: These patients were initially treated in upcountry clinics for acute gastritis from either alcohol consumption or suspected food poisoning. There was no duodenal ulcer history. As a result, they came to specialist surgical clinic more than 72 hours after perforation. Diagnosis of perforated duodenal ulcer was made and they were operated using the appropriate surgical intervention.  
Conclusion: Diagnosis of hangovers and acute gastritis from alcoholic consumption or suspected food poisoning should be treated with suspicion because the symptoms and signs may mimic perforated peptic ulcer in “silent” chronic ulcers. The final decision on the appropriate surgical intervention for patients with perforated duodenal ulcer stratifies them into two groups: The previously fit patients who have relatively mild physiological compromise imposed on previously healthy organ system by the perforation can withstand the operative stress of definitive procedure.  
The Second category includes patients who are critically ill, who poorly tolerate any operation and hence poor surgical risks. These require urgent, adequate resuscitation and simple suture with omental patch.  
African Journal of Health Sciences Vol.5(1) 2005: 73-78

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 Practice Points: Pharmacological therapy of female urinary incontinence  
 . Vol. 5 No. 1 (2005).   
Abstract  
 Background: Although not a life threatening condition, UI is a common problem in women that produces embarrassing and debilitating symptoms, severely affects the quality of life and represents a significant public health problem. The bladder and urethra in women constitute a functional unit that is controlled by a complex interplay between the central and peripheral cholinergic and noradrenergic nervous systems and local regulatory factors. A substantial part of urethral tone in women is also mediated through the effect of estrogen on urethral mucosal function. Theoretically, detrusor instability can be improved by agents that decrease detrusor contractility and genuine stress incontinence by agents that increase outlet resistance.  
Objective: To review the use of various drugs in treatment of female urinary incontinence [UI] and present the current evidence-based recommendations.  
Methods: Systemmatic review of literature  
Results: The strength of evidence for the use of such agents, however, varies from data obtained from pharmacological and physiological experiments to those derived from clinical studies. Hence, the use of some of the currently prescribed drugs for treatment of female UI is founded more on tradition than on evidence based on results from controlled clinical trials. There is also an urgent medical need for a new smooth muscle agent for treating UI in women because current drug therapy of UI is either inadequate or ineffective. Therefore, further clinical experience with drugs that selectively modulate the electrophysiological properties and the intracellular pathways of the smooth muscles of the lower urinary tract in women as therapeutic agents for UI is awaited with interest.  
Key words: Drugs, pharmacology, urinary incontinence, women   
African Journal of Health Sciences Vol.5(1) 2005: 79-85

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 Practice Points: Bridging the health gap in Uganda: the surgical role of the clinical officer  
 . Vol. 5 No. 1 (2005).   
Abstract  
 Introduction: A scarcity of trained medical personnel impedes Uganda's ability to deliver healthcare effectively. The role of the Clinical Officer (CO) was established to assist the provision of primary healthcare to rural communities.  
Methods: Twenty COs, attending a clinical course, responded to a structured questionnaire to determine their local investigative resources, the cases encountered by them in the two-week period preceding the course and the surgical and obstetric procedures that they felt able to perform.  
Results: The majority of respondents did not have access to biochemical or radiological investigations. Fifty-five percent had access to basic haematology and urine microscopy. The majority of the case-mix encountered by the COs was medical (median 60 %) but they also encountered a proportion of surgical (median 12.5 %) and obstetric cases (median 15 %). COs felt confident in performing routine obstetric procedures as well as offering basic wound and surgical infection management.  
Conclusion: COs already provide a vital role in the delivery of healthcare in Uganda. Their surgical role could be augmented through further education and training. This might help to bridge the gap between overwhelming demand for medical services and a scant supply of trained personnel.  
Key words: Clinical Officer, Uganda, Trauma, Surgical skills   
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 Blood pressure profiles among Makerere University undergraduate students  
 . Vol. 5 No. 2 (2005).   
Abstract  
 The purpose of this study was to set reference values for spot blood pressure and its derivatives among Makerere university undergraduate students.  
Study Design: This was a cross- sectional study.  
Materials and methods: A total of 183 undergraduates including 63 females and 120 males participated in the study. Blood pressure was measured, with the respondent seated, using a sphygmomanometer. Mean arterial pressure was determined as the average of the systolic and diastolic values. Pulse pressure was the difference between systolic and diastolic values. Dividing systolic by diastolic values gave the required ratio. Histograms and cumulative percentages of these results were plotted and used to set the central 95th percentile range as the reference values.  
Results: Empirical ranges were: systolic BP 100-179 mmHg; diastolic BP 60-139 mmHg; systolic: diastolic pressure ratio 1.20-2.30 mmHg, mean arterial pressure 80-159 mmHg and pulse pressure 20-85 mmHg. The reference ranges covering the central 95 percentile were: systolic BP 100-150 mmHg, diastolic BP 64-100, systolic: diastolic BP ratio 1.29-2.03, the mean arterial pressure 85121 mmHg, and pulse pressure 25-70 mmHg. According to the systolic pressure, 35% were normal, 54% pre-hypertensive and 11% hypertensive. According to diastolic values, 48% were normotensive, 43% pre-hypertensive and 18% hypertensive. The mean arterial pressure was distributed like the parent pressures. The pulse pressure and the systolic:diastolic ratio were trimodally distributed with the three peaks corresponding to normotension, pre-hypertension and hypertension.  
Conclusion and recommendation: Reference values for the university student population have been derived and they are recommended for application in clinical evaluation.  
African Health Sciences Vol.5(2) 2005: 99-106

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 Perception of peers' behaviour regarding sexual health decision making among female undergraduates in Anambra State, Nigeria  
 . Vol. 5 No. 2 (2005).   
Abstract  
 Background: High-risk sexual behaviours are prevalent in tertiary educational institutions in Nigeria, but little is known about the social influences that bear on the reproductive health decision-making and behaviour of the undergraduates. On the other hand, perceptions regarding the behaviour and influence of peers have been documented to be key social factors associated with reproductive health behaviour of young people.  
Objective: This study aimed to assess the perception of Nigerian female undergraduate about sexual behaviours of their peers and the type of influence their peers tend to exert on them.  
Method: The study was cross-sectional in nature and involved 588 randomly selected unmarried female undergraduates in two tertiary institutions in Anambra state, Nigeria. The study instrument was a self-administered questionnaire. Data was analysed using Epi-Info statistical package.  
Results: Three-quarters of respondents were between 15 and 24 years and the majority were from homes with formally educated parents (91.2 % of mothers and 93.9 % of fathers). Regarding sexual behaviour, 80.1% of respondents indicated that their age mates were already sexually active, and 92 % indicated that most of their friends had regular sexual partners. The use of condoms by sexually active friends was reported by 58.5 % of respondents. Almost half (47.1 %) of respondents indicated that they were under pressure by friends to engage in pre-marital sex, and 22.1 % indicated that the pressure was moderate or severe in degree. However, 64.6 % of respondents indicated that they would receive moderate or lots of support for their friends if they made the decision to abstain from sex.  
Conclusion: Perception of sexual behaviour of peers and the nature of the pressure that peers exert support pre-marital sex. It appears peers would also respect and support the decision of those that choose to practice sexual abstinence.  
African Health Sciences Vol.5(2) 2005: 107-113

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 Sexually transmitted diseases in Zimbabwe: a qualitative analysis of factors associated with choice of a health care facility  
 . Vol. 5 No. 2 (2005).   
Abstract  
 Background: The control of sexually transmitted diseases (STDs) through rapid and effective treatment is critical in reducing the transmission of HIV infection. This is only possible when STD patients access appropriate STD care services.  
Objectives: To examine factors associated with choice of STD health care facility in Zimbabwe.  
Methods: Focus Group Discussions (FGDs) were used to collect data from the following settings: Antenatal clinics, well baby clinics, long distance bus stops/market places, bars, areas (compounds) behind bars, factory sites and youth clubs. Data from 26 FGDs attended by 281 antenatal clinic attendees, 34 FGDs of 350 women attending well baby clinics, 8 FGDs of 82 women recruited at long distance bus stops/market places, 9 FGDs of 115 sex workers, 11 FGDs of 124 male factory workers, and 5 FGDs of 44 female adolescents belonging to youth clubs were analysed.  
Results: In total 93 FGDs were held of which 76 (81.7%) took place in urban areas and 17 in rural areas. Asked which health facility they would attend if they had an STD, all the different groups of the population mentioned a local clinic except for sex workers who preferred a hospital or a traditional practitioner, and male factory workers who preferred a factory clinic. Among the factors that would be considered in choosing a health facility were accessibility and affordability (stated by all groups), and privacy/ confidentiality, health care providers' attitudes, caring or professionalism (stated by all groups except male factory workers).  
Conclusion: Although accessibility and affordability were the common factors mentioned by all the groups, it is important to consider group specific factors in the choice of health care facilities.  
African Health Sciences Vol.5(2) 2005: 114-118

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 The possible mechanisms for the antifertility action of methanolic root extract of Rumex steudelii  
. Vol. 5 No. 2 (2005).   
Abstract  
 Back ground: The practice of traditional medicine for the control of fertility in most parts of Ethiopia is based on the uses of plant medicines for many years. Rumex steudelii Hochst (Polygonaceae), locally known as “Tult” or “Yeberemelas” is one of the traditionally used antifertility plants in Ethiopia. In our previous study, the methanolic extract of R. steudelii root was found to show antifertility activity in female rats.  
Objectives: The present study focused further on the possible mechanisms of the antifertility effect of the methanolic extract of R. steudelii.  
Methods: The effect of the extract on implantation, the uterus weight of immature ovariectomized rats and serum estrogen-progesterone ratio was evaluated. Its effect on isolated guinea pig uterus in the presence and absence of uterine muscle contractions inhibitors was also assessed. Test for in vivo abortifacient effect was also carried out.  
Results: It was found that the extract decreased the number of implantation sites significantly. At a contraceptive dose, it was also observed to have no estrogenic activity in immature rat bioassay. The extract did not affect the serum estrogen-progesterone ratio. It produced concentration dependent increase in uterine muscle contractions similar to those of the standard drug, oxytocin. Incubation of the tissue with three uterine muscle contractions inhibitors revealed that the extract produced uterine contractions perhaps by activating muscarinic and/or histaminic receptors. The in vivo abortifacient effect was not seen upon administration of both lower and higher doses of the extract in pregnant rats.  
Conclusion: All these observations suggest that the extract produced antifertility effect mainly by inhibiting implantation though antiestrogen, progesterogen and uterotonic effects could as well be possible mechanisms.  
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 Evaluation of CD4+/CD8+ status and urinary tract infections associated with urinary schistosomiasis among some rural Nigerians  
 . Vol. 5 No. 2 (2005).   
Abstract  
 Background: Data on urinary schistosomiasis in Nigeria are mainly epidemological. The knowledge of co-infections of urinary schistosomiasis and other pathogens are important epidemiological tools for the control and health benefits of the rural dwellers. The granulomatous reactions in urinary schistosomiasis is CD4+ dependent. The CD8+ is cytotoxic to parasites and it is activated by CD4+. These parameters therefore participate in the immune responses to urinary schistosomiasis.  
Objective: In this study, we evaluated the polyparasitism involving urinary schistosomiasis and urinary tract co – infections among some rural Nigerians. The CD4+:CD8+ ratio and status with age groups in years were also investigated.  
Methods: Parasitological investigation using ova on urine was carried out on 216 volunteers. The urine samples were examined for bacteriuria and subsequently subjected to standard microbiological urine culture. CD4+/CD8+ were determined using the CD T4 Dynabead techniques. Data were analysed using MicroSoft Excel.  
Results: The inhabitants with light infections of urinary schistosomiasis as indicated by <50 ova /10ml of urine had a mean CD4+:CD8+ ratio of 1.57 while those with heavy infections as shown by >50 ova/10ml of urine had a relatively lower CD4+:CD8+ ratio of 1.03. In all, the overall CD4+:CD8+ ratio of 1.23 was recorded with the mean CD4+ count of 257.96 cells/µL and the mean CD8+ count of 210.45cells/µL. Comparatively, the control uninfected subjects had a CD4+:CD8+ ratio of 5.97. The CD4+ and the CD8+ counts were correlated with the ova of S. haematobium in their urine samples at r = 0.0108 and r = 0.516 respectively. The bacteriuria, urinary schistosomiasis and urinary tract co - infections namely; Escherichia coli, Proteus, Pseudomonas aeroginosa, Staphylococcus epidermidis and Staph. Saprophyticus were reported in the urine cultures of 48(22.0%) volunteers.  
Conclusion: The mean overall CD4+:CD8+ ratio of urinary schistosomiasis infected persons is 1.23 which is above the normal CD4+: CD8+ ratio of 1. The CD4+:CD8+ ratio and counts of the urinary schistosomiasis infected inhabitants were lower than the uninfected inhabitants. The positive correlation between the CD4+: CD8+ and the S. haematobium ova shows a relationship which indicate an increase of the CD4+: CD8+ as the intensity of infection increases. We report polyparasitism of S. haematobium and urinary tracts co-infections among some rural inhabitants in Ikpeshi, Nigeria. It is therefore imperative to incorporate the management of urinary tract infections in urinary schistosomiasis control programme.  
Key words: CD4+, CD8+, urinary tract infections, urinary schistosomiasis, rural Nigerians   
African Health Sciences Vol.5(2) 2005: 126-130

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 Paradoxical helminthiasis and giardiasis in Cape Town, South Africa: epidemiology and control  
 . Vol. 5 No. 2 (2005).   
Abstract  
 Background. South Africa has endorsed a World Health Assembly (WHA) resolution calling for control of soil-transmitted helminths (STHs). In Cape Town, services and housing that exist in old-established suburbs should minimise the prevalence of intestinal parasitic infections, even when residents are poor. Where families live in shacks in densely-populated areas without effective sanitation, more than 90% of children can be infected by STHs. The humoral immune response to worms theoretically favours infection by Mycobacterium tuberculosis and HIV.  
Objectives. Obtain estimates of gender-, age-, school-related and overall prevalence of helminthiasis and giardiasis in a low-income but well-serviced community. Assess possible sources of infection. Alert health services to the need for control measures and the threat from protozoal pathogens. Warn that the immune response to intestinal parasites may favour tuberculosis (TB) and HIV/AIDS.  
Methods. A cross-sectional study of the prevalence of helminthiasis and giardiasis was carried out in a large, non-selective sample of children attending nine schools. Gender, school and age effects were related to non-medical preventive services, sewage disposal practices and possible sources of infection.  
Results. The overall STH infestation rate was 55.8%. Prevalence was influenced by school and age but not by gender. Eggs and cysts were seen at the following prevalences: Ascaris 24.8%; Trichuris 50.6%; Hymenolepis nana 2.2%; Enterobius 0.6%; Giardia 17.3%; hookworm 0.08%; and Trichostrongylus 0.1%. Approximately 60% of sewage sludge is used in a form that will contain viable eggs and cysts.  
Conclusions. Prevalence trends in this old community in Cape Town could indicate infection by swallowing eggs or cysts on food or in water, more than by exposure to polluted soil. Sewage sludge and effluent might be sources of infection. In adjacent, under-serviced, newer communities, promiscuous defaecation occurs. Probable vectors are discussed. The immune response to intestinal parasites might be a risk factor for HIV/AIDS and TB.  
Key words: Ascaris, Enterobius, HIV/AIDS, hookworm, IgE, Trichuris, tuberculosis   
African Health Sciences Vol.5(2) 2005: 131-136

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 The Response Inventory for Stressful Life Events (RISLE) I. refinement of the 100-item Version  
 . Vol. 5 No. 2 (2005).   
Abstract  
 Background: No indigenous screening instruments are available for the detection of depression and suicide risk relevant to the context of patients in Uganda. The Response Inventory for Stressful Life Events (RISLE) may be an appropriate tool, but requires validation.  
Objective: The paper reports on the development of the RISLE and the refinement of the 100-item RISLE into a shorter version for use in large samples.  
Methods: Two samples were used in the validation exercise: a general population sample from Adjumani and Bugiri districts and a student sample from Makerere University in Kampala district. The RISLE responses were subjected to Principal Components Analysis and Discriminant Function Analysis. The 100-item RISLE and resulting shorter version were compared and their concurrent validity assessed by comparing test results to the individuals' responses to the Beck Depression Inventory (BDI) and the Beck Scale for Suicide ideation (BSS).  
Results: Nine hundred thirty nine questionnaires were available for the population sample, 101 for the student sample. The 100item RISLE was reduced to 36-items without loss of face validity. Both the 100- and 36-item versions had high internal consistency, were highly correlated with each other and with the BDI and BSS.  
Conclusion: The 36-item RISLE appears to be an advance on the 100-item version, retaining its internal consistency and concurrent validity.  
African Health Sciences Vol.5(2) 2005: 137-144

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 The Response Inventory for Stressful Life Events (RISLE) II: Validation of the 36-item Version  
 . Vol. 5 No. 2 (2005).   
Abstract  
 Background: A 36-item version of the Response Inventory for Stressful Life Events (RISLE) was derived from the longer 100item version. The 36-item version may be more appropriate for use in larger population sample.  
Objective: To compare the responses of the 36-item RISLE to interview derived psychiatric diagnoses and suicidal ideation in a sub-sample of the general population and student samples reported in the accompanying paper.  
Methods: Clinical interviews using the Mini International Neuropsychiatric Interview (MINI) were carried out on 67 members of the general population and 58 members of the student samples. Receiver Operating Characteristic (ROC) curves were constructed for the RISLE responses using current depressive disorder, any current psychiatric disorder, and past month suicidality variables. Sensitivities, specificities, predictive values and likelihood ratios were determined based on various cut-off points based on ROC curves. Kappa statistic was determined to evaluate the level of agreement between the result of questionnaire surveys and research clinical interviews at different cut-off points on the RISLE.  
Results: The probability of correct detection of current depression was 79%, any current psychiatric disorder 83% and past month suicidality 83%. The optimal cut-offs for the general population was 10 and for the students 6. High scores on the 36-item RISLE were associated with a past history of suicide attempt and recent and past suicide ideation.  
Conclusion: The 36-item RISLE appears to have good concurrent validity and may be a reasonable screening instrument for psychological distress in the Ugandan population. The results suggest that the RISLE alone is capable of screening for both depressive mood and suicidal ideation effectively at different cut-off points. Thus the RISLE is capable of achieving what normally takes two scales such as the BDI and BSS to do separately. However, further validation work is required using larger population samples in clinical interviews in prospective studies.  
African Health Sciences Vol.5(2) 2005: 145-151

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 Interpretation of tuberculin skin-test results in the diagnosis of tuberculosis in children  
 . Vol. 5 No. 2 (2005).   
Abstract  
 Introduction: The tuberculin skin test is one of the most valuable tests for demonstrating tuberculous infection in both symptomatic and asymptomatic children. However, its application is often undermined by difficulties in interpretation of results arising from its low sensitivity and specificity.  
Objectives: This review aimed to use the concept of induration distribution analysis to estimate the induration size demarcating positive from negative results in a group of children with suspected tuberculosis, and to compare this cut-off with available guidelines for interpretation of the Mantoux test in the diagnosis of tuberculosis in children.  
Methods: The results of Mantoux tests of children presenting with suspected tuberculosis over a 12-month period were retrospectively reviewed and plotted on a frequency distribution curve. The distribution was used to define a demarcation between positive and negative reactions. The resultant cut-off was compared with currently published guidelines for interpretation of the Mantoux test.  
Results: Two hundred (200) Mantoux results were analysed out of 202 records reviewed. Induration sizes ranged from 0 to 60 mm, with a mean of 9.4 mm. The induration distribution showed a bimodal pattern, with 103 patients showing no reaction (0 mm), and 96 (48%) patients with an induration size of ³ 5 mm, with the second mode at 15-19 mm. The demarcating antimode was at 5 mm.  
Conclusions: The induration distribution showed that a cut-off induration size of 5 mm was appropriate for this group of patients. This was in agreement with currently published guidelines for the interpretation of the Mantoux test in the diagnosis of tuberculosis in children.  
Key words: Mantoux, induration distribution, tuberculosis, children   
African Health Sciences Vol.5(2) 2005: 152-156

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 Esophageal cancer in north rift valley of western Kenya  
 . Vol. 5 No. 2 (2005).   
Abstract  
 Background: Cancer of esophagus is the 9th It is aggressive with poor prognosis especially in its late stage. Cancer of esophagus is geographically unevenly distributed with high incidence found within sharply demarcated geographic confines. Earlier reports from this country indicated relatively high proportion of cases in residents of Western and Central provinces with low incidence in the residents of the Rift Valley Province. This does not seem to be in agreement with our findings. Several aetiological factors have been associated with this type of cancer although their definitive mechanistic role is not clear.  
Objective: The main aim of this study was to describe the incidence, clinical epidemiology and histology of esophageal cancer in the North Rift region of Western Kenya, which forms the patients catchment area of Moi Teaching and Referral Hospital, Eldoret.  
Methods: This study involved a review of all available pathology reports beginning from January 1994 up to May 2001 from Moi Teaching and Referral Hospital. All reports of esophageal cancer were abstracted and analyzed according to gender, age and ethnical background. All cases were based on histological diagnosis. Statistical analysis was performed using the SPSS software package.  
Results: Esophageal cancer in this area is the most common cancer in men, yet it is the third common cancer in women. A male to female ratio of 1.5 to 1 was observed. Our finding also contrast with an earlier reported study that indicated that Rift Valley is a low prevalence area for this type of cancer. The mean age of the patients with this cancer was 58.7 years. The ethnic group most afflicted were Nandis and Luhyas. They are the majority tribes in this area. Squamous cell carcinoma accounted for 90% of the cases.  
Conclusions: Cancer of the esophagus is the most common malignancy in males and the third common malignancy in females in the catchment area of Moi Teaching and Referral Hospital, Eldoret. There is need to carry out further work to establish the aetiologic factors behind this neoplasm. This study forms a preliminary basis of further investigation to be undertaken to identify genes that are mutated during the carcinogenic development of this cancer. This may lead to identification of molecular biomarkers to be used in future for the early detection of this neoplasm.  
African Health Sciences Vol.5(2) 2005: 157-163

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 Aetiology of low back pain in Mulago Hospital, Uganda  
 . Vol. 5 No. 2 (2005).   
Abstract  
 Background: Low back pain exists in epidemic proportions in the western world and is on the increase. Its cause is mostly nonspecific. Not much is known about it in the developing world because the data is scanty. This study was set out to investigate the possible causes of low back pain and prevalence.  
Objective: To establish the likely causes of low back pain among patients seen in the out patient department, Mulago Hospital, Uganda.  
Methods: 204 patients were enrolled out of 1033 general patients who were present to the out patient referral hospital orthopedic clinic. All the 204 were referred patients with low back pain as the chief complaint. They were subjected to a questionnaire, which included history taking, a physical examination and investigations. Data was entered using Epi info soft ware and analyzed using SPSS.  
Results: The prevalence was 20%. The mean age was 47 years 10 months. The majority, 62.3% of patients had mechanical or simple back pain with no definable patho-anatomic causative factor (non-specific). 19.1% had nerve root compression due to prolapsed intervertebral discs. 17.2% had serious spinal pathology due to tuberculosis, brucellosis, fractures and degenerative changes. For 3 patients (1.5%) the cause was not determined.  
Conclusion: The findings indicate that low back pain of non-specific aetiology is the commonest cause of back pain. The precise aetiology of this large indefinite entity warrant further study.  
African Health Sciences Vol.5(2) 2005: 164-167

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 Viral load, CD4+ T-lymphocyte counts and antibody titres in HIV-1 infected untreated children in Kenya; implication for immunodeficiency and AIDS progression  
 . Vol. 6 No. 1 (2006).   
Abstract  
Background: There are limited reports on HIV-1 RNA load, CD4+ T-lymphocytes and antibody responses in relation to disease progression in HIV-1 infected untreated children in Africa. Methods: To describe the relationships between these parameters, we conducted a longitudinal cohort study involving 51 perinatally HIV-1 infected children aged between 1 and 13 years. HIV status was determined by ELISA and confirmed by western blot and PCR. Antibodies were quantified by limiting dilution ELISA, plasma HIV-1 RNA load by RT-PCR and CD4+ T-lymphocytes by FACSCount. Results: Asymptomatic and symptomatic disease had, respectively, a rise in median HIV-1 RNA load from 1,195 to 132,543 and from 42,962 to 1,109,281 copies/ml in children below 6 years. The increase in viral load was 10-fold higher for asymptomatic compared to other categories and 2-fold faster for children less than 6 years than those above. Similarly, symptomatic children below 6 years had initial median CD4+ T-lymphocyte counts of 647 (22%) cells/μL, declining to 378 (20%) while those above 6 years had initial values of below 335 (15%) but which increased to 428 (17%). Median viral load correlated significantly with median CD4+ T-lymphocyte percentage in children above 6 years (p=0.026) but not below. Conclusions: Viral load is lower in older than younger children and correlates significantly with percentage CD4+ T-lymphocytes. Survival by HIV-1 infected children requires a competent immune response early in infection to counter the rapidly replicating virus. Interventions aimed at boosting the naïve immune system may prolong survival in these children. African Health Sciences Vol. 6(1) 2006: 3-13

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 Burden of alcohol use in the Uganda police in Kampala district  
 . Vol. 6 No. 1 (2006).   
Abstract  
Background: Alcohol dependence is one of the leading causes of the global burden of disease. Among members of the Uganda Police Force, alcohol dependence has been a major contributor of poor mental health, poor work output and forced retirement. Objective: This study was carried out to determine the prevalence of alcohol dependence and associated psychosocial problems in the Uganda Police Force in Kampala District. Methods of Study: A sample of police officers selected by systematic sampling strategy from two large barracks in Kampala District participated. A semi-structured questionnaire designed to elicit information on the perceived impact of alcohol use was used. Prevalence rate was derived from ICD-10 criteria for alcohol dependence, and psychosocial problems in alcohol dependence. Results: Twenty respondents (19.2%) met criteria for alcohol use disorder, 26.0% met criteria for alcohol use problems and 9.6% reported that their health was poor. Alcohol use disorder or problems were significantly associated with lack of job satisfaction, poor health, problems in implementing personal plans, disciplinary problems, inability to save from personal earnings, debts, and absenteeism from work. Conclusion: One in five police officers met criteria for alcohol use disorder while one in four experienced psychosocial problems related to alcohol use. The results suggest serious implications for the quality of services provided by the Uganda Police. There is a need to establish measures to provide services for those affected, and a further need to establish preventative measures against alcohol dependence in the police force. African Health Sciences Vol. 6(1) 2006: 14-20

Adamson S Muula;;;Department of Community Health, University of Malawi College of Medicine, Malawi.   
 Condom and sexual abstinence talk in the Malawi National Assembly  
 . Vol. 6 No. 1 (2006).   
Abstract  
Background: Correct and consistent use of condoms has been reported as effective in the prevention of transmission of HIV. There have been many studies reporting on attitudes (perceptions) of communities on condoms and other aspects of HIV and AIDS and yet there is paucity of data on the perception towards condoms and abstinence by law makers. Objective: To determine perceptions of Members of Parliament in Malawi towards condoms. Methods: A qualitative study utilising parliamentary Hansards to describe the discussions about condoms and abstinence in the National Assembly 1999-2004. Content and discourse analyses were used. Results: In general, Members of Parliament had negative attitudes towards extra- and/or pre-marital sexual intercourse, condom promotion and use. Sexual abstinence amongst non-married persons was preferred as opposed to condom use. Condom use was not perceived as an effective way of controlling the spread of HIV. Some MPs though called for a change in mind-set so as to allow use of condoms in prisons, in order to prevent transmission of infection from prisoners to the general community once the prisoners were released.Conclusion: This study confirms that health interventions such as condoms are not perceived neutrally and may be construed as the enemy of society. African Health Sciences Vol. 6(1) 2006: 21- 26

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 Studies of anticancer and antipyretic activity of Bidens pilosa whole plant  
 . Vol. 6 No. 1 (2006).   
Abstract  
 Screening of different extracts and fractions from the plant Bidens pilosa Linn. var. (Asteraceae) has been conducted using the in – vitro comet assay for anticancer and the antipyretic action, which was done with in – vivo models. The extract from whole plant was extracted with n – hexane, chloroform and methanol extract (E1 – E3). The extracts were fractioned by column chromatography method and fractioned with ethyl acetate, acetone and water (F1 – F3). All the extracts and fractions were tested for anticancer and antipyretic activity. Among extracts E1 shows remarkable anticancer activity and E3 bears maximum antipyretic activity. In the antipyretic activity, paracetamol was used as the standard test drug. The most promising material (LC50 < 1500 μg / ml) was F1 ethyl acetate fractions of methanolic extract and methanolic crude extract of whole plants. However, little correlation was observed in the degree of antipyretic activity between the test drug and standard drug. In conclusion, the extract obtained from the whole plant of Bidens pilosa showed a significant cytotoxic effect to methanolic extract against Hela cells by in vitro method and showed a comparable antipyretic activity effect to paracetamol in rabbit pyrogen test. African Health Sciences Vol. 6(1) 2006: 27-30

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 The in-vitro antibacterial activity of Annona senegalensis , Securidacca longipendiculata and Steganotaenia araliacea - Ugandan medicinal plants  
 . Vol. 6 No. 1 (2006).   
Abstract  
Background: Nearly all cultures from ancient times to the present day have used plants as a source of medicines. As a result, different remedies tended to develop in different parts of the world. Current strategies to overcome the global problem of antimicrobial resistance include research in finding new and innovative antimicrobials from plants. Objectives: To determine the antibacterial activity of extracts of Annona senegalensis, Securidacca longipendiculata and Steganotaenia araliacea, plants which are used in Eastern Uganda for the treatment of diarrhea and wound infections. Methods: The root barks of these plants were collected, sun-dried, pounded using pestles and wooden mortars. Water and methanol extracts were derived and screened. Standard cultures of E. coli ATCC 25922, Pseudomonas aeruginosa ATCC 27853, and Staphylococcus aureus ATCC 25923 were used in the study. The antibacterial tests used were the agar well diffusion assays. The minimum inhibitory concentrations (MIC) were determined by cylinder plate technique. Results: Extracts of Annona senegalensis, Steganotaenia araliacea and Securidaca longipendiculata showed activity against Staphylococcus aureus. The methanol extract of Securidaca longipediculata was not inhibitory to S.aureus. Steganotaenia araliacea and Securidaca longipediculata (water) extracts were active against all the bacteria tested. The water and methanol extracts of Annona senegalensis did not show inhibitory activity against E. coli. Of the three bacteria studied, Staphylococcus aureus was the most susceptible to the extracts followed by P. aeruginosa. E. coli was least sensitive to the plant extracts. Annona senegalensis had the lowest MIC against Staphylococcus aureus (62.5mg/ml); while Steganotaenia araliacea had the highest MIC (250mg/ml) signifying lower activity. Conclusions: The root bark extracts of the three plants showed antibacterial activity, justifying their continued use in treatment of bacterial infections. Recommendations: Further studies are required to isolate and characterise the active phytochemical constituents in the plants. Toxicity studies should be done to determine their safety. African Health Sciences Vol. 6(1) 2006: 31-35

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 Mob justice in Tanzania: a medico-social problem  
 . Vol. 6 No. 1 (2006).   
Abstract  
Objective: To investigate the magnitude of mob justice and associated factors. Background: Mob justice is a social and public health problem that has grown in Tanzania in recent decades that has negative effects on social and health of the country, communities, and families. Materials and Methods: A four-year autopsy study was conducted at the Department of Pathology, MUCHS. Information on the cases was obtained from police, the relatives, friends and other witnesses if available. Results: 1249 persons were killed by mobs in Dar es Salaam during the period of 5 years (2000-2004). The alleged offense ranged from a serious crime like theft or murder to a mere violation of local customs or religious beliefs. The mode of the killings were mostly burning (48.11%) and stoning (49.96%). Other modes accounted for only 3.0% of the cases. The pattern of injuries ranged from skull and other skeletal fractures to viscera rupture. Conclusion: MJ is a social, legal and public health problem in Tanzania that needs immediate attention. Unemployment of youth and perceived economic inequalities should be addressed. As long as the judicial system doesn't work and corruption is not punished, people will continue to organize their own trials and judge their suspects in the street. These must be tackled in order to reduce the growing incidences of mob justice, hence saving life. It must be ensured that criminals do not violate the freedom, dignity and respect of each and every human or member of the society. African Health Sciences Vol. 6(1) 2006: 36-38

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 Upper gastrointestinal endoscopic findings in adolescents at Lacor hospital, Uganda  
 . Vol. 6 No. 1 (2006).   
Abstract  
Background and Objectives: Fiberoptic endoscopy is a highly efficient diagnostic tool, which is now being increasingly used, in the pediatric age group. This study has been carried out to demonstrate indications for and common findings of endoscopy in children. Materials and Methods: We retrospectively reviewed the medical records for endoscopy indication and result of children who had endoscopy between Jan 2000 to June 2005. Results: We analyzed 135 children who were referred for upper gastrointestinal endoscopy. There were 38 boys and 97 girls. The mean age was 16 years (SD+/−1.4293). The main indications comprised epigastric pain (67.4%), dyspepsia (11.9), hematemesis (8.9%), recurrent abdominal pain (3%) recurrent vomiting (3%), and miscellaneous (5.8%). Endoscopic diagnose included duodenal ulcer (14.8%) and gastritis (12.6%); duodenal scarring (5.2%), bile reflux (5.2%) duodenitis (4.4%) and miscellaneous 6.4%. Conclusion: In Upper gastrointestinal endoscopy is a diagnostic procedure in children with gastrointestinal disorder. Gastritis and duodenal disease are commonly seen in children, hence must be included in differential diagnosis of children with digestive complaints and its management. African Health Sciences Vol. 6(1) 2006: 39-42

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 Storage of antimalarials at household level and associated factors in Kiromo ward, Bagamoyo Tanzania  
 . Vol. 6 No. 1 (2006).   
Abstract  
Background: Malaria is a highly debilitating and frequently fatal disease of wide distribution. Improper drug storage and rampant self-medication are some of the factors that may contribute to an increase in the development of drug resistance by malaria parasites towards antimalarials. Objectives: To determine the extent of antimalarial drugs storage, sources and associated factors at household level at Kiromo ward in Bagamoyo, Coast region, Tanzania after the introduction of SP replacing chloroquine as first line. Methods: A total of 300 households from three villages making up Kiromo ward were included in this study. Swahili version of the questionnaire and a checklist were used in data collection. Results: Of the 300 households visited 25 (8.3%) were found to store antimalarials. The most commonly stored antimalarials were amodiaquine (30.8%) and quinine (34.6%). Most of these were in tablet form (76.9%). The source of these drugs was mostly from dispensaries. Kiromo was the only dispensary in the ward and others were outside the ward. These drugs were stored in special containers for safety. Frequent episodes of illness in the family were given as the most (56%) common reasons for drug storage in the families, followed by distance (20%). There was a statistically significant (p<0.05) association between storage of antimalarial drugs and number of children in the family and presence of a family member with febrile illness. The study further showed that out of 26 different types of antimalarials stored, only 7 (26.9%) had expiry dates on the containers because these were original containers of the drugs. Conclusion: The study revealed that few households store antimalarial drugs with amodiaquine and quinine being the most stored. The majority of the households obtained antimalarial drugs from dispensaries. Health education should be given not only to the patients but also the entire general public on the appropriate drug use, safety, expiry dates and appropriate storage. A model dispensary like Kiromo should be implemented in other rural areas. African Health Sciences Vol. 6(1) 2006: 43-48

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 A review of diagnosis and modes of presentation of tropical idiopathic lower limb gangrene  
 . Vol. 6 No. 1 (2006).   
Abstract  
Background: Tropical idiopathic lower limb gangrene (TILLG) is also known as Symmetrical gangrene in the African, Idiopathic gangrene in the African and Idiopathic peripheral gangrene of the tropics. The aetiopathogenesis of this clinical entity is a mystery. Objective: To review methods of diagnosing tropical idiopathic lower limb gangrene (TILLG) and highlight its clinical variants. Method: All Literature on idiopathic gangrene of the extremities was searched from libraries, colleagues and internet but only literature on TILLG (in Africans) from 1947 to date was scrutinised. Each case was studied to find out the basis of diagnosis. Result: TILLG is not fully understood and not easy to recognise. Two sets of criteria are known to be helpful in establishing diagnosis. These criteria can be classified as major and minor criteria. Major criteria are those clinical data that can establish the diagnosis of TILLG. No devices are required to identify them. Minor criteria are pathological changes that are consistent with TILLG. Devices are required to identify them. Three pathomorphological types of TILLG were described in literature and are classified as types A, B and C. Conclusions: This review is supposed to sensitise the clinician and make diagnosis easier. This will also encourage more researches. As more information becomes available, aetiopathogenesis of TILLG will be clearer and more clinical variants of the disease may be reported. This additional information will help in the prevention of gangrene, reducing the socioeconomic problems arising from amputation. African Health Sciences Vol. 6(1) 2006: 49-50

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 Fetal hemoglobin during infancy and in sickle cell adults  
 . Vol. 6 No. 1 (2006).   
Abstract  
Background: Fetal hemoglobin has been implicated in the modulation of sickle cell crisis though it is functional during infancy. Objective: The purpose of this study was to determine the waning time of fetal hemoglobin (HbF) and its persistence in later life. Method: Ninety infants aged 0-12 months, admitted at hospital, were tested for their HbF levels. Adult patients numbering 690 were also examined for their sickle cell status and a sickle positive patient of SS type with HbF had her family members recruited and their sickle cell types determined. Results: The results revealed that HbF was highest (98%) at birth, decreasing at 5% per week till 6 months when it wane off. Ten infants aged 6–12 months had HbF persisting at a level of 10% or more. Adult patients examined showed proportions of their sickle cell types as AS forming 51%, AC 20%, SS 19%, and SC 10%. An SS adult patient with mild sickle cell crisis had an ASF father who had no crisis and a mother and brother with AS each who had severe crisis. Conclusion: These findings suggest that HbF wanes off during infancy but persist in some adults and may modulate crisis in these adults. This has implications in sickle cell management. African Health Sciences Vol. 6(1) 2006: 51-54

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 Neurologic infections in a Nigerian university teaching hospital  
 . Vol. 6 No. 1 (2006).   
Abstract  
Background: Neurologic infections are an important cause of morbidity and mortality especially worldwide but much more in the African continent. The frequency of the different types of neurologic infections and their mortality in this part of Nigeria is not known. Objectives: To review cases admitted into the main tertiary referral center in Rivers State of Nigeria with neurologic infections over a 10-year period and to determine the types of infections, their frequency and the mortality Methods: Case notes of all admissions into the medical wards of UPTH, Port Harcourt between April 1993 and March 2003 were reviewed. Cases admitted with neurologic infections were extracted and analyzed for the study.Results: Of the 1395 patients admitted with neurologic disorders during the study period, 311 (22.3%) had neurological infections. The M:F ratio and mean age of patients with neurolgic infections were 1.7:1 and 34.1 years respectively. The most common infections identified were meningitis 136(43.7%), tetanus 90(28.9%), Pott's disease with cord compression 30(9.6%), viral meningoencephalitis 27(8.7%) and tuberculous meningitis (TBM) 19(6.1%). The case fatality was high: meningitis 49.3%, tetanus 47.8%, Pott's disease23.3%, meningoencephalitis 44.4% and TBM 68.4%.Conclusions: Preventable neurologic infections are a very important cause of morbidity and mortality in this environment. Cases presenting with suspicious neurologic infections should be referred to centers where specialized care can be instituted African Health Sciences Vol. 6(1) 2006: 55-58

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 Characterization and management of solid medical wastes in the Federal Capital Territory, Abuja Nigeria  
 . Vol. 6 No. 1 (2006).   
Abstract  
Background: Medical establishment such as hospitals and research institutes generate sizable amount of hazardous waste. Health care workers, patients are at risk of acquiring infection from sharps and contamination of environment with multiple drug resistant microorganisms if wastes are not properly managed. Objectives: To characterize types and evaluate waste disposal techniques employed in the management of solid medical wastes in five selected hospitals in the Federal Capital Territory, Abuja. Methods: This was a cross section study involving the use of questionnaires, in-depth interview, meetings, discussions and participant observed strategy. It also involved the collection, sorting (segregation), identification and characterization and weighing of waste types from wards and units in the selected hospitals. Results: The average waste generation rate per bed/day was determined and found to be 2.78kg of solid waste, 26.5% of the total waste was hazardous in nature. Waste segregation was found not to be practiced by any of the hospitals surveyed, 18.3% of the hospitals incinerated waste in a locally built brick incinerator; 9.1% bury; 36.3% burn waste in open pits while 36.3% dispose of a waste into municipal dumpsites. Conclusion: Waste management officers do not have formal training in waste management techniques; and hospital administrators pay very little attention to appropriate management of medical waste. Therefore, we must educate waste generators of their responsibility to properly manage the waste so that their staff, patients, environment and community is protected. African Health Sciences Vol. 6(1) 2006: 58-63

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 AIDS and non AIDS-related malignant lymphoma in Tanzania  
 . Vol. 6 No. 2 (2006).   
Abstract  
Background: Malignant lymphoma (ML) in HIV patients, are second in frequency to Kaposi's sarcoma (AKS) as AIDS-defining tumors. In Africa the frequency of AIDS-related lymphoma (ARL) is rare and the findings are controversial. Kaposi's sarcoma (KS) lesions are now causally associated with KSHV/HHV-8 but whether African ARL shows this association is not clear. Method: Cancer registry data was reviewed for retrospective cases. Both retrospective and prospective lymphoma cases were classified according to the revised European-American (REAL) classification. Immunephenotyping was performed on both frozen and fixed paraffin sections. Viral DNA was assessed by polymerase chain reaction (PCR) of formalin fixed or frozen biopsies. In situ hybridization (ISH) was used to determine the presence of EBV encoded RNA (EBER). Objectives: To determine the frequency and type of AIDS and non-AIDS related malignant lymphoma in Tanzania and a possible coassociation with KSHV/HHV-8 and EBV. Results: An overall increasing tendency for ML in Tanzania was observed during 1991-94 and a clear increase from 1993. The tumors were classified as Burkitt's (6), diffuse large cell (10), precursor-B lymphoblastic (1) and Hodgkin's disease (5) from HIV positive and negative patients. Ten (40%) high grade ML and three Hodgkin's lymphoma from HIV patients had HHV-8 DNA. These findings were not related to age, sex or type of lymphoma. There was no association of HHV-8 with the lymphoma cells. Epstein-Barr virus (EBV) was demonstrable in most (13/18; 72%) of the tested tumors and seven (31.8%) had both HHV-8 and EBV. Conclusions: This study suggests an overall increased frequency of ML patients infected with HHV-8 in Tanzania particularly in HIV patients which may result from the well established high HHV-8 prevalence in the general population, but HHV-8 was not associated with ARL pathogenesis as reflected by lack of tumor cell infection. As opposed to EBV, measures targeting HHV-8 for control of ML may therefore not be appropriate. African Health Sciences Vol. 6(2) 2006: 69-75

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 Non-neoplastic diseases of the cervix in Nigerians: A histopathological study  
 . Vol. 6 No. 2 (2006).   
Abstract  
Background: Diseases of the cervix are common in young sexually active women. Non-neoplastic diseases are predominantly inflammatory and are common but there are a few publications on the subject compared to neoplastic diseases of the cervix. Materials and Methods: The surgical day books of the Histopathology department of the Obafemi Awolowo University Teaching Hospitals Complex Ile-Ife, Nigeria from the year 1990-1999(Ten years) were studied for all cervical biopsies. Results: Four hundred (400) cervical surgical biopsies were received during this period. 150 (37.5%) of the cases were non-neoplastic lesions. Age range was 20-69 years with peak incidence at 40-49 years. Histological distribution showed 123 cases (82%) were chronic non-specific cervicitis. Eighteen cases (12%) were chronic cervicitis with koilocytic change pathognomonic of Human Papilloma Virus (HPV) infection, two- third (12cases) of which occur within 40- 49years. There were five cases (3.3%) of chronic granulomatous cervicitis, three cases (2.0%) of acute cervicitis and only one case (0.7%) of microglandular endocervical hyperplasia. Conclusion: All the histological types were found within the peak age incidence of 40-49 years. Chronic non-specific cervicitis was the most common non-neoplastic cervical lesion and it occurs in all age groups of women studied. In 12% of patients it is associated with cytopathic effect of HPV. This has obvious implication for the occurrence of carcinoma of the cervix in our country. We recommend routine pap smear test in this group of patients especially, as a way of reducing the occurrence of carcinoma of the cervix. Keywords: non-neoplastic, cervix, diseaseAfrican Health Sciences Vol. 6(2) 2006: 76-80

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 Antifertility effect of aqueous and ethanol extracts of the leaves and roots of Asparagus africanus in rats  
 . Vol. 6 No. 2 (2006).   
Abstract  
Background: Asparagus africanus is claimed to have use in reproductive related health problems in some areas of Ethiopia.Objective: To study the potential antifertility effect of the aqueous and ethanol extracts of the leaves and roots of Asparagus africanus in rats.Methods: Water and ethanol extracts were given by gavages to rats in the in vivo test at a dose of 300 mg/kg of body weight, and rat uterine tissue were used for the in vitro test at different concentrations.Results: The aqueous extracts of the leaves and the roots showed an anti-implantation activity of 70% and 77%, respectively, while the ethanol extracts of the leaves and roots showed 48% and 61%, respectively. The antifertility activities of the aqueous and ethanol extracts were 40% (for leaves), 60% (for roots) and 20% (for leaves), 40% (for roots), respectively. All the extracts have resulted in significant (P< 0.05) reduction in the number of implants as compared with their respective controls. Each extract potentiated acetylcholine induced uterine contractions in a concentration dependent manner significantly (P< 0.05). Conclusion: The results obtained in this study suggest that the leaves and roots of this plant may possess hormonal properties that can modulate the reproductive function of the experimental rats. Keywords: antifertility, anti-implantation, asparagus africanus, aqueous extract, ethanol extract, leaves, roots, rats African Health Sciences Vol. 6(2) 2006: 81-85

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 Pharmacokinetic interactions between chloroquine, sulfadoxine and pyrimethamine and their bioequivalence in a generic fixed-dose combination in healthy volunteers in Uganda  
 . Vol. 6 No. 2 (2006).   
Abstract  
Background: A pre-packaged fixed-dose formulation of chloroquine (CQ) and sulfadoxine/pyrimethamine (S/P) combination (Homapak) is widely used for the treatment of falciparum malaria in Ugandan children. It is however a product whose pharmacokinetics and interactions have not been studied. Objectives: To explore possible pharmacokinetic interactions between CQ and S/P during co-administration, and to determine their bioavailability in the locally made Homapak compared to the Good Manufacturing Practice (GMP) made formulations.Methods: Thirty-two adult healthy volunteers were randomized into four groups and given single oral doses of fixed-dose CQ+S/P combination (Homapak), or GMP formulations of S/P (Fansidar), CQ (Pharco), or their combination. Plasma samples were followed for 21 days, analysed by HPLC-UV methods, with pharmacokinetic modeling using the WinNonlin software. Results: Sulfadoxine in Homapak was more rapidly absorbed (ka = 0.55 h-1) than in Fansidar + CQ (ka = 0.27 h-1, p=0.004), but not more than S in Fansidar alone group (ka = 0.32 h-1, p=0.03). No significant differences were observed in the other pharmacokinetic parameters of S, P and CQ when given together or separately. The relative bioavailability of CQ and S in Homapak showed bioequivalence to reference formulations. Conclusions: There were no pharmacokinetic interactions between CQ, S and P when the compounds were given together, however, more investigations would be needed to explore this further. Compared with GMP made drugs, both S and CQ are bioequivalent in Homapak, the Ugandan made fixed-dose formulation. Furthermore, the absorption of S was more rapid which could be advantageous in malaria treatment. Keywords: sulfadoxine, pyrimethamine, chloroquine, bioequivalence, pharmacokinetic interactions African Health Sciences Vol. 6(2) 2006: 86-92

Scholastica O Alajo;;;;;Jessica Nakavuma;;;;;Joseph Erume;;;Makerere University, P. O. Box 7062, Kampala Uganda.   
 Cholera in endemic districts in Uganda during El Niño rains: 2002 – 2003  
 . Vol. 6 No. 2 (2006).   
Abstract  
Background: El Niño phenomenon causing increased rainfall and flooding has been linked to flare ups and emergence of several disease outbreaks including cholera. The latter has been reported in many districts in Uganda in recent years. Therefore an understanding of factors influencing its pattern of occurrence is needed for effective control. Objectives: To determine cholera disease status during six months of El Niño rains and assess serotypes and antibiotic sensitivity of isolates. Methods: A prospective study was conducted in five cholera “endemic districts” in Uganda. Results: Cholera outbreaks occurred in all the study districts coincident with the onset of the El Niño rains. There were 924 cholera suspect cases reported with 95 fatalities (case fatality rate 10.3%). A total of 388 clinical specimens were analyzed by culture and of these, 168 were positive for V. cholerae. Biochemical and serological analysis identified the isolates as V. choleraem O1, biotype EL Tor serotype Ogawa. Antibiotic sensitivity revealed that isolates were 100% sensitive to ciprofloxacin, tetracycline and erythromycin, whereas sensitivity was variable for other tested antibiotics. Unlike Kampala, where the disease was contained within three months, persistence occurred in other districts only dying out with end of El Niño rains, suggesting differences in disease control. Conclusion: These results show that El Niño rains cause increase in the number of cholera cases in Uganda, calling for preparedness and a need to emulate Kampala response incase of outbreaks in other districts. African Health Sciences Vol. 6(2) 2006: 93-97

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 Pattern and validity of clinical diagnosis of upper gastrointestinal diseases in South-west Nigeria  
 . Vol. 6 No. 2 (2006).   
Abstract  
Background: Diagnosis of upper gastrointestinal (UGI) diseases is often made on clinical grounds alone in Nigeria due to lack of endoscopic facilities. The validity of using such diagnosis is presently unknown. Objective: The study aimed to determine: age and sex distribution of patients presenting for UGI endoscopy; pattern of clinical and endoscopic diagnoses in patients with UGI diseases; and, the validity of clinic-based diagnosis. Methods: Medical records of patients presenting at Obafemi Awolowo University Teaching Hospitals Complex, Ile-Ife, Nigeria for UGI endoscopy between September 1999 and August 2003 were reviewed. Data was analysed for sensitivity, specificity, positive predictive value, and negative predictive value of clinical diagnosis using endoscopic diagnosis as “gold” standard. Results: Males constituted 53.4% of subjects and mean age was 45 years (+ 1.69 SD). Peptic ulcer disease (PUD) constituted 67.6% of referral diagnosis but 33.9% of endoscopic diagnosis. PUD had the highest sensitivity value (0.72) while gastritis had the least (0.04). Specificity ranged from 0.40 for PUD to 1.00 for corrosive oesophagitis. Positive predictive value ranged from 0.29 (oesophageal cancer) to 0.67 (corrosive oesophagitis) and negative predictive value ranged from 0.66 for gastritis to 0.99 for corrosive oesophagitis. Conclusion: The validity of clinical diagnosis in UGI conditions varied widely, and in general, there is poor agreement between clinical and endoscopic diagnoses. African Health Sciences Vol. 6(2) 2006: 98- 103

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 Trauma at a Nigerian teaching hospital: pattern and documentation of presentation  
 . Vol. 6 No. 2 (2006).   
Abstract  
Background and Objectives: This study is aimed at identifying the characteristics of injuries and determining the efficiency of documentation of patients' records in a tertiary hospital where there is no trauma registry. Patients and Methods: A retrospective case record analysis was conducted of injured patients seen at the Accident and Emergency unit over a 12 month period from January to December 2003. Results: A total of 1078 records of injured patients that attended the A&E were analysed. Their mean age was 31years (range 3 months to 85 years). Laceration (n = 408) and fractures (n = 266) representing 62.5% of injuries were seen. Injuries to the lower limb occurred in 239 patients, multiple anatomical sites 224, head 224, upper limb 203, the neck 20, and the abdomen 11 patients. Trauma was due to road traffic accident in 977 patients, fall in 39, assault in 14 while burns and firearm injuries occurred in 5 and 7 patients respectively. The mean injury severity score (ISS) was 4. Severe injuries, ISS > 15 occurred in 54 patients with mean ISS of 21, and resulted from RTA in 92.6% of cases. Mortality from severe injuries occurred in 31.5% of cases while overall mortality was 2%. Most deaths were associated with multiple injuries (60.9%) and head injury (30.4%). Incomplete documentation of accident and injury data occurred frequently, from 2% of some data to 100% of others. Conclusions: Lacerations and fractures were the most common injuries. Mortality is due usually to head and multiple injuries. Research into appropriate strategies for prevention of injuries, especially RTA, is required but this must start with the establishment of institutional and regional trauma registries for complete documentation of relevant data. African Health Sciences Vol. 6(2) 2006: 104-107

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 Effect of achyranthes aspera L. on fetal abortion, uterine and pituitary weights, serum lipids and hormones  
 . Vol. 6 No. 2 (2006).   
Abstract  
Back ground: The practice of traditional medicine for the control of fertility in rural Ethiopia is based on folk use of numerous antifertility herbs and Achyranthes aspera is one of these used for this purpose. Many plants are known to possess anti-fertility effect through their action on hypothlamo-pituitary-gonadal axis or direct hormonal effects on reproductive organs resulting in inhibition of ovarian steroidogenesis. Objectives: The present study focused to investigate the effect of methanolic leaves extract of Achyranthes aspera L. on some indicators for anti-fertility activities such as abortifacient, estrogenesity, pituitary weight, and ovarian hormone level and lipids profile in female rats, in attempt to validate the traditional claim. Methods: The abortifacient effect of the methanolic extract of the leaves of Achyranthes aspera was determined by counting the dead fetuses in vivo. Effect on estrogenesity was assessed by taking the ratio of the uterine weight to body weight. The ratio of the pituitary weight to body weight was also calculated. The effect of the extract on the level of ovarian hormones and lipid profile was evaluated using electrochemiluminescence immunoassay. Results: The extract showed significant (p<0.05) abortifacient activity and increased pituitary and uterine wet weights in ovarectimized rats. The extract, however, did not significantly influence serum concentration of the ovarian hormones and various lipids except lowering HDL at doses tested.Conclusion: The methanolic leaves extract of Achyranthes aspera possesses anti-fertility activity, which might be exploited to prevent unwanted pregnancy and control the ever-increasing population explosion. Keywords: Achyranthes aspera, female rats, hormones, lipids African Health Sciences Vol. 6(2) 2006: 108-112

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 Acceptability of maxillary major connectors in removable partial dentures  
 . Vol. 6 No. 2 (2006).   
Abstract  
Background: The choice of connector lies between plate, a bar or a combination of bars, which may cross the palate in various positions. Many opinions have been expressed concerning the acceptability to the patients of the various forms of palatal connectors but there have been few investigations. Objectives: The aim of this study is to compare subjective patients' reactions to three maxillary major connectors: metal bar, metal plate, and acrylic connectors and to establish the most acceptable and the least acceptable maxillary major connectors. Methods: Fifteen consecutive patients attending the prosthetic out–patient clinic of Dental Center, University College Hospital, Ibadan who had never worn dentures were recruited into the study. Three dentures each with a different maxillary major connector design were fabricated for each patient. A questionnaire was administered to ascertain their reactions to each of the three denture designs. Results: Fourteen patients (93.3%) preferred the denture with metal palatal bar major connector whereas only one patient preferred the denture with acrylic plate major connector design. No patient preferred the palatal metal plate connector design. Conclusions: The metal bar major connector was the most acceptable maxillary major connector while acrylic resin plate was more acceptable than metal plate maxillary major connector. It also confirmed the influence of connector design on patient acceptance of removable partial denture. African Health Sciences Vol. 6(2) 2006: 113-117

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 Nationality and country of training of medical doctors in Malawi  
 . Vol. 6 No. 2 (2006).   
Abstract  
Background: There is growing interest in the migration of doctors from Africa to developed nations. Little attention has been made in understanding the flow of doctors into African countries. Objective: To describe the nationality, country of primary qualification as a doctor and specialties of doctors registered in Malawi in 2003. Methods: Review of Medical Council of Malawi 2003 register and University of Malawi-College of Medicine graduation records. Results: There were 252 doctors registered by the Medical Council of Malawi (MCM) of whom 51.2% were Malawian and 48.8% non-Malawian. 35.7% of the doctors had obtained their primary education in Malawi, 17.5% from the UK, 9.9% other African countries and 8.7% from other African countries. There were 72 specialists of whom 23 were Malawian nationals and 49 were non- Malawians. Conclusions: There is almost an equal distribution of national and non-national doctors in Malawi. However, among specialists, non-national far out-number Malawians by over two and a half times. While the brain drain of doctors from developing nations to developed nations has received interest, there is need also to explore the migration of doctors into resource-poor countries such as Malawi. African Health Sciences Vol. 6(2) 2006: 118-119

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 Aetiology, risk factors and immediate outcome of bacteriologically confirmed neonatal septicaemia in Mulago hospital, Uganda  
 . Vol. 6 No. 2 (2006).   
Abstract  
Background: Neonatal septicaemia remains a major cause of morbidity and mortality. The aetiology, risk factors and outcome of this problem need to understood. Objective: To determine the aetiology, risk factors and immediate outcome of bacteriologically confirmed neonatal septicaemia in Mulago hospital. Methods: Blood cultures were aseptically obtained from neonates presenting with clinical sepsis by WHO criteria to Mulago during a five month period between July and November 2002. Blood was placed in Brain Heart Infusion media and incubated within 30 minutes. Subcultures were plated daily up to 7 days on blood, chocolate and MacConkey agar and incubated in aerobic and 5% carbon dioxide conditions. Pure colonies were identified by Gram stain and biochemical tests and antibiotic sensitivities were obtained. Results: Gram positive organisms were predominant (69.2%) followed by E. coli (17%) and Group B Streptococci (GBS) (7%). Staphylococcus aureus and E. coli dominated isolates in early and late onset sepsis. S. aureus was more sensitive to gentamicin than to cloxacillin. The sensitivity of E. coli to ceftriaxone was 94.1%. Factors significantly associated with neonatal septicaemia were male sex, history of convulsions, hypoglycaemia, lack of antenatal care, late onset sepsis and umbilical pus discharge. Mortality in sepsis cases was 18.1%, and 84% of deaths occurred in the first 2 days of admission. Hypoglycaemia was significantly associated with death (p < 0.01). Conclusion: S. aureus predominates the aetiology of neonatal septicaemia followed by E.coli. Most deaths occur in the first 48 hours of admission and hypoglycaemia is significantly associated with death. African Health Sciences Vol. 6(2) 2006: 120-126

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 Problem Based Learning, curriculum development and change process at Faculty of Medicine, Makerere University, Uganda  
 . Vol. 6 No. 2 (2006).   
Abstract  
Introduction: The faculty of Medicine, (FOM) Makerere University Kampala was started in 1924 and has been running a traditional curriculum for 79 years. A few years back it embarked on changing its curriculum from traditional to Problem Based Learning (PBL) and Community Based Education and Service (COBES) as well as early clinical exposure. This curriculum has been implemented since the academic year 2003/2004. The study was done to describe the steps taken to change and implement the curriculum at the Faculty of Medicine, Makerere University Kampala. Objective: To describe the steps taken to change and implement the new curriculum at the Faculty of Medicine. Methods: The stages taken during the process were described and analysed. Results: The following stages were recognized characterization of Uganda's health status, analysis of government policy, analysis of old curriculum, needs assessment, adoption of new model (SPICES), workshop / retreats for faculty sensitization, incremental development of programs by faculty,implementation of new curriculum. Conclusion: The FOM has successfully embarked on curriculum change. This has not been without challenges. However, challenges have been taken on and handled as they arose and this has led to the implementation of new curriculum. Problem based learning can be adopted even in a low resourced country like Uganda. Keywords: curriculum development, medical education, problem based learning, community based education and serviceAfrican Health Sciences Vol. 6(2) 2006: 127-130

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 Chronic renal failure at the Olabisi Onabanjo university teaching hospital, Sagamu, Nigeria  
 . Vol. 6 No. 3 (2006).   
Abstract  
Background and objectives of the study: Chronic kidney disease is a common cause of morbidity and mortality in Nigeria. This study aims at determining the pattern of chronic renal failure (CRF) in a Nigerian University Teaching Hospital. Methods: The study was a 10-year retrospective study of consecutive cases of CRF seen at Olabisi Onabanjo University Teaching Hospital, Sagamu, Ogun State, Nigeria. Results: The frequency of CRF in the population was 3.6% (182 of 5,107). There were 90 males and 63 females (1.42:1). The peak age was between 20-49 years, with a mean of 39.6+14.8 (range 14 -72years). The commonest causes were chronic glomerulonephritis 63(41.2%), hypertensive nephrosclerosis 40(26.1%) and diabetes mellitus 20(13.1%). The commonest symptoms were oedema, vomiting, oliguria and dyspnea occurring at 118(77.1%), 96(62.7%), 89(58.2%) and 87(56.9%) respectively. The mean creatinine clearance value at presentation was 6.5+8.1mls/min, while the commonest complications were hypertension 68 (44.4%), biventricular failure 32 (20.9%) and urinary tract infection 29 (19%). The mean presenting systolic and diastolic blood pressures were 167.34+37.6mmHg and 106.03+28.9 mmHg respectively. The mean total haemodialysis session per patient was 3.5+1.6 (range 1- 7sessions). Only 34(22.2%) of the patients were able to afford haemodialysis. The majority 21(61.8%) of these could only afford 3 haemodialysis sessions while only 2(5.9%) patients had up to 7 dialysis sessions in the center. Conclusion: Chronic glomerulonephritis, hypertensive nephrosclerosis and diabetes mellitus are the commonest causes of chronic renal failure in Nigeria. Most of the patients presented late. Cardiovascular complications and infections were responsible for a greater morbidity among the patients. African Health Sciences Vol. 6(3) 2006: 132-138

GS Bimenya;;;;;JK Okot;;;;;H Nangosa;;;;;SA Anguma;;;;;W Byarugaba.   
 Plasma cholesterol and related lipid levels of seemingly healthy public service employees in Kampala, Uganda  
 . Vol. 6 No. 3 (2006).   
Abstract  
Background: As Uganda's economy improves, many people tend to adopt western diets and sedentary life styles that predispose to cardiovascular diseases including hypertension. These may be in silent danger without any typical symptoms to send early warning signals. In Uganda, cardiovascular diseases (CVD) and diabetes mellitus are rapidly emerging as major causes of morbidity and mortality. Objective: This study was conducted to determine spot levels of plasma lipid indicators of CVD in seemingly healthy public service employees in Kampala, Uganda. The purpose of this study was achieved through analysis of fasting plasma samples for the following: Total cholesterol (TC), Triacylglycerols (TG), High density lipoprotein cholesterol (HDL), Low density lipoprotein cholesterol (LDL), and molar ratios of LDL/HDL, TC/ HDL, and TC/TG. Methods: One hundred and seventy four fasting executives 85 males and 89 females employed in public service in Kampala, Uganda, were investigated to determine enzymatically spot levels of TC, TG, HDL, and LDL from which their mutual ratios were calculated. Results: In each of the 7 parameters studied, the samples showed risk factors for CVD at the following rates :HDL 10% ,LDL/HDL 12%, TG 47%, LDL 48%, TC/HDL 53% TC 66%, TG/HDL 68%,. Conclusions: In all the cut off points used, each analyte had a significant percentage of public service employees at risk of CVD. It is therefore concluded that hypercholesterolaemia and other dyslipidemias exist among seemingly healthy public service employees in Kampala, Uganda, and this needs urgent intervention at both individual and national levels. African Health Sciences Vol. 6(3) 2006: 139-144

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 Dental caries in 12-year-old suburban Nigerian school children  
 . Vol. 6 No. 3 (2006).   
Abstract  
Background: Dental caries is one of the commonest oral diseases in children. Despite this fact, not much attention has been given to studies on this issue among suburban Nigerian children. Objective: To investigate the prevalence of dental caries, dental attendance and oral health behaviours among the 12- year-old suburban Nigerian children. Subjects and Methods: Four hundred and two schoolchildren (349 boys, 153 girls) from both private and public schools age 12-year-old participated in the study in 2003. One examiner was calibrated and performed the screening procedures using standard method of WHO diagnostic criteria. Results: The prevalence of caries was 13.9 % and mean DMFT was 0.14. The decayed component accounted for 77.2 % of the DMFT while filling and missing teeth accounted for 15.8% and 7% respectively. Over 85 % of the children examined were caries free. Seventy seven per cent of the teeth affected by caries were untreated. The probability of having caries experience DMFT> 0 was significantly associated with the type of school and regular sweet consumption p< 0.05. The children who had not visited the dentist had higher caries prevalence than other children. This was statistically significant p<0.05. Dental attendance was generally poor in both public (90.6%) and private (83.1%) school children. Conclusion: The findings in this study for the caries prevalence in 12 year - old suburban Nigerian schoolchildren was as low as in developed countries of central Europe and lower than the global standard according to WHO references for the year 2000. Keywords: caries, prevalence, dental, attendance, behaviour, suburban, children, survey, Nigeria African Health Sciences Vol. 6(3) 2006: 145-150

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;Abuja, Nigeria;;;;;Olufumilayo Y Elegba;;;;;Iretiola B Babaniyi.   
 Bacteriological profile of neonatal septicaemia in a tertiary hospital in Nigeria  
 . Vol. 6 No. 3 (2006).   
Abstract  
Background: Neonatal septicaemia is an important cause of morbidity and mortality. Knowledge of the bacteriological profile of the aetiologic agents is very important and helps to reduce the associated mortality in neonatal septicaemia. Objective: To determine the bacteriological profile of common aetiologic agents of neonatal septicaemia and their antibiotics sensitivity pattern. Method: This study was a retrospective review of all the 390 neonatal blood cultures carried out in the Department of Clinical Microbiology and Parasitology of the National Hospital Abuja, Nigeria over three years (Jan 2002 – Dec 2004). Result: The 390 neonatal samples constituted 25% of all blood samples received in the laboratory during the period under review. Twenty-two percent were positive for bacterial growth, yielding gram-negative bacilli (GNB) and grampositive cocci (GPC) in almost equal proportion, predominantly Klebsiella pneumoniae (86% of GNB) and Staphylococcus aureus (81% of GPC). Although the Klebsiella pneumoniae were multiply-resistant and showed resistance pattern suggestive of Extended-Spectrum Beta Lactamase (ELBS) production they were 100% sensitive to imipenem. The sensitivity of the Staphylococcus aureus isolates to amoxicillin-clavulanic acid, cefuroxime, ciprofloxacin, chloramphenicol and erythromycin were 89%, 85%, 75%, 71% and 64% respectively. Conclusion: A sustainable antibiotic susceptibility surveillance programme coupled with good infection control practices and rational antibiotics use will reduce infection rate, ensure better therapeutic success and prolong the efficacy of available antimicrobials. Keywords: neonates, septicaemia, antibiotic susceptibility, Nigeria African Health Sciences Vol. 6(3) 2006: 151-154

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 Reproductive health knowledge, beliefs and determinants of contraceptives use among women attending family planning clinics in Ibadan, Nigeria  
 . Vol. 6 No. 3 (2006).   
Abstract  
Background: In developing countries especially in Africa, reproductive ill health have been a great concern to many stakeholders as maternal mortality and morbidity are very high compared to developed world. Also reproductive health knowledge and access to quality of care maternal health services in Africa are poor with significant health consequences. Appropriate reproductive health knowledge, belief and will power of women to access quality family planning services (preventive and curative) are essential for improvement in reproductive health of women. Objective: The study aimed to assess reproductive health knowledge, beliefs and influential factors of contraceptives use among women attending family planning clinics in Ibadan, Nigeria. Method: The study was cross-sectional in nature involving 550 randomly selected respondents among women attending family planning clinics in Ibadan, Nigeria. The study instrument was a self-administered questionnaire. Data was analyzed using SPSS package. Results: Only 56.0% of the respondents knew when pregnancy can occur, 31.5% believed that having sex once with a man will not result in pregnancy. Almost in all items, over 90.0% of respondents had knowledge of benefits of family planning. Consideration about personal health (86.0%) and husband's approval (74.9%) were major determinants of respondents use of contraceptives. Conclusion: Though respondents were knowledgeable about benefits of family planning, there is the need for continuous education of women about reproductive health issues and integration of men's participation in family planning programme to increase utilization of family planning services in Ibadan, Nigeria. African Health Sciences Vol. 6(3) 2006: 155-159

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 Oral fecal parasites and personal hygiene of food handlers in Abeokuta, Nigeria  
 . Vol. 6 No. 3 (2006).   
Abstract  
 Background: Ingestion of infective eggs and cysts of faecal orally transmissible parasites has been linked with the level of environmental and personal hygiene. The possibility of contamination of food with eggs and cysts by infected food vendors has also been recorded. Objectives and methods: This study was aimed at assessing the prevalence of parasites with direct transmission and the level of hygiene among food vendors. Stools of randomly selected food vendors selling in schools and streets in Abeokuta were examined for ova and cysts of parasites using formo-ether concentration method. Questionnaires, interviews, and field observation were also used to assess the activities of food vendors. Results: Ninety-seven (97%) percent of the food vendors were infected with one or more faecal-orally transmissible parasites while 3% were free from such parasites; Parasites observed were Entamoeba histolytica with a prevalence of 72% Ascaris lumbricoides (54%), Enterobius vermicularis (27%), Trichuris trichiura (24%) and Giardia duodenalis(13%). School food vendors recorded lower prevalence of infection (92%) than the street food vendors (98.7%) (P>0.05) Fifty-two percent (52%) of the food vendors have dewormed in the last four years; Eighty percent (80%) of this were school food vendors. Infections with helminthes were recorded in 63.5% of the dewormed food vendors. Food vendors involved in child care activities were found to be more infected than those not involved in such activities. Toilet facilities available to the vendors were mainly pit latrine and other related structure (75%) while 25% had access to water system closets. During hawking, dung hills were majorly used for defaecation. Hand washing after defaecation did not include the use of soap in the few vendors that were involved in hand washing. Conclusion: There is need to enact food handling policies and implementation of such policies ensured in order to reduce transmission of oral faecal parasites. Keywords: Food vendors, parasites, infection, feacal, helminths African Health Sciences Vol. 6(3) 2006: 160-164

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 Knowledge of sexually transmitted diseases among secondary school students in Dar es Salaam, Tanzania  
 . Vol. 6 No. 3 (2006).   
Abstract  
Background: In Tanzania, it is considered a taboo for teachers and parents to talk with children about sexual matters including sexually transmitted diseases (STDs) in schools and at home because of cultural and religious barriers. Political pressure also keeps sexual education and thus education on STDs out of classrooms. Generally, there is disagreement over STDs education on what to teach, by whom, and to what extent. Objectives: To assess the knowledge of STDs, and attitude towards sexual behavior and STDs among secondary school students. Methods: This was a cross- sectional study using a semi-structured questionnaire. A sample size of 635 students was determined by simple random sampling. Results: Majority of the students (98%) said have heard about STDs; however their knowledge of the symptoms associated with STDs was poor. Similarly 147 (23%) students did not know other means of STDs transmission rather than sexual intercourse. A number of students who were capable of identifying all tracer STDs was comparable between the ordinary (10.5%) and advanced (10.6%) level students (p<0.001). Thirty-two students (8%) were completely unable to identify even a single tracer STD. About 96% respondents said were capable of preventing themselves from contracting STDs, however 38% of them admitted that they were at risk of contracting STDs. Majority (99%) described more than one source of information on STDs, television and radio were the most commonly mentioned sources, whilst none of them cited parents as source of information (p<0.001). Regarding vulnerability to STDs, 503 (79%) students said female students were more vulnerable to STDs compared to males. Conclusions: The level of knowledge about STDs (ability to identify tracer STDs, to describe symptoms associated with STDs and their mode of transmission) is poor with regard to the students' levels of education. Female students are more vulnerable to STDs compared to male counterparts. Mass media is still the more effective means of educating the students on STDs. African Health Sciences Vol. 6(3) 2006: 165-169

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 Gunshot injuries in Calabar, Nigeria: an indication of increasing societal violence and police brutality  
 . Vol. 6 No. 3 (2006).   
Abstract  
Background: Gunshot injuries were rare in Calabar before the Nigerian civil war. This has changed in subsequent years and has reached a near epidemic proportion in the last three years. These are caused by civil violence, police brutality and armed robberies. Objective: To evaluate the incidence, pattern and causes of gunshot injuries in this region and draw the attention of Nigerians and the Government to the above problems for a possible solution. Methodology: Records of patients admitted into the University of Calabar Teaching Hospital (UCTH) with gunshot wounds between April 2002 and May 2004 were extracted. Parameters analyzed included patients' biodata, sources of injury, anatomical site (s) of injury, modalities of treatment and the outcome. Result: There were 51 injuries in 49 patients as follows: The lower limbs 25 (51%), upper limbs 6 (12.4%), upper limbs/ chest 2 (4.1%), chest 4 (8.2%), abdomen 7(14.1%) and head/neck 5(10.2%). Male/female ratio was 48:1. Twenty-four (49%) sustained their injuries from either accidental discharge or deliberate shooting by the police while armed robbers wounded 10 (20.4%) and cultists, 2 (4.1%). Two patients had amputations and mortality was 8.2%. Conclusion/recommendations: The police should be cautious with guns; they and the Government should be alert to the menace of robbery, political violence, cultism and communal clashes. Good Governance, creation of employment, eradication of corruption and political violence may help. African Health Sciences Vol. 6(3) 2006: 170-172

M Galukande;;;Faculty of Medicine, Kampala, Uganda;;;;;S Muwazi;;;;;BD Mugisa.   
 Disability associated with low back pain in Mulago Hospital, Kampala Uganda  
 . Vol. 6 No. 3 (2006).   
Abstract  
Background: Low back pain is sufficiently disabling and a common cause of disability particularly during the productive middle years of adult life. Disability implies interference with daily activities. Objective: To assess and document the disability associated with low back pain in terms of sick leave days, interference with daily activities and some pain characteristics. Methods: This study was carried out in the Orthopaedic out patient clinic of Mulago Hospital, a tertiary national referral hospital in Kampala, Uganda. It was a descriptive cross sectional study over a period of seven months. 204 patients with mechanical back pain were enrolled in the study, after screening all consecutive new adult patients referred with low back pain as the major complaint. A validated modified Oswestry instrument was used to collect data. Nine daily activities: sleep, sex, lifting, traveling, social and recreational activities, dressing, sitting, walking and running activities were investigated. Data was analyzed using SPSS for windows version 10. Mean and Standard deviations were used to summarize continuous variables. P value was considered statistically significant if it was equal or less than 0.05. Results: 87% of the respondents reported a mean of 14 days off work during the 4 weeks prior to the interview because of back problems. The mean duration of a current low back pain episode was 5 months. All activities were interfered with; with lifting as the most affected with a mean score of 4.5, walking and running was 3.6, standing was 3.3, sex life was 2.9, traveling was 2.9, sitting was 2.7, social and recreational activities was 2.7, getting dressed was 2.1 and sleeping was 1.8. Conclusion: Our results confirm that low back pain is a significant cause of disability affecting the productive middle years of adult life and causes significant disruption of daily activities including sleep and sex. The cost of lost work time, compensation and treatment for our setting is a knowledge gap that should be filled by further study. There is need for a community-based study to ascertain extent of the problem in at a wider population level. African Health Sciences Vol. 6(3) 2006: 173-176

Zaccheaus Awortu Jeremiah;;;Public Health Laboratory, Public Health Division, Ministry of Health, Rivers State, Nigeria.   
 Abnormal haemoglobin variants, ABO and Rh blood groups among student of African descent in Port Harcourt, Nigeria  
 . Vol. 6 No. 3 (2006).   
Abstract  
Background: Abnormal haemoglobin variants ( HbSS,AS,AC,SC,etc) have been known to be common among blacks. Patients with sickle cell disease are often faced with the risk of alloimmunization from allogeneic blood transfusion Objectives: The study was designed to sample students population of African descents for the purpose of updating information on the prevalence of abnormal haemoglobin variants, ABO, and Rh blood groups and compare the results with previously published data. Methods: Standard electrophoretic and haemagglutination techniques were employed in testing the blood samples. Results: Of the 620 students screened, 80.32% were HbAA and 19.68% HbAS. 22.9% were of blood group A, 17.10% group B, 4.84% group AB and 55.16% group O. 96.77% were Rh.D positive while 3.23% were Rh D negative. Sickle cell gene in homozygous state (HbSS) and other abnormal haemoglobin variants were not encountered in this students population,. Analysis of the students population revealed that 454(73.23%) were females while 166(26.77%) were males. Participants of the age group 26-30 years (35.7%) constituted the majority and in this age group, all blood groups were represented. Conclusion: There is a gradual decline in the prevalence of abnormal haemoglobin variants in our black population. The frequencies of ABO and Rh blood groups however appeared to be stable and consistent with previous published data. Keywords: haemoglobin genotypes, blood groups, ABO, Rh, Nigeria African Health Sciences Vol. 6(3) 2006: 177-181

IG Munabi;;;Makerere University Medical School, Department of Human Anatomy, P.O.Box 7062, Kampala, RSA;;;;;ET Katabira;;;;;J Konde-Lule.   
 Early undergraduate research experience at Makerere University Faculty of Medicine: a tool for promoting medical research  
 . Vol. 6 No. 3 (2006).   
Abstract  
Background: Research is one of the key distinguishing features of an academic institution. The way an institution grooms its future researchers determines its long term survival. The ability to do and communicate ones research findings is so important that it is now an internationally recognized minimum competency for graduate of any medical school. To remain relevant the Faculty of Medicine Makerere University needs to identify research enhancing opportunities like undergraduate research experiences. Methods: This was a cross sectional study involving 424 graduate and undergraduate students of Makerere University Medical School on the traditional curriculum. A self administered questionnaire was used to capture reported details of individual research experiences. Results: There were 424 student respondents, 88% of whom were undergraduates (372/424). About 41% (176/ 424) of these respondents reported having had a previous research experience. Among the postgraduates 74% (37/ 50) reported having had a previous research experience compared with 68% (139/342) of the undergraduates [OR=4.16, 2.07-8.57]. The sum of individual undergraduate experiences had the strongest positive correlation with the total number of studies done by an individual [R=0.801]. Conclusion: Early, guided undergraduate research experience can be used to promote research within the Faculty of Medicine Makerere University. Keywords: research, medical, students, Makerere African Health Sciences Vol. 6(3) 2006: 182-186

Mohamed M Radwan;;;;;Fikri M Abu-Zidan;;;UAE University, Al-Ain, United Arab Emirates.   
 Focussed assessment sonograph trauma (FAST) and CT scan in blunt abdominal trauma: surgeon's perspective  
 . Vol. 6 No. 3 (2006).   
Abstract  
Background: Diagnosis of blunt abdominal trauma is a real challenge even for experienced trauma surgeons. Diagnostic tools that help the treating doctor in optimum management of blunt abdominal trauma include; Focussed Assessment Sonography for Trauma (FAST), Diagnostic peritoneal lavage (DPL) and CT scan. Objectives: the aim of this communication is to define the recent role of FAST and CT scan of the abdomen in the diagnosis of blunt abdominal trauma. Findings and conclusions: FAST is useful as the initial diagnostic tool for abdominal trauma to detect intraabdominal fluid. With proper training and understanding the limitations of ultrasound, the results of FAST can be optimized. DPL is indicated to diagnose suspected internal abdominal injury when ultrasound machine is not available, there is no trained person to perform FAST, or the results of FAST are equivocal or difficult to interpret in a haemodynamically unstable patient. In contrast, in haemodynamically stable patients the diagnostic modality of choice is CT with intravenous contrast. It is useful to detect free air and intraperitoneal fluid, delineate the extent of solid organ injury, detect retroperitoneal injuries, and help in the decision for conservative treatment. Helical CT is done rapidly which reduces the time the patient stays in the CT scan room. Furthermore, this improves sagittal and coronal reconstruction images which are useful for detecting ruptured diaphragm. African Health Sciences Vol. 6(3) 2006: 187-190

R Klein.   
 What's in a label? Learning from the HIV-TB deadly symbiosis  
 . Vol. 4 No. 3 (2004).   
Abstract  
No Abstracts. African Health Sciences Vol.4(3) 2004: pp.202-204

J K Byamugisha;;;;;F M Mirembe;;;;;E Faxelid;;;;;K Gemzell-Danielsson.   
 Emergency Contraception and Fertility awareness among University Students in Kampala, Uganda  
 . Vol. 6 No. 4 (2006).   
Abstract  
Background: Uganda has a high maternal mortality ratio with unsafe abortions being one of the major causes. Young people are particularly vulnerable to unsafe induced abortion with its sequelae. Emergency contraception (EC) may reduce unsafe abortions if easily accessible and acceptable.  
  
Objective: To determine knowledge about, ever use and attitudes towards EC among resident and non-resident female first year university students in Kampala.  
  
Methods: This Cross sectional study was carried out at Makerere University from January to March 2005.Out of 5971 females admitted in the academic year 2004/2005,379 answered a self administered questionnaire. The students were approached individually and given the questionnaire if they consented.  
  
Results: The mean age of the participants was 21 years. Less than half (45.1%) had ever heard about emergency contraceptive pills (ECPs). The most common sources of information about EC were friends (34%),media (24.8%) and schools (19.4%). The ever pregnancy rate was 3.4 percent and 42 percent were in a steady relationship of three or more months. The contraceptive ever-use rate was 14.5 percent. Among the users the most common methods were condoms (48.9%) and withdrawal (23.4%). Emergency contraceptive pills had been used by seven students. Forty two percent did not know the time interval within which ECPs can work and one third thought it would interrupt an ongoing pregnancy. Thirty five percent did not know when in the menstrual cycle they were likely to conceive. The majority of the students were against over the counter (OTC) availability of EC because of fear of misuse.  
  
Conclusions: Knowledge about Emergency contraception and fertility awareness is low among the female first year university students. Friends and the media are an important source of EC information. Awareness and knowledge of EC should be increased.  
  
 Keywords: Emergency contraception, University Students, Kampala > African Health Sciences Vol. 6 (4) 2006: pp. 194-200

C P Szabo;;;;;C W Allwood.   
 Body figure preference in South African adolescent females: A cross cultural study.  
 . Vol. 6 No. 4 (2006).   
Abstract  
Background: Eating disorders have traditionally been associated with the white community in South Africa. The emergence of eating disorders among blacks in the mid 1990's appeared to signal a demographic shift. Subsequent data suggested that eating disorders would increase in prevalence amongst black South Africans. Objective: The current study sought to explore body figure preference in a cross cultural South African sample, given the established relationship between body dissatisfaction and eating disorders. Methods: The sample comprised a community based, multi-racial adolescent population in both urban (n=1353) and rural (n=361) areas. The Body Figure Preference Test [BFPT] was administered. Results: Most urban respondents had a desire to be smaller (white=72%; black=61%), whereas rural black respondents were more evenly divided amongst those who were content (31%), desiring to be larger (29%) and desiring to be smaller (40%) [Chi square value=105.309, df=4, p=0.001]. Conclusions: The findings of the study demonstrate that racial homogenization exists regarding body figure preference within the urban setting. Data from the rural area suggests milieu specific factors in this regard with fewer respondents desiring to be smaller. This may have implications for the emergence of eating disorders in black South African populations, more specifically those in urban areas. Keywords: body, figure, South Africa, cross-cultural > African Health Sciences Vol. 6 (4) 2006: pp. 201-206

J N Nakku;;;;;G Nakasi;;;;;F Mirembe.   
 Postpartum major depression at six weeks in primary health care: prevalence and associated factors  
 . Vol. 6 No. 4 (2006).   
Abstract  
Background: Major depression is a common and disabling complication of the postpartum period in women. It is thought to occur three times more commonly in the developing than in developed countries.  
  
Objectives: The objectives of this study were to determine the prevalence of and factors associated with major depression among women attending a peri-urban primary health care unit in Kampala, Uganda, at six weeks postpartum.  
  
Method: Five hundred and fourty four women attending a peri-urban health centre were investigated in a cross-sectional study. These women were screened using the twenty five-item Self Reporting Questionnaire (SRQ-25), while major depression was confirmed using the Mini International Neuro-psychiatric Interview (MINI). Associations were sought between major depression and the respondents' demographics and various psychological, social and obstetric factors.  
  
Results: The point prevalence of major depression at six weeks postpartum was 6.1%. Psychiatric disorder was significantly associated with young age, being single, negative life events, unplanned pregnancy, unwanted sex of baby and current physical illness in both mother and newborn.  
  
Conclusion: There is indication for routine screening of at risk women in the peri-natal period to avoid, recognize and manage postpartum psychiatric morbidity and its consequence on mothers and their developing children.  
 > African Health Sciences Vol. 6 (4) 2006: pp. 207-214

J Smit;;;;;C E van den Berg;;;;;L G Bekker;;;;;S Seedat;;;;;D J Stein.   
 Translation and cross-cultural adaptation of a mental health battery in an African setting  
 . Vol. 6 No. 4 (2006).   
Abstract  
Background: Standardised measuring instruments are increasingly used in psychiatric research cross-culturally. These instruments are considered to be culturally equivalent when all forms of biases, or social norms specific to the culture of origin, have been removed.  
  
Objectives: To describe the qualitative process of selection, translation and cultural adaptation of a mental health battery for use in a Xhosa-speaking community that is, as far as possible, ‘culture-free' or equivalent.  
  
Method: Informal discussions were held with key members in the community to determine what would be considered as appropriate for the community in respect of psychiatric screening instruments. Existing rating-scales for depression, alcohol abuse and posttraumatic stress disorder that would meet these criteria were identified and then translated from English into Xhosa. Cultural equivalence was achieved by combining methods of back-translation, committee consensus approach and decentering. Discussions during the committee consensus meetings were recorded and categorized into themes. Two themes emerged: (1) issues related to the attainment of semantic equivalence and (2) broader problems inherent in cross-cultural research.  
  
Results: Issues related to individual questionnaires included the use of terms to describe emotional distress cross-culturally. Broader issues related to the translation process itself included the form of language to be used, time-frames, and the use of Likert-scales. It also demonstrated the problems inherent in the categorization of emotions.  
  
Conclusion: A method of combining a group approach, back-translation, and decentering was effective and efficient in this context for establishing content and semantic equivalence. Cross-cultural adaptation can never completely remove all forms of bias from a research instrument, but such limitations should be acknowledged and openly discussed, rather than hidden or ignored.  
 Keywords:   
Cross-cultural; rating scales; research; psychiatry; South Africa > African Health Sciences Vol. 6 (4) 2006: pp. 215-222

C Chen.   
 Rebellion against the polio vaccine in Nigeria: implications for humanitarian policy  
 . Vol. 4 No. 3 (2004).   
Abstract  
No Abstracts. African Health Sciences Vol.4(3) 2004: pp.205-207

L Berrang-Ford;;;;;M Odiit;;;;;F Maiso;;;;;D Waltner-Toews;;;;;J McDermott.   
 Sleeping sickness in Uganda: revisiting current and historical distributions  
 . Vol. 6 No. 4 (2006).   
Abstract  
Background: Sleeping sickness is a parasitic, vector-borne disease, carried by the tsetse fly and prevalent in sub-Saharan Africa. The disease continues to pose a public health burden in Uganda, which experienced a widespread outbreak in 1900-1920, and a more recent outbreak in 1976-1989. The disease continues to spread to uninfected districts.  
  
Objectives: This paper compares the spatial distributions of sleeping in Uganda for the 1900-1920 outbreak period with current disease foci, and discusses information gaps and implications arising for future research, prevention and control.  
  
Methods: Population census records for 1911 and sleeping sickness records from Medical and Sanitary Reports of the Ugandan Protectorate for 1905-1936 were extracted from the Uganda Archives. Current sleeping sickness distribution data were provided by the Ministry of Health, Uganda. These were used to develop sleeping sickness distribution maps for comparison between the early 1900s and the early 2000s.  
  
Results: The distribution of sleeping sickness from 1905-1920 shows notable differences compared to the current distribution of disease. In particular, archival cases were recorded in south-west and central Uganda, areas currently free of disease. The disease focus has moved from lakeshore Buganda (1905-1920) to the Busoga and south-east districts.  
  
Conclusions: Archival sleeping sickness distributions indicate the potential for a much wider area of disease risk than indicated by current disease foci. This is compounded by an absence of tsetse distribution data, continued political instability in north-central Uganda, continued spread of disease into new districts, and evidence of the role of livestock movements in spreading the parasite. These results support concerns as to the potential mergence of the two disease foci in the south-east and north-west of the country.  
  
 > African Health Sciences Vol. 6 (4) 2006: pp. 223-231

J Gangoue-Pieboji;;;;;S Koulla-Shiro;;;;;P Ngassam;;;;;D Adiogo;;;;;P Ndumbe.   
 Antimicrobial activity against gram negative bacilli from Yaounde Central Hospital, Cameroon  
 . Vol. 6 No. 4 (2006).   
Abstract  
Background: Antimicrobial resistance among bacteria pathogens is a world-wide issue. The antimicrobial susceptibility patterns of common pathogenic bacteria are essential to guide empirical and pathogen-specific therapy; unfortunately, these data are scarse in Cameroon.  
  
Objective: To determine the antimicrobial susceptibility patterns of Gram-negative bacilli isolated in Yaounde Central Hospital Laboratory of Bacteriology.  
  
Methods: Gram-negative bacilli isolates (n = 505), obtained from a wide range of clinical specimens (urine, pus and blood) in Yaoundé Central Hospital Laboratory of Bacteriology between March 1995 and April 1998, were evaluated for resistance to antibiotics (amoxicillin, amoxicillin/clavulanate, piperacillin, cefazolin, cefoxitin, cefotaxime, ceftazidime, aztreonam, imipenem, gentamicin, tobramicin, ofloxacin and trimethoprim/sulfamethoxazole) by the Kirby-Bauer disk diffusion method.  
  
Results: High rates of resistance were found in most of the bacteria studied. Resistance to all isolates was mostly observed for amoxicillin (87%), piperacillin (74%) and trimethoprim/sulfamethoxazole (73%). Susceptibilities to third generation cephalosporins (cefotaxime, ceftazidime) and monobactame (aztreonam) were = 91% for Escherichia coli, = 71% for Klebsiella spp., = 98% for Proteus mirabilis, = 50% for Enterobacter spp. and Citrobacter spp. Pseudomonas aeruginosa was less susceptible to cefotaxime (2%) and aztreonam (33%), and highly susceptible to ceftazidime (72%) whereas Acinetobacter baumannii was highly resistant to aztreonam (100%), to cefotaxime (96%) and cetazidime (62%). Imipenem (98%) was the most active antibiotic followed by the ofloxacine (88%). Susceptibility of all isolates to gentamicin was 67%.  
  
Conclusion: These results indicate that surveillance to antimicrobial resistance in Cameroon is necessary to monitor microbial trends, antimicrobial resistance pattern, and provide information for choosing empirical or direct therapy to physicians.  
 Keywords: antimicrobial agents, resistance, Gram-negative bacilli, bacteria susceptibility testing, Cameroon.> African Health Sciences Vol. 6 (4) 2006: pp. 232-235

L O Thanni.   
 Bacterial osteomyelitis in major sickling haemoglobinopathies: geographic difference in pathogen prevalence  
 . Vol. 6 No. 4 (2006).   
Abstract  
Background: Controversy exists about the bacterial pathogen that is most often associated with osteomyelitis in major sickling haemoglobinopathies, that is, HbSS, HbSC, and HbSthalassemia.  
  
Objective: To determine the existence of regional or continental differences in the prevalence of bacterial pathogens associated with osteomyelitis in sickling haemoglobinopathies  
  
Method: A meta-analysis is done of 11 year hospital data set and published studies in African Journals Online (Ajol) and Pubmed electronic databases on the subject.  
  
Results: Fifteen studies including two hundred and eighty one bacterial pathogens from SubSaharan Africa, United States, Europe and the Middle East were analysed. There were 129 (45.9%) salmonellae, 82 (29.2%) Staphylococcus aureus, 55 (19.6%) other Gram negative bacilli (GNB) and 15 (5.3%) other Gram positive cocci (GPC). There were 117 isolates in the studies from Africa out of which salmonellae accounted for 21.4%, S. aureus 38.5%, other GNB 34.2% and other GPC 6%. In contrast, out of 110 isolates in the studies from the USA, salmonellae were 70%, S. aureus 16.4%, other GNB 9.1% and other GPC 4.5%. Salmonellae and S. aureus accounted for 37.9% and 62.1%; 64% and 4.9% in isolates from the Middle East and Europe respectively.  
  
Conclusions: Salmonellae are the most common bacterial pathogens of osteomyelitis in major sickling haemoglobinopathies in the USA and Europe whereas Staphylococcus aureus is the most common pathogen in SubSaharan Africa and the Middle East. The worldwide prevalence of salmonella may be reducing while that of S. aureus may be increasing. Possible reasons for this observation are suggested.  
  
 Keywords: haemoglobinopathy, osteomyelitis, sickle cell disease, bacteria, salmonella, staphylococcus aureus > African Health Sciences Vol. 6 (4) 2006: pp. 236-239

SZ Hoffman.   
 HIV/AIDS in Cuba: a model for care or an ethical dilemma?  
 . Vol. 4 No. 3 (2004).   
Abstract  
No Abstracts. African Health Sciences Vol.4(3) 2004: pp.208-209

L W Kibe;;;;;C M Mbogo;;;;;J Keating;;;;;S Molyneux;;;;;J I Githure;;;;;J C Beier.   
 Community based vector control in Malindi, Kenya  
 . Vol. 6 No. 4 (2006).   
Abstract  
Background: Community involvement has become an important component of the National Malaria Control Strategy in Kenya, resulting in the organization of groups charged with addressing mosquito and malaria-related concerns within the community.  
  
Objectives: The purpose of this study was to identify community groups involved with intended malaria vector control activity in Malindi, Kenya.  
  
Methods: Information was obtained from key informant interviews, focus group discussions, and a stakeholder meeting. The objectives were to determine the roles of community groups, identify examples of past successes and obstacles to successful implementation of vector control, and assess the level of knowledge about malaria and mosquitoes among the groups.  
  
Results: Nineteen of 34 community groups (56%) registered at social services reported intended malaria vector control activities such as treating ditches, making and selling insecticide-treated mosquito nets, draining stagnant water, organizing clean-ups, making and selling neem soap, and the organization of campaigns such as the “Malaria Mosquito Day”. Major challenges facing these groups include volunteerism, lack of technical expertise, supervision, and maintaining control activities in the absence of funds. Most groups reported limited knowledge about malaria vectors, and thus targeted all water bodies for control activities.  
  
Conclusions: We found that community groups are willing to participate in control operations, but lack government and technical support. We highlight the importance of strengthening organizational efforts and capacity building, as well as the need to clarify government policy on malaria vector control responsibilities within the communities  
 Keywords: vector control, malaria, community groups, urban, Kenya> African Health Sciences Vol. 6 (4) 2006: pp. 240-246

G S Bimenya;;;;;W Byarugaba;;;;;S Kalungi;;;;;J Mayito;;;;;K Mugabe;;;;;R Makabayi;;;;;E Ayebare;;;;;H Wanzira;;;;;M Muhame.   
 Initial attempt to establish population reference values for blood glucose and lipids in Makerere University undergraduate students  
 . Vol. 6 No. 4 (2006).   
Abstract  
The purpose of this study was to establish blood glucose and lipid profile of Makerere University undergraduate students.  
  
Study design: This was a cross-sectional study.  
  
Materials and methods: A total of 183 students participated in the study. Capillary blood glucose was read instantly on a finger prick sample off Sensorex™ glucose analyzer. Venous blood from the antecubital vein was used for lipid assays. Total cholesterol was assayed by the oxidase-peroxidase enzyme system. Plasma triacylglycerols were analyzed using the glycerokinase-oxidase reagents. HDL and LDL cholesterol were analyzed using homogeneous enzymatic methods. Concentration results for each variable were plotted in histograms and the type of distribution established. Summary statistics were then calculated non- parametrically to set reference values.  
  
Results: Empirical ranges were: Cholesterol 2.1-7.2 mmol/L; triacylglycerols 0.4-6.87 mmol/L; HDLC 0.09-2.13 mmol/L; LDLC 0.95-5.38 mmol/L and capillary blood glucose 2.72-9.21 mmol/L. The reference ranges covering the central 95 percentile were: Cholesterol 2.65-5.15 mmol/L, triacylglycerols 0.61-4.03 mmol/L; HDLC 0.58-1.97 mmol/L; LDLC 1.25-3.57 mmol/L and capillary blood glucose 3.11-7.55 mmol/L.  
  
Conclusion: The established reference values for the age group 20-26 years were: Total Cholesterol 2.65-5.15 mmol/L, LDL 1.25-3.57 mmol/L, HDL 0.58-1.97 mmol/L, TG 0.61-4.03 mmol/L and capillary blood glucose 3.11-7.55 mmol/L which differed from set international values.  
  
Recommendations: We recommend the establishment of indices for the indigenous populations, conscientiously planned diets, and regular exercise.  
  
 > African Health Sciences Vol. 6 (4) 2006: pp.247-251

A A-I Musa.   
 Monteggia fracture-dislocation: a case report, its' initial management and review of bado's classification  
 . Vol. 6 No. 4 (2006).   
Abstract  
Fracture of proximal ulna and dislocation of the proximal radio-ulna joint in the same arm is called Monteggia fracture- dislocation. Four clinical variants of this fracture- dislocation have been described in literature. This is a report and description of initial management of a fracture- dislocation, which was consequent to a sideswipe injury and consisted of a combination of the following injuries; lateral dislocation of the radial head, fractures of the olecranon and proximal ulna in the left forearm. The radial head dislocation and fracture of the olecranon were open. The head of the radius was exposed through the same wound. This fracture-dislocation resembled type 3 Bado's classification of Monteggia fracture-dislocation because of fracture of the olecranon close to the coronoid process and lateral dislocation of the head of radius. Keywords: Monteggia fracture- dislocation; initial management; Bado's classification> African Health Sciences Vol. 6 (4) 2006: pp. 252-254

J Wandabwa;;;;;P Doyle;;;;;K Paul;;;;;M A Wandabwa;;;;;F Aziga.   
 Risk factors for severe abruptio placenta in Mulago Hospital, Kampala, Uganda  
 . Vol. 5 No. 4 (2005).   
Abstract  
Objective: To determine the risk factors for severe abruptio placenta in Mulago hospital, Kampala, Uganda.   
Design: A case control study.   
Setting: Mulago hospital labour wards   
Study population: Women who delivered in Mulago hospital. Participants: Forty five women with severe abruptio placenta (cases) were recruited between 15th November 2001 and 30th November 2002. They were followed up and compared to five hundred women (controls) who had normal deliveries. Outcome variables: Socio-demographic characteristics, familial history, medical history, gynaecological and obstetric history.   
Results: The risk factors for severe abruptio placenta were low socio economic status (OR 10.5,95% CI 3.8 to 29.2), co existing hypertension (OR 56.8, 95% CI 9.0 to 358.5), previous history of stillbirth (OR 3.1,95% CI 1.1 to 9.1), delivery by caesarean section in previous pregnancy (OR 7.3, 95% CI 1.8 to 29.7),non attendance of antenatal care(OR 6.5, 95% CI 2.0 to 21.2), recurrent vaginal bleeding(OR 26.7, 95% CI 8.6 to 85.4) and delivery of male babies(OR 2.2, 95% CI: 1.2 to 4.9).   
Conclusion: The risk factors for abruptio placenta were chronic hypertension, recurrent vaginal bleeding, previous delivery with caesarean section and low socio economic status. These factors can be identified during prenatal period and used to prevent maternal morbidity and mortality. African Health Sciences Vol. 5 (4) 2005: pp. 285-290

M Odida.   
 Papillary squamous cell carcinoma of the cervix in Uganda: a report of 20 cases  
 . Vol. 5 No. 4 (2005).   
Abstract  
Background: Non-glandular papillary carcinoma of the cervix are uncommon tumours. In Uganda where cervical carcinoma is very common, no cases of papillary squamous cell carcinoma of the cervix has been reported.   
Objectives: To ascertain the occurrence and describe the clinicopathological features of papillary squamous cell carcinoma of the cervix in Uganda.   
Study Design: Retrospective review of histologically diagnosed cases of squamous cell carcinoma of cervix with papillary structures.   
Methods: Retrospective review of cases of cervical carcinoma diagnosed in the Pathology Department, Makerere University from 1968 to 1973 was done. Cases with features of squamous differentiation and forming papillary pattern were then selected.   
Results:Twenty cases were encountered and the ages of the patients ranged from 22 to 70 years (mean 46.6 years). Histologically, the tumours had thin to broad fibrovascular cores covered by multilayered squamous epithelium. In five cases, there were areas with very delicate fibrovascular cores covered by monolayered epithelial cells.   
Conclusion: The results of this study show that in Uganda, papillary squamous cell carcinoma of the cervix does occur and is predominantly a disease of older women. The results also confirm that papillary squamous cell carcinoma is a distinct subtype with some variants, and support the hypothesis that squamous cell carcinoma of the cervix is heterogeneous group of tumuors. African Health Sciences Vol. 5 (4) 2005: pp. 291-294

O A Idowu;;;;;C F Mafiana;;;;;S Dopu.   
 Anaemia in pregnancy: a survey of pregnant women in Abeokuta, Nigeria  
 . Vol. 5 No. 4 (2005).   
Abstract  
Background: Anaemia in pregnancy is a common problem in most developing countries and a major cause of morbidity and mortality especially in malaria endemic areas. In pregnancy, anaemia has a significant impact on the health of the foetus as well as that of the mother. 20% of maternal deaths in Africa have been attributed to anaemia   
Objectives and Methods: This study was therefore carried out to determine the prevalence of anaemia among pregnant women receiving antenatal care in two hospitals and a traditional birth home in order to obtain a broader prevalence data. Pregnant women were enrolled in the study at their first antenatal visit and were monitored through pregnancy for anaemia. Packed cell volume (PCV) was used to assess level of anaemia; Questionnaires were also administered to obtain demographic information.   
Results: Three hundred and sixty five (76.5%) of the women were anaemic at one trimester of pregnancy or another. Anaemia were more prevalent among primigravidae (80.6%) than the multigravidae(74.5%)(P>0.05). Two hundred and eleven women (57.8%) had moderate anaemia while 147 (40.3%) had mild anaemia and 7(1.9%) were severely anaemic (5 (71.4%) of which were primigravidae). All severely anaemic women were under 30 years old. Women attending TBH for antenatal care were found to be more anaemic (81.2%) (Even at various trimesters of pregnancy) than those attending the hospitals (72.5%) (P<0.05). However, in all the antenatal centers more women were anaemic in the 2nd trimester of pregnancy. Forty-seven (9.8%) of the enrolled women booked for antenatal care in the first trimester, while 303(63.5%) booked in the second trimester and 127(26.6%) in the 3rd trimester of their pregnancies. 62.5% of these women were already anaemic at the time of antenatal booking, with a higher prevalence among the primigravidae (69.7%)(P< 0.05). Absence of symptoms of ill health was the major reason for late antenatal booking. Anaemia was higher among unemployed women and those with sickle cell traits.   
Conclusion: Educating women on early antenatal booking and including those in TBHs in health interventions is necessary to reduce the problem of anaemia in pregnancy in Nigeria. African Health Sciences Vol. 5 (4) 2005: pp. 295-299

D K Kaye;;;;;F Mirembe;;;;;A Johansson;;;;;A M Ekstrom;;;;;G B Kyomuhendo.   
 Implications of bride price on domestic violence and reproductive health in Wakiso District, Uganda  
 . Vol. 5 No. 4 (2005).   
Abstract  
Objective: Bride price payment is a gender issue with implications on gender relations in different socio-cultural contexts. It also impacts Sexual and Reproductive Health and Rights. In a qualitative study on the perceptions of domestic violence in Wakiso district, payment of bride price emerged as one of the key factors associated with domestic violence. The study explored experiences, motivations, meanings, consequences and reproductive health implications of bride price payment in Wakiso district Uganda.   
Methods: 10 single-sex focus group discussions and 14 in-depth interviews were conducted in Wakiso and Nangabo sub-counties, Wakiso district from July 2003 through March 2004. Data was analyzed by thematic content analysis, assisted by Easy Text software for data retrieval.   
Findings: Participants perceived bride price as indicating that a woman was 'bought' into the man's household, which reduced her household decision-making roles. It limited women's independence and perpetuated unequal gender power relations, especially regarding health-seeking behaviour.   
Conclusion: Bride price payment is a contextual factor that the community in Wakiso District, Uganda, perceived as associated with domestic violence, with serious sexual and reproductive health implications.  
 African Health Sciences Vol. 5 (4) 2005: pp. 300-303

L Atuyambe;;;;;F Mirembe;;;;;A Johansson;;;;;E K Kirumira;;;;;E Faxelid.   
 Experiences of pregnant adolescents - voices from Wakiso district, Uganda  
 . Vol. 5 No. 4 (2005).   
Abstract  
Background: In Uganda, morbidity and mortality among adolescent mothers and their children are high. Social factors behind this problem need to be better understood.   
Objective: To explore problems that pregnant adolescents face in order to design appropriate policies and interventions.   
Methods: This was a descriptive study that utilized qualitative methods for data collection. The study population comprised of pregnant adolescents, adolescent mothers, opinion leaders, In-charge of health unit, and Traditional Birth Attendants (TBAs) in Wakiso district, Uganda. Six Focus Group Discussions (FGDs) with adolescent mothers and pregnant adolescents, and six key informant interviews were conducted with leaders in-charge of health units and TBAs. A moderator and a note taker facilitated the FGDs, which were tape recorded with consent from participants. Qualitative content analysis was done.   
Results: Discussions revealed that pregnant adolescents faced domestic physical violence. Furthermore, they were psychologically violated by parents and partners, and the community within which they lived. Pregnant adolescents were treated inhumanely and overworked with household chores and had inadequate food to eat. Adolescents experienced stigma and as a result some had carried out unsafe abortions. Key informant interviews and FGDs revealed that health workers were rude and unsympathetic to pregnant adolescents. This significantly contributed to delayed health care seeking when adolescents were ill.   
Conclusion: Pregnant adolescents lack basic needs like shelter, food and security. They also face relational problems with families, partners and the community. There is, therefore, a need to sensitize the community and school personnel about adolescent reproductive health issues. In addition, adolescent friendly services need to be established/strengthened. Continuous in-service training for health workers with emphasis on counseling skills for young people is urgently needed. African Health Sciences Vol. 5 (4) 2005: pp. 304-309

A Almedom;;;;;B Tesfamichael;;;;;Z Mohammed;;;;;N Mascie-Taylor;;;;;J Muller;;;;;Z Alemu.   
 Prolonged displacement may compromise resilience in Eritrean mothers  
 . Vol. 5 No. 4 (2005).   
Abstract  
Objective: to assess the impact of prolonged displacement on the resilience of Eritrean mothers.   
Methods: an adapted SOC scale (short form) was administered. Complementary qualitative data were gathered from study participants' spontaneous reactions to and commentaries on the SOC scale.   
Results: Displaced women's SOC scores were significantly less than those of the non-displaced: Mean = 54.84; SD = 6.48 in internally displaced person (IDP) camps, compared to non-displaced urban and rural/pastoralist: Mean = 48. 94, SD = 11.99; t = 3.831, p < .001. Post hoc tests revealed that the main difference is between IDP camp dwellers and urban (non-displaced). Rural but traditionally mobile (pastoralist or transhumant) communities scored more or less the same as the urban non-displaced – i.e., significantly higher than those in IDP camps (p < 0.05). Analysis of variance confirmed that gender is critical: displacement has significantly negative effects on women compared to men: RR = .262, p < .001. SOC scores of urban and pastoralist/transhumant groups were similar, while women in IDP camps were lower scoring – RR = .268, p < .001.   
Conclusions: The implications of these findings for health policy are critical. It is incumbent on the international health institutions including the World Health Organization and regional as well as local players to address the plight of internally displaced women, their families and communities in Eritrea and other places of dire conditions such as, for example Darfur in the Sudan. African Health Sciences Vol. 5 (4) 2005: pp. 310-314

D K Kaye;;;;;F Mirembe;;;;;G Bantebya.   
 Perceptions of health care providers in Mulago hospital on prevention and management of domestic violence  
 . Vol. 5 No. 4 (2005).   
Abstract  
Objective: To explore knowledge, attitudes and practices of health workers in Mulago hospital towards domestic violence prevention and management, especially violence during pregnancy.   
Methods: From 5th to 25th March 2000, self-administered pre-coded questionnaires were given to a purposively selected sample of 48 health workers identified from staff of the Obstetrics and Gynaecology department, Mulago hospital, Uganda. The questionnaire had 22 statements assessing knowledge, attitudes and practices, to which participants gave responses on a Likert scale ranging from whether they agreed, disagreed or were undecided. Responses were analyzed in terms of frequencies and percentages. To corroborate information obtained, in-depth interviews were conducted with clinic and ward administrators on knowledge, attitudes, practices and barriers to survivors' management.   
Results: Many respondents had poor knowledge of domestic violence management or prevention. Though they believed counseling survivors was necessary, none of the in-depth interviewees had counseling skills or had ever referred patients or survivors for such counseling. Lack of technical competence, negative attitudes and institutional constraints were cited as main barriers to provision of optimal care to survivors.   
Conclusion: Health workers of Mulago hospital lacked knowledge on management, had negative attitudes and provided sub-optimal care to domestic violence survivors. African Health Sciences Vol. 5 (4) 2005: pp. 315-318

G M Qayad.   
 Competence of maternal and child health clinic workers in detecting malnutrition in Somalia  
 . Vol. 5 No. 4 (2005).   
Abstract  
Background: The MCH clinic workers in Somalia receive formal and in-service training to perform their professional duties. Their competence in the field was never examined. This study assessed their competencies in detecting malnourished children 5 years and below in Beledweyne.   
Objective: To assess the competence of MCH clinic workers in detecting malnourished children.   
Design: Cross-sectional study.   
Methods: The study was conducted in 1989. We obtained data on children five years and below from the MCH clinic in Beledweyne, Somalia. We analyzed two months data. We used CASP program to calculate the Weight-for-Age index (WFA). The nutritional status determined by the MCH clinic workers and the WFA index were used to estimate the positive and negative predicted values of the MCH clinic workers' competence in detecting malnourished children.   
Results: We studied 487 children 5 years old and below. The health workers determined that 13.5% were malnourished. The positive and negative predicted values of the MCH clinic workers' nutritional measure were 76% and 92% respectively.   
Conclusion: The MCH clinic workers showed deficiency in their competence to detect malnourished children. They misclassified 10% of the children, which was worse among the malnourished, due to incorrect plotting of the child's current weight on the growth chart.  
 African Health Sciences Vol. 5 (4) 2005: pp. 319-321

OB Familoni.   
 An overview of stress in medical practice  
 . Vol. 8 No. 1 (2008).   
Abstract  
Stress can be generally defined as undue, inappropriate or exaggerated response to a situation. Whereas anxiety about a situation could be positive, stress is always negative with attending adverse psychological and physiological changes leading to decreased productivity, disease and sometimes death African Health Science Vol. 8 (1) 2008: pp. 6-7

P Ocama;;;;;M Katwere;;;;;T Piloya;;;;;J Feld;;;;;K C Opio;;;;;A Kambugu;;;;;E Katabira;;;;;D Thomas;;;;;R Colebunders;;;;;A Ronald.   
 The spectrum of liver diseases in HIV infected individuals at an HIV treatment clinic in Kampala, Uganda  
 . Vol. 8 No. 1 (2008).   
Abstract  
Background: Liver diseases are common in patients with HIV due to viral hepatitis B and C co-infections, opportunistic infections or malignancies, antiretroviral drugs and drugs for opportunistic infections. Objective: To describe the spectrum of liver diseases in HIV-infected patients attending an HIV clinic in Kampala, Uganda. Method: Consecutive patients presenting with jaundice, right upper quadrant pain with fever or malaise, ascites and/or tender hepatomegaly were recruited and underwent investigations to evaluate the cause of their liver disease. Results: Seventy-seven consecutive patients were recruited over an eleven month period. Of these, 23 (30%) had increased transaminases because of nevirapine (NVP) and/or isoniazid (INH) hepatotoxicity. Although 14 (61%) patients with drug-induced liver disease presented with jaundice, all recovered with drug discontinuation. Hepatitis B surface antigen was positive in 11 (15%) patients while anti-hepatitis C antibody was reactive in only 2 (3%). Probable granulomatous hepatitis due to tuberculosis was diagnosed in 7 (9%) patients and all responded to anti-TB therapy. Other diagnoses included alcoholic liver disease, AIDS cholangiopathy, hepatocellular carcinoma, schistosomiasis, haemangioma and hepatic adenoma. Twelve (16%) patients died during follow-up of which 7 (9%) died because of liver disease. Conclusion: Drug history, liver enzyme studies, ultrasound, and hepatitis B and C investigations identified the probable etiology in 60 (78%) of 77 patients with HIV infection presenting with symptoms and/or signs of liver disease. African Health Science Vol. 8 (1) 2008: pp. 8-12

G M Mbagaya;;;;;M O Odhiambo.   
 Mother's health seeking behaviour during child illness in a rural western Kenya community  
 . Vol. 5 No. 4 (2005).   
Abstract  
Background: In most developing countries, the health of the children is strongly dependant on maternal healthcare behaviour. The study describes the prevalence of illness among preschool children in a rural sugarcane growing community and the mother's health seeking behavior.   
Objectives: To document the presence of illness among preschool children at household level in a rural community in Western Kenya and also determine the mother's health seeking behavior during the course of these illnesses.   
Methods: This was an observational cross-sectional community survey using interview schedules, key informants and focus group discussions and Makunga Rural Health Center in Kakamega District western Kenya. Descriptive statistics were used in data analysis.   
Results: Fifty two percent of the children had had at least one illness a week prior to the survey. Fever was the most commonly reported symptom with 48% of the cases. A third (32.4%) of the mothers purchased and administered drugs to their sick children without seeking medical attention. The most commonly reported reasons for this behavior were: the government health facilities were at a distance, the services are poor and inability to afford services at the private hospitals and clinics.   
Conclusion: Intervention programmes focusing on diversification of income sources, maternal education and community based mobile clinics are likely to contribute towards improved health of children in this and any other rural sugarcane growing community. African Health Sciences Vol. 5 (4) 2005: pp. 322-327

A A Hyder;;;;;S Maman;;;;;J E Nyoni;;;;;S A Khasiani;;;;;N Teoh;;;;;Z Premji;;;;;S Sohani.   
 The pervasive triad of food security, gender inequity and women's health: exploratory research from sub-Saharan Africa  
 . Vol. 5 No. 4 (2005).   
Abstract  
Objectives: This study was designed to explore the interactions between food securing activities, health and gender equity from the perspective of rural east African women. The specific objectives were to document the critical interaction among these three issues—food security, gender inequity, women's health within the context of sub-Saharan Africa; to describe the nature of this triad from the perspective of women farmers in Africa; and to propose a framework for linking available interventions to the vicious nature of this triad.   
Setting: In-depth interviews and focus group discussions were conducted with rural women farmers in Kwale District, Kenya and Bagamoyo District, Tanzania.   
Methods: A total of 12 in-depth interviews and 4 focus group discussions have been included in this analysis. Transcribed text from interviews and focus group discussions were coded and thematic conceptual matrices were developed to compare dimensions of common themes across interviews and settings. A thematic analysis was then performed and a framework developed to understand the nature of the triad and explore the potential for interventions within the interactions.   
Findings: The vicious cycle of increasing work, lack of time, and lack of independent decision making for women who are responsible for food production and health of their families, has health and social consequences. Food securing activities have negative health consequences for women, which are further augmented by issues of gender inequity.   
Conclusion: The African development community must respond by thinking of creative solutions and appropriate interventions for the empowerment of women farmers in the region to ensure their health. African Health Sciences Vol. 5 (4) 2005: pp. 328-334

H E Misiri;;;;;A S Muula.   
 Under-reporting of gravidity in a rural Malawian population  
 . Vol. 5 No. 4 (2005).   
Abstract  
Background: Mis-reporting of data by study participants in a questionnaire-based study is an important source of bias in studies.   
Objective: To determine the prevalence and factors influencing mis-reporting of gravidity among rural women in Malawi.   
Materials and Methods: Data from cross sectional study conducted in 2004 were analysed using logistic regression analysis and the logit modeling.   
Results: 7118 women were in the reproductive age group, 2387(33.5%) had ever attended school, 4556 (64.0%) had never and results for 175 (2.5%) were missing. Of those who attended school, 94.9% (2297) had attained a maximum primary level, 5.04% (122) secondary level and 0.08% (2) tertiary level. 81.6% of the women were aged between 12 and 36 years of age, mean was 26.1 years (SD 10.05 years). The remaining 18.4% were aged between 37 and 49 years of age. The mean number of pregnancies attained was 4.0 (SD 3.4), live births was 3.0 (SD 3.2), mean number of stillbirths was almost zero (SD 0.9) and the mean number of children alive was 2.0 (SD 2.3). The prevalence of mis-reporting of gravidity was 7.9%. Factors influencing the risk of under-reporting gravidity were: previous experience of a still-birth, young age, not being married and having ever attended some level of education.   
Conclusions: We suggest that women who perceived that the community expected them, or they expected themselves to have fewer or no pregnancy at all, censured themselves in reporting low number of pregancies. Researchers using questionnaires should keep in mind possibility of mis-reporting of number of pregnancies among women as this may introduce error in research results. Incorporating multiple questions asking the same thing but in a different way has potential to identify biases as these other questions serve as consistency checks. African Health Sciences Vol. 5 (4) 2005: pp. 335-337

G K Namayanja;;;;;J M Nankya;;;;;J K Byamugisha;;;;;F N Ssali;;;;;C M Kityo;;;;;S D Rwambuya;;;;;R D Mugerwa;;;;;F A Mmiro;;;;;C S Morrison;;;;;R A Salata.   
 Stevens –Johnson syndrome due to nevirapine  
 . Vol. 5 No. 4 (2005).   
Abstract  
A 25-year-old HIV-infected woman participating in a study of the effects of hormonal contraception on HIV disease progression was started on antiretroviral therapy-Combivir & Nevirapine (NVP) on May 27, 2004. NVP was 200mg daily initially for two weeks to be increased to 200mg bid thereafter. On day twelve, she presented with a mild skin rash on the trunk, purulent conjunctivitis, pharyngitis and fever. She was treated symptomatically and sent home. The following day she returned with a generalized erythematous eruption. She was admitted to JCRC (Joint Clinical and Research Centre) on June 14 and was diagnosed with Stevens - Johnson syndrome (SJS). Antiretroviral therapy was stopped. By July 05, 2004, she had improved and was discharged .After recovery she was restarted on Combivir and Efavirenz and is subsequently doing well on this regimen.  
 African Health Sciences Vol. 5 (4) 2005: pp. 338-340

D Meya;;;;;I Lwanga;;;;;A Ronald;;;;;E Kigonya.   
 A renal aspergilloma - an unusual presentation of aspergillosis in an HIV patient  
 . Vol. 5 No. 4 (2005).   
Abstract  
Background: Aspergillosis is a fungal infection occasionally found in immunosuppressed patients. The recommended management of patients with renal aspergilloma remains unclear.   
Methods: An HIV patient presented with flank pain and an abdominal mass. Renal aspergilloma was diagnosed.   
Results: The patient with CD4 above 200 did well with nephrectomy followed by amphotericin therapy for 14 days.   
Conclusions: The merits of surgery followed by antifungal chemotherapy or vice versa are limited. More studies are needed to ascertain the most effective method of treatment for Aspergillosis in HIV patients.  
. African Health Sciences Vol. 5 (4) 2005: pp. 341-342

E E Akpo.   
 Giant hydrocele - an epitome of neglect  
 . Vol. 5 No. 4 (2005).   
Abstract  
Hydrocele [Greek: water - sac] is abnormal fluid collection within the tunica vaginalis of the scrotum or a patent tunica vaginalis. It is a relatively common condition in surgical practice. However, a giant hydrocele, here defined for clinical purposes, as a hydrocele equal to or bigger than the patient's head, is rare as indicated by the limited number of reported cases in the literature.  
In this paper I am presenting three cases of giant hydroceles and highlighting how it affects the quality of patients' life by way of complications, infertility, sexual function and work capacity.  
 African Health Sciences Vol. 5 (4) 2005: pp. 343-344

P J Gupta.   
 PRACTICE POINTS- Ano-perianal tuberculosis - solving a clinical dilemma  
 . Vol. 5 No. 4 (2005).   
Abstract  
Background: Tuberculosis is one of the causes of granulomatous disease within the anorectal region. The clinical features, which include symptoms and signs of anal pain or discharge, multiple or recurrent fistula in ano and inguinal lymphadinopathy, are not characteristically distinct from other anal lesions. It is also difficult to distinguish it from other granulomatous diseases involving the same area.   
Materials and Methods: A Medline database was used to perform a literature search for articles relating to the term 'anal', 'tuberculosis' and 'Koch's'.   
Conclusion: Analysis of the available literature shows that Koch's lesion in and around the anus is not uncommon. The presentation is varied in nature and tuberculosis should be suspected in lesions not responding to the conventional approaches. The treatment is two-fold: surgical for the suppuration and medical for the tuberculosis.  
 African Health Sciences Vol. 5 (4) 2005: pp. 345-347

L Atuyamb;;;;;S Neema;;;;;E Otolok-Tanga;;;;;G Wamuyu-Maina;;;;;S Kasasa;;;;;F Wabwire-Mangen.   
 The effects of enhanced access to antiretroviral therapy: a qualitative study of community perceptions in Kampala city, Uganda  
 . Vol. 8 No. 1 (2008).   
Abstract  
Introduction: Since 2001, Antiretroviral Therapy (ART) has been integrated as part of the Uganda National Program for Comprehensive HIV/AIDS Care and Support. If patients take Antiretroviral drugs (ARVs) as prescribed, quality of life is expected to improve and  
patients become healthier. It is, however, postulated that scale up of ARVs could erode the previous achievement in behaviour change interventions. This study examined community perceptions and beliefs on whether enhanced access to ARVs increases risk behaviour.  
It also examined people's fears regarding HIV/AIDS infection and the use of ARVs.  
Methods: This was a qualitative study that utilized Focus Group Discussions (FGDs) and Key Informant (KI) interviews. Participants were purposefully sampled. Twenty FGDs comprising of 190 participants and 12 KI interviews were conducted. FGDs were conducted with adult men and women (above 25 years), and youth (male and female) while KI interviews were held with Kampala City Council officials, Kawempe Division Local Council officials, health workers and religious leaders. All data was tape recorded with consent from  
participants and transcribed thereafter. Typed data was analyzed manually using qualitative latent content analysis technique. Results: Most participants felt that enhanced access to ART would increase risky sexual behaviour; namely promiscuity, lack of  
faithfulness among couples, multiple partners, prostitution, unprotected sexual practices, rape and lack of abstinence as the risky sexual behaviours. A few FGDs, however, indicated that increased ART access and counselling that HIV-positive people receive promoted  
positive health behaviour. Some of the participants expressed fears that the increased use of ARVs would promote HIV transmission because it would be difficult to differentiate between HIV-positive and HIV-negative persons since they all looked healthy. Furthermore,  
respondents expressed uncertainty about ARVs with regard to adherence, sustainable supply, and capacity to ensure quality of ARVs on the market. Conclusions: There are fears and misconceptions that enhanced access to ART will increase risky sexual behaviour and HIV transmission. Information Education and Communication (IEC) on ART use and availability should be enhanced among all people. Prevention programs which are modified and specific to the needs of the people living with HIV should be developed and implemented, and should include information on the ability of individuals to transmit HIV even when they are on ART. Key words: ART, ‘enhanced access', perceptions, qualitative, Uganda African Health Science Vol. 8 (1) 2008: pp. 13-19

F Nagoula;;;;;P Watcho;;;;;M-C Dongmo;;;;;A Kenfack;;;;;P Joseph;;;;;T Joseph.   
 Effects of pirimiphos-methyl (an organophosphate insecticide) on the fertility of adult male rats  
 . Vol. 7 No. 1 (2007).   
Abstract  
Background: Organophosphate insecticides represent one of the most widely used classes of pesticides with high potential for human exposure in both rural and residential environments.   
Objective: In the present study, we investigated the effects of pirimiphos-methyl (0, 2-diethylamino-6-methylpirimidin-4-yl O, O-dimethyl phosphorothioate), an organophosphothioate pesticide, on male rat reproductive performances.   
Methods: A total of 24 adult Wistar rats were divided into 4 groups of 6 animals each and orally treated with 0, 41.67, 62.5 or 125 mg/kg of pirimiphos-methyl for 90 days.   
Results: Results from the study showed a significant increase (p<0.05) in feed consumption, body weight gain, relative testis and epidiydimis weights and intra-testicular cholesterol level in rats receiving the test substance at doses of 62.5 or 125mg/kg whereas a significant decrease (p<0.05) in serum total protein, sperm density and motility, fertility and parturition indices and pups sex-ratio (M/ F) was recorded in animals treated with 125 mg/Kg of pirimiphos methyl. Histological findings also indicated enlargement of interstitial space, inhibition of spermatogenesis, rarefaction of Leydig cells and oedema in testes compared to control animals.   
Conclusion: It could then be concluded that pirimiphos-methyl (62.5 and 125mg/kg) is detrimental to the reproductive potentials of male rats.  
 Keywords: pirimiphos-methyl, spermatogenesis, fertility, male rats African Health Sciences Vol. 7(1) 2007: pp. 3-9

S A Uzoigwe;;;;;D Seleye-Fubara.   
 Uterine sarcomas in Port Harcourt, Nigeria A 12-year clinico-pathologic study  
 . Vol. 7 No. 1 (2007).   
Abstract  
Background: Uterine sarcomas are rare gyneacologic malignancies with a high mortality.There is the need to determine its frequency, clinical presentation and histologic variants.This may form the basis for further research and management inorder to reduce the morbidity and mortality associated with it.   
Design: A 12-year hospital based retrospective clinico-pathological study.   
Setting: University of Port HarcourtTeaching Hospital (UPTH), Port Harcourt, Nigeria.   
Subject: Women with histologically diagnosed uterine sarcomas.   
Method: Previously prepared histologic slides were retrieved and reviewed to confirm the diagnosis and to ascertain the histological type of the uterine sarcoma. Clinical data such as the age and the mode of presentation were extracted from the case notes, histology request forms and reports.   
Results:Eleven histological reports satisfied the criteria for the study which accounted for 0.5% and 4% of total malignancies and gynaecologic malignancies respectively in UPTH during the period under review. Malignant mixed mesodermal tumors was the most common (36.4%).The highest frequency of the tumors occurred in the age group 50-59 years (45.5%) and abnormal vaginal bleeding was the most common clinical presentation (36.4%).   
Conclusion: Uterine Sarcomas are rare world wide; most common above the age of 50 years, with variable clinical presentations and associated with high morbidity and mortality rate.  
 Keywords: Uterine Sarcoma,Age, Presentation, Port Harcourt. African Health Sciences Vol. 7(1) 2007: pp. 10-13

M M Radwan;;;;;K Ramdan;;;;;I Abu-Azab;;;;;F M Abu-Zidan;;;;;A-Z Fikri.   
 Botulinum toxin treatment for anal fissure  
 . Vol. 7 No. 1 (2007).   
Abstract  
Objectives: To evaluate the effectiveness of Botulinum toxin injection in the treatment of anal fissure.   
Methods: 38 patients (22 males, 16 females; mean age (SD) of 33.3 (8.3) years) who have presented to Surgical Outpatient Clinic at Al Ain Hospital, United Arab Emirates, with anal fissure in the period between June 2000 and September 2001 and treated with Botulinum toxin injection were retrospectively studied.They were followed up for at least 8 weeks to evaluate the effects of treatment.   
Results: Treatment with Botulinum toxin was effective in 89% of patients with chronic uncomplicated anal fissure.Two patients experienced minor incontinence in the form of a fecal soiling which disappeared later.   
Conclusion: Botulinum toxin injection is an effective alternative for surgery for treatment of uncomplicated idiopathic anal fissure. Surgery should be offered to patients who do not improve with Botulinum toxin injection and to those with complicated anal fissure.  
 Keywords: Anal fissure,chronic, botulinum toxin, sphincterotomy African Health Sciences Vol. 7(1) 2007: pp. 14-17

L E Okoror;;;;;D E Agbonlahor;;;;;F I Esumeh;;;;;P I Umolu.   
 Prevalence of chlamydia in patients attending gynecological clinics in south eastern Nigeria  
 . Vol. 7 No. 1 (2007).   
Abstract  
Background: Chlamydia infections have been reported to cause silent infections in communities which becomes endemic and could remain unnoticed for a very long time. In most parts of Nigeria these organisms are not screened for, and hence relative information about frequencies of the organisms are sparse.  
  
Method: Five hundred and sixty five blood samples and ten umbilical cord fluids were collected from various patients attending clinics in South Eastern Nigeria and were screened for Chlamydia Complement Fixing Antibody (CCFA). Endocervical swabs and urethral discharges or swabs were collected from patients whose serum was positive and were cultured into embryonic eggs which was later observed, harvested and stained using the Romanowsky – Giemsa staining techniques. The positive sera were further confirmed by distinguishing the species of Chlamydia using the monoclonal antibody spot test kit.  
  
Result: Of the five hundred and sixty five (565) samples collected only three hundred and forty were positive to CCFA, of which 141 were males and 204 females. From the cultured samples 230 were positive for Chlamydia trachomatis and 99 positive to Chlamydia pneumoniae. Statistical analysis using the student\'s t test at 95% confidence interval shows that there was no significant difference between the number of females and males that presented themselves for screening.  
  
Conclusion: Proper screening of patients to include Chlamydia should be encouraged at all levels of medical diagnosis in the country so as to proffer treatment. Otherwise the infection will remain a “silent epidemic”, as is the case currently.  
  
 Keywords: Chlamydia, Complement fixation test, Chlamydia Complement Fixing Antibody African Health Sciences Vol. 7(1) 2007: pp. 18-24

F Nuwaha;;;;;J Okware;;;;;T Hanningtone;;;;;C Mwebaze.   
False teeth "ebiino" and millet disease "oburo" in Bushenyi district of Uganda  
 . Vol. 7 No. 1 (2007).   
Abstract  
Background:\"False teeth\" (Ebiino) and \"Millet disease\" (Oburo, Tea-tea) have been reported in Uganda and other countries in Sub-Saharan Africa. These two perceived diseases are commonly reported in children under-five years of age. Anecdotal and published evidence suggests that these conditions are associated with moderate to severe childhood diseases such as malaria, pneumonia and diarrhoea and that most health seeking behaviour for the conditions is from traditional healers.   
Objectives:To estimate how common the 2 perceived diseases (false teeth and millet disease) are and describe health seeking behaviour for the two diseases.   
Methods:We did a cross-sectional survey using an interviewer administered questionnaire with closed and open questions in Bushenyi district, Uganda. The participants included 215 heads of households or their spouses obtained by cluster random sampling of 30 villages. Participants answered questions regarding occurrence of false teeth and millet disease disease in the household, treatment sought for false teeth and millet disease, perceived causes of false teeth and millet disease and about social economic situation of the household.   
Results: More than one in two of the households had a child less than five years who suffered from false teeth or millet disease in the last five years. More than 80% of the respondents used traditional medicine alone or in combination with modern medicine to treat false teeth and or millet disease. Occurrence of false teeth and millet disease disease were favoured by low education status and not living in a house with cemented floor or having a brick wall. Use of traditional medicine was not associated with social economic conditions.   
Conclusions:The frequency of the perceived diseases false teeth and millet disease disease is high and may be attributed to low access to preventive and curative health services.  
 Keywords: Malaria; Pneumonia; Diarrhoea; health seeking behaviour; access to health facilities; traditional medicine; health beliefs. African Health Sciences Vol. 7(1) 2007: pp. 25-32

E I Odongo-Aginya;;;;;K Narcis;;;;;S Ludwig;;;;;H Wabinga;;;;;A Fenwick;;;;;A Montresor.   
 Substitution of Malachite Green with Nigrosin - Eosin Yellow Stain in the Kato-Katz method: microscopical appearance of the helminth eggs  
 . Vol. 7 No. 1 (2007).   
Abstract  
Background: The Kato-Katz thick smear technique is the standard technique recommended by the World Health Organisation for the quantitative diagnosis of Schistosoma mansoni and other intestinal helminth infections. The major problem of the technique is that a few hours after the preparation of slides hookworm eggs over clear and disappear due glycerin.  
  
Objective: To illustrate clear visibility of different helminth eggs microscopically in Odongo-Aginya method, substitution of malachite green with 7.5% nigrosin in 10% formalin and 5% eosin in 10% formalin.  
  
Method: Measured, strained stool specimen was stained with mixture of nigrosin/ eosin and covered with cellophane cover slips. The prepared slide was examined immediately microscopically.  
  
Result: Slides prepared with Odongo-Aginya method can be examined immediately or later without compromising the visibility of parasite eggs and larvae. Hookworm eggs remain visible for a long time.  
  
Conclusion: The present publication shows microscopic appearance of the helminth eggs using the Odongo-Aginya modification  
 Keywords: Kato - Katz method, pictorial illustration, Odongo-aginya modification, helminth eggs, Uganda. African Health Sciences Vol. 7(1) 2007: pp. 33-36

A P Kengne;;;;;P K Awah;;;;;L Fezeu;;;;;J C Mbanya.   
 The burden of high blood pressure and related risk factors in urban Sub-Saharan Africa: Evidences from Douala in Cameroon  
 . Vol. 7 No. 1 (2007).   
Abstract  
Objective: To provide the current burden of high blood pressure and related risk factors in urban setting in Cameroon.   
Methods:We used the WHO STEPS approach for Surveillance of non-communicable diseases and their risk factors to collect data from 2,559 adults aged 15-99 years, residing at Cite des Palmiers in Douala, Cameroon.   
Results: The level of education was low with up to 60% of participants totalizing less than primary school. Smoking habits were 6 times more frequent in men (p<0.001) and 85% of participants reported alcohol consumption. Sedentary lifestyles at work and at leisure time were prevalent.Women displayed high prevalence of obesity in general.The mean blood pressure and the prevalence of hypertension increased with age in men and women.The prevalence of hypertension was 20.8%, and the risk of hypertension significantly increased with clustering of risk factors in the general population (p=0.001) and in men (p=0.008).   
Conclusions: This study provides additional evidence on the growing problem of hypertension and related risk factors in urban Cameroon; and confirms the feasibility of using the WHO STEPS approach for the surveillance of NCDs in Africa. There is a need for rapid implementation of preventive strategies in the country.  
 Keywords: Hypertension, risk factors, non-communicable diseases,Africa, Cameroon African Health Sciences Vol. 7(1) 2007: pp. 38-44

A S Muula;;;;;L Mpabulungi.   
 Cigarette smoking prevalence among school-going adolescents in two African capital cities: Kampala Uganda and Lilongwe Malawi.  
 . Vol. 7 No. 1 (2007).   
Abstract  
Background: Non communicable diseases are a growing public health concern. Globally tobacco-related deaths surpass malaria deaths and yet developing countries\' data are lacking.   
Objectives:To compare prevalence of tobacco use and exposure to tobacco and tobacco-related issues among adolescents in Kampala, Uganda and Lilongwe, Malawi.   
Methods: Cross sectional data from the Global Youth Tobacco Survey (GYTS) w used. Data were collected in 2001 in Lilongwe and in 2002 in Uganda using a standardized questionnaire tool.The study was aimed to enrolled schoolchildren aged 13-17 years.   
Results:The prevalence of tobacco smoking in Kampala and Lilongwe among adolescents was 5.6% and 6.2% (p >0.05) respectively. However, adolescents in Lilongwe were statistically significantly more likely to have ever smoked, use other tobacco products and perceived themselves as likely to initiate smoking in the coming year. Exposure to tobacco-related advertisements through billboards, newspapers and magazines was high in both settings.   
Conclusions:Adolescents are increasingly being exposed to tobacco and tobacco-related advertisements in Lilongwe, Malawi and Kampala, Uganda.There is need to enhance tobacco prevention efforts in developing nations. African Health Sciences Vol. 7(1) 2007: pp. 45-49

P B Olaitan;;;;;O Antonia;;;;;G C Ugwueze;;;;;I S Ogbonnaya;;;;;U J Achebe.   
 Management of human bites of the face in Enugu, Nigeria  
 . Vol. 7 No. 1 (2007).   
Abstract  
Background: Human bites of the face present to the surgeon sometimes with a dilemma as to the method and timing of surgery. Often patients present with soft tissue defects as a result of the injury sustained. Reconstruction therefore becomes absolutely necessary to avoid psychosocial complications.   
Objectives: The aim of this paper is to review human bites of the face, which presented to the Plastic Surgery Department of the National Orthopaedic Hospital, Enugu, Nigeria over a 10-year period and highlight the epidemiology, presentation, management and its outcome.   
Methods:A retrospective review of the cases of human bites of the face that presented within a ten year period was carried out. Sources of information were the case notes and operation registers. Information obtained includes age, gender of the patients as well as that of the assailants and the relationship of the assailants to the patients. Sites of the injuries, management and outcome were also obtained.   
Results:There were 54 patients seen and treated during the period with the age range 16-54 years (Mean age, 33.8±2.3).The male to female ratio was 1:1.6.Various surgical procedures including wedge excision and direct closure (for the lip); midline forehead flap cover, composite auricular graft and nasolabial flaps (for the nose) were carried out.Three of the 9 noses bitten were skin grafted and 3 had primary direct closure. Few complications occurred.   
Conclusion:We conclude that human bites still remain common in our environment.These sometimes need reconstruction due to loss of parts. Minimal debridement with primary closure/reconstruction of human bites of the face; when presented early, gives a good result.  
 Keywords: Human bite, face, presentation, management, Enugu, Nigeria African Health Sciences Vol. 7(1) 2007: pp. 50-54

E Otolok-Tanga;;;;;L Atuyambe;;;;;C K Murphey;;;;;K E Ringheim;;;;;S Woldehanna.   
 Examining the actions of faith-based organizations and their influence on HIV/AIDS-related stigma: A case study of Uganda  
 . Vol. 7 No. 1 (2007).   
Abstract  
Background: Stigma and discrimination are widely recognized as factors that fuel the HIV/AIDS epidemic. Uganda\'s success in combating HIV/AIDS has been attributed to a number of factors, including political, religious and societal engagement and openness – actors that combat stigma and assist prevention efforts.   
Objectives: Our study aimed to explore perceptions of Uganda-based key decision-makers about the past, present and optimal future roles of FBOs in HIV/AIDS work, including actions to promote or dissuade stigma and discrimination.   
Methods:We analyzed FBO contributions in relation to priorities established in the Global Strategy Framework on HIV/AIDS, a consensus-based strategy developed by United Nations Member States.Thirty expert key informants from 11 different sectors including faith-based organizations participated in a structured interview on their perceptions of the role that FBOs have played and could most usefully play in HIV/AIDS prevention, care and support.   
Results: Early on, FBOs were perceived by key informants to foster HIV/AIDS-related stigma and discrimination. Respondents attributed this to inadequate knowledge, moralistic perspectives, and fear relating to the sensitive issues surrounding sexuality and death. More recent FBO efforts are perceived to dissuade HIV/AIDS-related stigma and discrimination through increased openness about HIV status among both clergy and congregation members, and the leadership of persons living with HIV/AIDS.   
Conclusions: Uganda\'s program continues to face challenges, including perceptions among the general population that HIV/AIDS is a cause for secrecy. By virtue of their networks and influence, respondents believe that FBOs are well-positioned to contribute to breaking the silence about HIV/AIDS which undermines prevention, care and treatment efforts.  
 Keywords: HIV/AIDS, Faith-Based Organizations, Religion, Stigma, Discrimination,Vulnerability, Uganda African Health Sciences Vol. 7(1) 2007: pp. 55-60

R M Karanja;;;;;W Gatei;;;;;N Wamae.   
 Cyclosporiasis: an emerging public health concern around the world and in Africa  
 . Vol. 7 No. 2 (2007).   
Abstract  
Background: Cyclosporiasis is an emerging gastro-enteric disease caused by the coccidia protozoan Cyclospora cayetanensis . It isassociated with diarrhoea among children in developing countries, in the Americas where C. cayetanensis is endemic, traveller\'s diarrhoeaand/or food and waterborne outbreaks in the developed countries.  
Objectives:The aim of this review is to highlight cyclosporiasis and its relevance to public health in East Africa and Africa at large.  
Methods: All literature on Cyclospora, C. cayetanensis,cyclosporiasis in Africa, and endemic cyclosporiasis was searched from libraries,colleagues and internet but only literature on its history, clinical presentation, epidemiology in endemic settings, and occurrence inAfrica were scrutinised.  
Results: In Sub Saharan Africa, cyclosporiasis has been reported in at least 3 countries, including Tanzania, in East Africa, occurring inboth immunocompromised and immunocompetent patients. Zoonotic species of Cyclospora have also been identified in East Africanprimates, indicating likely endemicity of this little reported disease in the region. This can be attributed to lack of awareness in thepublic and medical profession concerning the disease, and therefore not routinely checked at the health centres. Cyclosporiasis ischaracterized by intermittent diarrhoea, and secondary conditions or sequelae such as reactive arthritis syndrome (Reiter\'s syndrome),have been associated with progression of the disease. Its management is based on antibiotics, an unusual scenario for a protozoa.  
Conclusions: Although many aspects of this disease and its transmission remain an enigma, the situation has been rapidly changing since the disease first came to medical attention in the 1970s. African Health Sciences Vol. 7 (2) 2007: pp. 62-67

K Anukam;;;;;G Reid.   
 Organisms associated with bacterial vaginosis in Nigerian women as determined by PCR-DGGE and 16S rRNA gene sequence  
 . Vol. 7 No. 2 (2007).   
Abstract  
Background: Bacterial vaginosis (BV) is a condition with diverse etiology.This condition predisposes women to increased susceptibility to sexually transmitted diseases, including human immunodeficiency virus (HIV) infections and preterm birth.The diagnostic methods currently adopted in the evaluation of patient samples for BV are arguablyAmsel criteria, and Nugent score thatrequire microscopy and expert interpretation.These two methods are still subjective.   
Objective:The objective of this study was to determine the organisms present in the vagina of 34 HIV negative Nigerian women diagnosed as having bacterial vaginosis by using molecular techniques.   
Methods:The vaginal samples were subjected to DNA extraction, and amplified with eubacterial primers via PCR.The PCR products were separated using denaturing gradient gel electrophoresis (DGGE). Bands were excised, re-amplified, purified and sequenced. Sequence identification was performed using the BLAST algorithm and Genbank data base.   
Results: Mycoplasma hominis (12/34; 35%) was the most common isolate and 9 (26%) contained one of two clones of an unusual Rainbow Trout intestinal bacterium, while unculturable Streptococcus sp, and other bacteria made up the remaining isolates.   
Conclusions:The findings indicate further diversity in the etiological agents associated with BV, and raise the question as to whether diagnosis and management of this condition needs to be re-evaluated in countries like Nigeria.There is some controversy over the clinical importance of BV, as it was once regarded as a disease caused by Gardnerella and presenting as an odourous discharge condition, but is now diagnosed without necessarily the presence of these organisms or signs.With the incidence of BV aligned to an increased risk of HIV in a country ravaged by this virus, the effective eradication of BV can only be achieved if appropriate therapies are delivered. Keywords: bacterial vaginosis, Nigerian women, mycoplasma African Health Sciences Vol. 7 (2) 2007: pp. 68-72

G Akello;;;;;R Reis;;;;;E Ovuga;;;;;C B Rwabukwali;;;;;C Kabonesa;;;;;A Richters.   
 Primary school children\'s perspectives on common diseases and medicines used: implications for school healthcare programmes and priority setting in Uganda  
 . Vol. 7 No. 2 (2007).   
Abstract  
Background: Existing school health programmes in Uganda target children above five years for de-worming, oral hygiene and frequent vaccination of girls of reproductive age.   
Objective:To assess primary school children\'s perspectives on common diseases they experience and medicines used in order to suggest reforms for school healthcare programmes and priority setting.   
Methods: Rapid appraisal approaches, triangulated with a survey, using a semi-structured questionnaire with 80 children aged 8-15 years, were used in data collection.This was done during a three months fieldwork in one primary boarding school in Kampala.An investigation was made into perspectives of children on their recent illness experiences and medicines they used to recover. Other techniques in data collection included participant observation and eliciting children\'s narratives of diseases they experienced in a two weeks recall. Key informants, who included school teachers, a nurse, 2 paediatricians, 4 matrons and private health service providers in the vicinity of the school, were approached to validate children\'s narratives.   
Results: Children named and ranked malaria as the most severe and frequently experienced disease. Other diseases mentioned included diarrhoea, skin fungal infections, flu, and typhoid.The symptoms children recognised in case of illness were high body temperature, vomiting, headache, weakness, appetite loss and diarrhoea. Children were either given medicines by the school nurse or they selfmedicated using pharmaceuticals including chloroquine, panadol, flagyl, fansidar, quinine injections, capsules (amoxicillin and ampicillin) obtained from the clinics, drug shops, pharmacies,and other unspecified indigenous medicines from their home and markets.   
Conclusion:The healthcare needs and priorities of children in primary school are infectious diseases which they could readily identify.  
 Keywords: Children, illnesses, school healthcare programmes, priority setting, Uganda. African Health Sciences Vol. 7 (2) 2007: pp. 73-79

C I Anumudu;;;;;C M Okafor;;;;;K A Afolabi;;;;;V Ngwumohaike;;;;;R I Nwuba;;;;;M Nwagwu.   
 Epidemiological factors that promote the development of severe malaria anaemia in children in Ibadan  
 . Vol. 7 No. 2 (2007).   
Abstract  
Background: Effective control and management of severe malaria cases depends on a clear understanding of the local epidemiologicalfactors and specific clinical manifestations of the disease in the different endemic regions.   
Objectives: To determine the prevalence of severe malaria and epidemiological factors that affect the development of malaria anaemia.   
Methods: A cross-sectional survey was carried out among children below 5 years of age, at the Adeoyo State Maternity Hospital,Ibadan, Nigeria. Questionnaires and case histories were taken from patients clinically diagnosed of malaria.Thus, 372 volunteers wererecruited into the study from the 3131 paediatric cases that reported over the10-week period to the out-patient department (OPD) ofthe hospital. 229 (61.6%) of the recruited volunteers presented with fever (>37.5 oC) at consultation.These had malaria parasite andPCV tests done.   
Results: Clinical diagnosis was confirmed microscopically in 78% (290/372) for Plasmodium infection using thick film slides.Anaemia (PCV <28%) prevalence was 28.2%. Factors that contributed to the rapid progression of uncomplicated malaria to severestatus included: age of the child, level of parasitaemia, careless response and attitude of parents or guardians to fever in the children;parents\' preoccupation with their jobs or other healthy children and unwillingness to use available health facilities.   
Conclusion: The study underscores the need for community involved partnership for malaria control especially through healtheducation for the home management of malaria, espeically among those experiencing some form of inequity in access to healthcare.  
 Keywords: malaria, epidemiology, development, anaemia children African Health Sciences Vol. 7 (2) 2007: pp. 80-85

P Byakika-Kibwika;;;;;E Ddumba;;;;;M Kamya.   
 Effect of HIV-1 infection on malaria treatment outcome in Ugandan patients  
 . Vol. 7 No. 2 (2007).   
Abstract  
Background: Malaria and HIV-1 infection cause significant morbidity and mortality in sub-Saharan Africa. HIV-1 increases risk for malaria with the risk increasing as immunity declines.The effect of HIV-1 infection on antimalarial treatment outcome is still inconclusive.   
Objective: To compare antimalarial treatment outcome among HIV-1 positive and negative patients with acute uncomplicated falciparum malaria treated with chloroquine plus sulfadoxine-pyrimethamine (CQ+SP).   
Methods: Ninety eight HIV-1 positive patients aged 18 months or older with acute uncomplicated falciparum malaria were treated with CQ+SP and followed for 28 days to monitor outcome.Treatment outcome of HIV-1 positive patients was compared to that of 193 HIV-1 negative historical controls.The primary study outcome for both groups was treatment failure.   
Results: HIV-1 positive patients older than 5 years of age were less likely to have treatment failure compared to HIV-1 negative patients in the same age group (RR 0.59 95% CI 0.4- 0.8, p α 0.001) and HIV-1 positive patients on routine cotrimoxazole prophylaxis were less likely to have treatment failure following CQ+SP treatment compared to HIV negative patients (RR 0.6 95% CI 0.43-0.92, p = 0.006).There was no difference in treatment outcome according to HIV-1 status for children younger than 5 years of age.   
Conclusions: Adherence to cotrimoxazole prophylaxis should be reinforced in HIV positive patients and it should be reassessed if these patients present with acute episodes of malaria.  
 Keywords: malaria, HIV, Uganda, antimalarial treatment response African Health Sciences Vol. 7 (2) 2007: pp. 86-92

H Lum;;;;;C Isichei;;;;;M Isichei-Wakili;;;;;R Redfield.   
 Expansion of HIV-1 screening and anti-retroviral treatment programs in a resource-poor setting: results from a faith-based organization in Jos, Plateau State, Nigeria  
 . Vol. 7 No. 2 (2007).   
Abstract  
Background: Until recently, availability of anti-retroviral therapy (ART) in Nigeria has been limited to government and universitybased programs.Through the United States\' President\'s Emergency Plan For AIDS Relief (PEPFAR), additional funding has become available for the treatment of HIV-positive patients.   
Objective: To report the expansion of HIV-1 screening, enrollment in an ART program, and treatment outcomes over twelve months among HIV-positive patients at a nonprofit, non-governmental faith-based clinic providing free and holistic care in Jos City, Plateau State, Nigeria.   
Design: This was a retrospective analysis of HIV-1 screening and ART received by patients at Faith Alive Foundation Hospital (FAFH). From January through December 2005, voluntary counseling and testing (VCT) was freely available to all patients who requested it. Also beginning in December 2004, HIV-1 infected patients were enrolled in an expanded HIV/AIDS program at FAFH, where patients in clinical stages 3 or 4 based on World Health Organization (WHO) clinical classification, or had a CD4+ cell count of less than 200/ ml, were initiated on a simplified highly activeART (HAART) regimen through PEPFAR funding. Data from the first six quarters of the FAFH-PEPFAR ART program are presented here. Additionally, analysis of 645 patients who have received ART for one year, including changes in CD4+ cell count from baseline is shown.   
Results: In 2005, a total of 7672 persons received VCT and 3869 (50.4%) HIV-1 positive results were found. From October 2004 to March 2006, the total number of patients enrolled in the FAFH HIV/AIDS program rose from 1330 to 5946 people. Over the same period, the number of patients who received ART increased from 302 to 1667. A majority of patients received an oral ART regimen consisting of generic nevirapine, lamivudine, and stavudine.The number of patients initiated on ART each quarter ranged from 57-578, and the number of deaths of patients on ART was between 12 and 21 people per quarter. Analysis of 645 patients initiated on ART during the first quarter of the FAFH-PEPFAR ART program revealed that the median CD4+ cell count at baseline was 106/ml and the median increase was 173/ml (median time of follow-up, 7.0 months).   
Conclusions: Comprehensive HIV/AIDS care has been significantly expanded at FAFH, a free and holistic medical center in Jos, Nigeria. Cumulative data from the first year of this PEPFAR-funded ART program indicated that promising outcomes are achievable through delivery of care at this faith-based medical center.  
 Keywords: HIV; ART program; Nigeria, resource-poor African Health Sciences Vol. 7 (2) 2007: pp. 93-100

D B Meya;;;;;E Katabira;;;;;M Otim;;;;;A Ronald;;;;;R Colebunders;;;;;D Njama;;;;;H Mayanja-Kizza;;;;;C C Whalen;;;;;M Sande.   
 Functional adrenal insufficiency among critically ill patients with human immunodeficiency virus in a resource-limited setting  
 . Vol. 7 No. 2 (2007).   
Abstract  
Background: Functional adrenal insufficiency (FAI) is associated with increased mortality and is defined as subnormal cortisol production during acute severe illness.   
Methods: After screening 200 adult patients admitted in the medical emergency unit of Mulago Hospital, Kampala, Uganda, 113 critically ill HIV-infected adults not receiving corticosteroids were enrolled after obtaining informed consent to determine the prevalence and factors associated with FAI.   
Results: Functional adrenal insufficiency, defined in this study as morning total serum cortisol level of ≤ 25 μg/dl, was detected in 21 (19%) of 113 patients (95% CI 11-26%). Eosinophilia (>3%) occurred in 52% (11 of 21) patients with FAI compared to 24% (22 of 92) patients with normal adrenal function (p= 0.01). Factors predicting FAI on multivariate analysis were use of rifampicin and eosinophilia.The mortality rate among patients with FAI (19%) was not significantly different when compared to that among patients with a normal cortisol response (33%) (p=0.221). Hyponatremia, hypoglycemia, hyperkalemia, postural hypotension and the use of ketoconazole were not associated with FAI in this study.   
Conclusion: The diagnosis of FAI should be considered in severely ill patients with stage IV HIV disease using rifampicin or those found to have unexplained eosinophilia. Further studies to determine benefits of corticosteroids in critically ill HIV patients are needed in this setting.  
 Keywords: Functional adrenal insufficiency, HIV, Uganda African Health Sciences Vol. 7 (2) 2007: pp. 101-107

F Were;;;;;N O Bwibo.   
 Neonatal nutrition and later outcomes of very low birth weight infants at Kenyatta national hospital  
 . Vol. 7 No. 2 (2007).   
Abstract  
Background: Extensive research in developed countries has established that very low birth weight (VLBW) infants are particularly vulnerable to the effects of early nutritional deficiencies. There is, however, little information from poor countries on the long-term effects of these deficiencies in such infants.   
Objective: Determine the association between neonatal feeding regimens and post-discharge morbidity/ mortality and neurological abnormalities at the age of two years for a cohort of VLBW infants.   
Design: Prospective Cohort.   
Methods: One hundred and seventy five VLBW infants were recruited over a consecutive period of one year and followed up to the age of two years corrected for gestation. With neonatal feeding regimes as the exposure variable, post-discharge re-hospitalization, mortality and Saigal and Rosenbaum's functional disability assessment scores were compared as the outcome variables.   
Results: The 175 infants recruited into the study had median birth weight of 1400±103 grams and gestation 32 ±2.3 weeks.The male: female ratio was 2:3 while 64 (36.6%) had been born intrauterine growth retarded. During the newborn period, 83(47.4%), 35 (20.0%) and 57 (32.6%) of the infants fed on exclusive breast milk, pre-term formula and mixed preparations respectively. The median neonatal weight gain was 17 ±2.5, 15 ±2.0 and 13 ±3.9 grams/kilo/day for preterm formula, combined and exclusive breast milk fed infants respectively. More of the infants fed on breast milk alone were re-hospitalized compared to those on pre-term formula, RR 2.3; 95%CI 1.4-3.6 or mixed milk preparations, RR 1.9; 95% CI 1.4-2.7. Infants exclusively fed on breast milk had more neurological disabilities than those on pre-term formula alone, RR 3.2; 95% CI 1.2-8.1. Though only 22.9% of pre-term milk fed infants died compared to 36.1% of those on breast milk alone the difference was not statistically significant, P>0.05.   
Conclusion: Nutritionally enhanced enteral feeds during the first month of life appear to have reduced post-discharge morbidity and improved neurological outcomes at two years in VLBW infants.  
 Keywords: early nutrition, very low birth weight African Health Sciences Vol. 7 (2) 2007: pp. 108-114

B B Osinaike;;;;;A Akere;;;;;T O Olajumoke;;;;;E O Oyebamiji.   
 Cardiorespiratory changes during upper gastrointestinal endoscopy  
 . Vol. 7 No. 2 (2007).   
Abstract  
Objectives: To determine the changes in oxygen saturation,blood pressure and heart rate during various endoscopic procedures and to find out the risk factors for these changes.   
Methods: Forty patients without cardiorespiratory disorders were recruited. Oxygen saturation, blood pressure and pulse rate were monitored during endoscopy using pulse oximeter and automated blood pressure monitor.These were recorded from baseline until 5 minutes after the procedure.The important variables, which were evaluated in relation to these changes, included age, gender,duration of the procedure and drug/dosages.   
Results: Baseline mean oxygen saturation was 96.8± 1.55%. It decreased significantly to 94.53±3.30%(p= 0.002) during insertion of probe. Mild to moderate hypoxia was found in 19 (47.5%) patients. Severe hypoxia was found in 5 (12.5%) patients.The variables that reached statistical significance for desaturation were age greater than 50 years and duration longer than 27 minutes. Changes in pulse rate were significant post-sedation, during probe insertion, during scoping, at removal of probe and immediately post-procedure (p<0.02).The mean change in systolic blood pressure was not significant throughout the procedure when compared to baseline, however 14 (35%) patients developed transient hypertension.   
Conclusions: Mild to moderate hypoxia is common during endoscopic procedures and of no serious consequence. However severe hypoxia is less common.We recommend a non-invasive monitoring in patients with age greater than 50 years and procedure longer than 27 minutes. Keywords: Endoscopy, oxygen saturation, heart rate, blood pressure African Health Sciences Vol. 7 (2) 2007: pp. 115-119

D Nakanjako;;;;;D J Kyabayinze;;;;;H Mayanja-Kizza;;;;;E Katabira;;;;;M R Kamya.   
 Eligibility for HIV/AIDS treatment among adults in a medical emergency setting at an urban hospital in Uganda  
 . Vol. 7 No. 3 (2007).   
Abstract  
Background: Despite global effort to scale up access to antiretroviral therapy (ART), many people in need of HIV/AIDS care in Uganda have not been reached. HIV testing and ART are not widely offered as routine medical services and data on HIV/AIDS in emergency settings in Sub-Saharan Africa is limited.We determined the HIV prevalence and eligibility for ART in a medical emergency unit at Mulago hospital.  
Methods: In a cross-sectional study, we interviewed 223 patients who were systematically selected from the patients\'register from October through December 2004. HIV testing was offered routinely and results were delivered within 30 minutes.We evaluated HIV infected patients for WHO clinical stage of disease and referred them for HIV/AIDS care.  
Results: Out of 223 patients, 111 (50%) had HIV infection of whom 78 (70%) had WHO clinical stage 3 and 4 of disease thereby requiring ART. Overall, 84 out of 111 (76%) HIV positive patients had not received any specific HIV/AIDS care.  
Conclusion: The burden of HIV infection in the medical emergency unit is high and majority of the patients who required ART had no prior HIV/AIDS care.We recommend scale up of HIV/AIDS care in acute care settings in order to increase access to ART.  
 Keywords: HIV/AIDS, Eligibility for antiretroviral therapy, Hospitals,Africa African Health Sciences Vol. 7 (3) 2007: pp. 124-128

J C Forbi;;;;;A B Odetunde.   
 Human T-cell lymphotropic virus in a population of pregnant women and commercial sex workers in South Western Nigeria  
 . Vol. 7 No. 3 (2007).   
Abstract  
Background: Over 20 million persons are infected with HTLV-I/II globally.The virus is endemic in Africa and it is also transmitted sexually. Continued identification of high risk groups is important for the control of the disease.  
Objectives:To determine the prevalence of HTLV infection amongst two highly sexually active groups, pregnant women and CSWs in South Western Nigeria.  
Methods: Serum samples were tested for the presence of HTLV-I/II antibodies using the Vironostika® HTLV-I/II micro ELISA system.  
Results:A total of 364 serum samples collected from pregnant women, commercial sex worker (CSW) and secondary school students (control group) from Ibadan.While only 4 (5.1%) of 78 secondary school students (average age: 13years) were reactive for HTLV infection, 20 (16.7%) of 120 pregnant women (average age: 26years) and 38 (22.9%) of 166 CSWs (average age: 23years) were found to have antibodies against HTLV in their sera.The results of this study thus show that HTLV infection is active in the population although higher in pregnant women (although not statistically significant) and CSWs (p>0.05). Pregnant women and CSWs are therefore at a higher risk of HTLV transmission than other members of the population.  
Conclusion: Routine screening for HTLV infection may go a long way to understanding the epidemiology of HTLV infection in Nigeria and subsequently provide tools for its prevention and control.  
 Keywords: HTLV, prevalence, pregnant women, commercial sex workers, Nigeria. African Health Sciences Vol. 7 (3) 2007: pp. 129-132

A G Bakari;;;;;F Sani-Bello;;;;;M S Shehu;;;;;A Mai;;;;;I S Aliyu;;;;;I I Lawal.   
 Anti-retroviral therapy induced diabetes in a Nigerian  
 . Vol. 7 No. 3 (2007).   
Abstract  
Background:Anti-retroviral therapy (ART) using Highly Active Anti-retroviral Therapy (HAART) has led to considerable reduction in morbidity and mortality associated with human Immune deficiency virus (HIV) infection.This has led to increased life expectancy in HIV infected individuals on one hand, and side effects of chronic administration of these drugs on the other. One of such untoward effects is the association of anti-retroviral drugs especially the protease inhibitors (PI\'s) with metabolic derangements such as dyslipidaemia, lipodystrophy, insulin resistance and rarely Diabetes mellitus. Although there is extensive literature on this dysmetabolic syndrome in the Western World; there is to our knowledge no previous report from Nigeria.  
Objective: to report a case of diabetes mellitus following the initiation of anti-retroviral therapy.  
Methods: a case report of diabetes mellitus induced by anti-retroviral therapy in a 48 year old Nigerian male.  
Conclusion: Awareness and high index of suspicion is required to identify the metabolic complications of ART.  
 Keywords: HIV,ART, Proteases inhibitors, Diabetes, Metabolic Complications. African Health Sciences Vol. 7 (3) 2007: pp. 133-135

N Anyama;;;;;S Sseguya;;;;;A Okwera;;;;;W A El-Naggar;;;;;F Mpagi;;;;;E Owino.   
 The challenge of re-treatment pulmonary tuberculosis at two teaching and referral hospitals in Uganda  
 . Vol. 7 No. 3 (2007).   
Abstract  
Background With an annual tuberculosis (TB) incidence of about 350 cases per 100,000 of the population, Uganda is a high burden country. Moreover, it is evident that some TB patients have been treated for a previous episode of the disease. Objective To highlight the burden of re-treatment pulmonary TB and examine patient factors associated with re-treatment among adults at two teaching and referral hospitals, Mbarara and Mulago   
Methods A descriptive cross sectional study with data collection between September 2004 and March 2005; we calculated the prevalence and used logistic regression to explore factors associated with re-treatment.   
Results The prevalence of re-treatment pulmonaryTB at Mbarara based on medical records was 30.0% (95%CI: 21.2 to 40.0), and 21.3% (95%CI: 12.9 to 31.8) from exit interviews.The corresponding estimates at Mulago hospital were 12.0% (95% CI: 6.4 to 20.0) and 43.9% (33.0 to 55.3). Compared to the 18-26 year age category, the prevalence odds ratio (POR) for a seven-year increase in age was 1.54 (95%CI: 1.04-2.28; p = 0.027), while female patients were 0.39 (95%CI: 0.17-0.90; p = 0.025) times less likely to report re-treatment disease than males, in this facility-based study.   
Conclusions Re-treatment pulmonary TB is frequent at the two teaching and referral hospitals.A contribution to re-treatment prevention should entail more rigorous management of new TB cases, particularly at lower levels of care.  
 Keywords: Tuberculosis, pulmonary, re-treatment, prevalence African Health Sciences Vol. 7 (3) 2007: pp. 136-142

O A Aboderin;;;;;A Abdu;;;;;B W Odetoyin;;;;;I N Okeke;;;;;O O Lawa;;;;;D A Ndububa;;;;;A E Agbakwuru;;;;;A Lamikanra.   
 Antibiotic resistance of Helicobacter pylori from patients in Ile-Ife, South-west, Nigeria  
 . Vol. 7 No. 3 (2007).   
Abstract  
Background: Helicobacter pylori has become recognized as a major cause of gastroduodenal diseases in man. Evidence indicates that once acquired, H. pylori persists, usually for life unless eradicated by antimicrobial therapy. Over the past few years, we have accumulated some knowledge of the epidemiology of H. pylori in Ile-Ife, South-West Nigeria. In one collaborative study, we detected H. pylori in 195 (73%) patients referred for endoscopy at Obafemi Awolowo University Teaching Hospitals Complex (OAUTHC). Furthermore we have observed a variegated gastric inflammatory response and atrophy including atrophic pangastritis but are yet to demonstrate MALToma in any of our patients. In addition we have demonstrated that dental plaque is a possible source of gastric H. pylori infection and such an endogenous source could account for difficulty in eradication leading to re-infection. Presently, infected patients are treated with standard combination therapy made up of amoxycilin and ciprofloxacin with a proton pump inhibitor /bismuth. Reports however have shown that the incidence of antimicrobial resistance in Helicobacter pylori is a growing problem and which has been linked with failures in treatment and eradication. Given this situation it has become necessary to have information about the susceptibility of isolates to particular antimicrobial agents before the selection of an appropriate treatment regimen.   
Objectives: More recently, we sought to study antimicrobial susceptibility of locally isolated H. pylori strains.   
Methods: We subjected 32 isolates to antimicrobial susceptibility testing against seven agents.   
Results: All the isolates showed multiple acquired antimicrobial resistance as they were all resistant to amoxicillin, clarithromycin, metronidazole, while 29/31, 27/31 showed resistance to rifampicin and tetracycline respectively. Five (15.6%) of these isolates showed resistance to ciprofloxacin.   
Conclusions: Our findings suggest that H. pylori strains isolated within our study environment have acquired resistance to all the commonly prescribed antibiotics. On the basis of the findings it would be necessary to re-evaluate the eradication treatment regime in our setting. African Health Sciences Vol. 7 (3) 2007: pp. 143-147

J R Anguzu;;;;;D Olila.   
 Drug sensitivity patterns of bacterial isolates from septic post-operative wounds in a regional referral hospital in Uganda  
 . Vol. 7 No. 3 (2007).   
Abstract  
Background: Wound infections have been a problem in the field of surgery for a long time.Advances in control of infections have not completely eradicated this problem because of development of drug resistance.Antimicrobial resistance can increase complications and costs associated with procedures and treatment.  
Objective: A study was carried out on drug sensitivity patterns of bacterial isolates from septic postoperative wounds in Jinja hospital, Uganda.This study was designed to determine the distribution of bacterial pathogens isolated from septic post-operative wounds and their antimicrobial susceptibility patterns.  
Method: Specimens of pus swabs were collected aseptically and analysed in the laboratory. Colony characteristics and Grams technique were used to differentiate the organisms. Biochemical tests were done to confirm the species of the organisms. Sensitivity testing was done on the isolates using the disk diffusion method.  
Results: Pathogenic bacteria were recovered from 58.5% of the specimens.The isolates were: S.aureus (45.1%), Coliforms (16.9%), Proteus mirabilis (11.3%), P.aeruginosa (9.9%), Klebsiella pneumoniae (7.0%) and Enterobacter spp (2.82%). Most of the organisms were sensitive to gentamicin, ciprofloxacin and ceftazidime.There was resistance to ampicillin, amoxycillin and chloramphenicol. Staphylococcus aureus was generally sensitive to gentamicin (87.5%), ciprofloxacin (68.7%) and methicillin (75%), but resistant to erythromycin (56.2%) and ampicillin (97%). Most of the gram-negative bacteria isolated (Coliforms, P.aeruginosa , E.coli , Proteus mirabilis , and Klebsiella pneumoniae ) were sensitive to Ciprofloxacin, Gentamicin and Ceftazidime but resistant to Ampicillin,Amoxycillin and Chloramphenicol. Methicillin-resistant Staphylococcus aureus (MRSA) strains formed 25% of this species. Pseudomonas aeruginosa was sensitive to gentamicin (87.5%) and ceftazidime (85.7%) but showed resistance to ciprofloxacin (57.2%). Some organisms e.g. S.aureus, Pseudomonas aeruginosa and Proteus mirabilis exhibited multi-drug resistance to the antibiotics tested.  
Conclusion: Since a high proportion of samples had positive cultures, infection control is recommended as a strategy to minimise spread of resistant organisms. It is recommended that gentamicin, ciprofloxacin and ceftazidime be used in preference to ampicillin and amoxycillin for treatment of septic wounds.There is need to develop national surveillance of antibiotic- resistant organisms. African Health Sciences Vol. 7 (3) 2007: pp. 148-154

J D N'guessan;;;;;A Coulibaly;;;;;A A Ramanou;;;;;O C Okou;;;;;A J Djaman;;;;;F Guédé-Guina.   
 Antibacterial activity of Thonningia sanguinea against some multi- drug resistant strains of Salmonella enterica   
. Vol. 7 No. 3 (2007).   
Abstract  
Background : The emergence of strains of S.enterica with multiple drug resistance (MDR) is of great concern worldwide.The extracts of flowers of Thonningia sanguinea are used in traditional medicine in Ivory Coast to treat diarrhoeal diseases including salmonellosis. Previous studies had shown inhibition of the MDR strain Salmonella Enteritidis lysotype 6.  
Objectives: The present study focused to investigate the effect of the extract of the flowers of Thonningia sanguinea on some clinical MDR strains of Salmonella namely S.Tyhpi, S.Typhimurium,S. Hadar and a sensitive strain (S.Enteritidis).  
Methods: The antimicrobial parameters were determined by double dilution with agar slant method.This method led us to determine MIC, IC 50 and MBC.  
Results: The MDR strain of S.Typhimurium presented the highest MIC (2.5 mg/ml) whereas the other two MDR strains (S.Hadar,S.Typhi) and the sensitive one (S.Enteritidis) had the same MIC (1.25 mg/ml).The four strains presented the same MBC (2.5 mg/ml). The MDR strain of S.Typhi is the most susceptible strain to the aqueous extract of the flowers of Thonningia sanguinea according to The IC 50values.  
Conclusions: The aqueous extract of Thonningia sanguinea can provide an alternative therapy for the treatment of salmonellosis, mainly for typhoid fever caused by MDR strains of S. Typhi.The extract also inhibits S.Hadar a MDR emerging strain in Ivory Coast.  
 Keywords: Thonningia sanguinea; Salmonella, MDR strains, Ivory Coast African Health Sciences Vol. 7 (3) 2007: pp. 155-158

P B Olaitan;;;;;O E Adeleke;;;;;O O Iyabo.   
 Honey: a reservoir for microorganisms and an inhibitory agent for microbes  
 . Vol. 7 No. 3 (2007).   
Abstract  
Background: Honey is an ancient remedy for the treatment of infected wounds, which has recently been \'rediscovered\' by the medical profession.The use to which honey is put in medical care is increasing daily with many authors pointing out its importance and role in wound care.There have been reports that honey contains many microorganisms including bacteria and fungi.  
Objective:The aim of this paper is to highlight the various uses, organisms commonly found in honey, how the organisms arrived in the honey and their effects on wounds and wound care.Would the presence of these organisms not constitute a limiting factor to the use of honey in wound management? This is what this review aims to answer  
Methods:A literature search was done on honey using pubmed, google, local books and journals. Relevant journals were extracted and discussed with emphasis on the antimicrobial properties as well as microbial content of honey and the implications of these.   
Results:The production of honey as well as the storing process account for the presence of microorganisims. Most of these organisms are said to be in inactive forms as they can hardly survive in honey because of its several properties including hygroscopicity, hyperosmolarity, acidity, peroxide content, antibiotic activities etc. However there is a need for caution in the use of honey in wound management.  
Conclusion:We suggest that wounds to be treated with honey should be investigated i.e with a swab for the microorganisms present on the wound and their sensitivity to the honey before commencing honey treatment.This will help in carefully selecting wounds that might do well with honey treatment not withstanding other properties of honey that aid wound healing. African Health Sciences Vol. 7 (3) 2007: pp. 159-165

J Orem;;;;;E K Mbidde;;;;;B Lambert;;;;;S de Sanjose;;;;;E Weiderpass.   
 Burkitt\'s lymphoma in Africa, a review of the epidemiology and etiology  
 . Vol. 7 No. 3 (2007).   
Abstract  
Burkitt\'s lymphoma (BL) was first described in Eastern Africa, initially thought to be a sarcoma of the jaw. Shortly it became well known that this was a distinct form of Non Hodgkin\'s lymphoma.The disease has given insight in all aspects of cancer research and care. Its peculiar epidemiology has led to the discovery of Epstein Barr virus (EBV) and its importance in the cause of several viral illnesses and malignancies.The highest incidence and mortality rates of BL are seen in Eastern Africa. BL affects mainly children, and boys are more susceptible than girls.  
Evidence for a causal relationship between EBV and BL in the endemic form is fairly strong. Frequency of association between EBV and BL varies between different patient groups and different parts of the world. EBV may play a role in the pathogenesis of BL by deregulation of the oncogene c-MYC by chromosomal translocation.Although several studies suggest an association between malaria and BL, there has never been a conclusive population study in support of a direct role of malaria in causation of BL.The emergence of HIV and a distinct subtype of BL in HIV infected have brought a new dimension to the disease particularly in areas where both HIV and BL are endemic. BL has been reported as a common neoplasmin HIV infected patients, but not in other forms of immuno-depression, and the occurrence of BL seems to be higher amongst HIV positive adults, while the evidence of an association amongst children is still disputed.The role of other possible risk factors such as low socio-economical status, exposure to a plant species common in Africa called Euphorbiaceae, exposure to pesticies and to other infections such as schistosomiasis and arbovirus (an RNA virus transmitted by insect vectors) remain to be elucidated. Keywords: keyword; keyword; keyword African Health Sciences Vol. 7 (3) 2007: pp. 166-175

A A Adegoke;;;;;T O Lawoyin;;;;;M O Ogundeji;;;;;A M Thomson.   
 A community-based investigation of the avoidable factors of maternal mortality in Nigeria: the pilot experiences  
 . Vol. 7 No. 3 (2007).   
Abstract  
Background: Reduction of maternal mortality is one of the major goals of several recent international conferences and has been included within the Millennium Development Goals. However, because measuring maternal mortality is difficult and complex, reliable estimates of the dimensions of the problem are not generally available and assessing progress towards the goal is difficult in some countries. Reliable baseline data are crucial to effectively track progress and measure that targets or goals of reducing maternal mortality have been met.  
Objectives:The objectives of this pilot study were: to test adequacy of research instruments; to improve research techniques; to determine an appropriate workload; to determine the time required for interviews; and to assess the feasibility of a (full-scale) study/ survey.  
Methods:This pilot study was conducted between 11th April and 22nd April 2005. 420 houses were visited and interviews of 420 respondents between the ages of 15-49 were conducted in a randomly pre-selected Local Government Area of Oyo state using a structured instrument developed using the principles of the Sisterhood Method.  
Results:There was willingness of the public to participate in the study.The response rate was 100%.There was no issue raised as regards the structure,wording and translation of the questionnaire.This pilot study uncovered local political problems and other issues that may be encountered during the main study.  
Conclusions:The pilot raised a number of fundamental issues related to the process of designing the research instrument, identifying and recruiting Data Collectors, training and supervision of Data Collectors and the research project, gaining access to respondents and obtaining support and approval from \"gatekeepers\".This paper highlights the lessons learned and reports practical issues that occurred during pilot study. African Health Sciences Vol. 7 (3) 2007: pp. 176-181

E E Olayemi;;;;;G N Bazuaye.   
 Presence of lupus anticoagulant in an asymptomatic Nigerian  
 . Vol. 7 No. 3 (2007).   
Abstract  
Background:The lupus anticoagulant (LA) is one of the antiphospholipid antibodies (aPL), which prolong phospholipid- dependent coagulation tests by interfering with coagulation reactions that depend on protein - phospholipid complexes in vitro.  
Method:A 25 year old \'healthy\' male Nigerian was screened for the presence of any coagulation abnormality using the KCT, PT and platelet count; after volunteering for his plasma to be used in the preparation of normal pooled plasma in a study.  
Results: He was discovered to have a prolonged KCT, PT and normal platelet count. Based on the prolonged KCT his plasma was subjected to mixing studies with various concentration of normal pooled plasma; the KCT index was calculated and a curve was plotted. His KCT index was 1.6 and the curve convex in the left axis suggesting the presence of LA. His past medical history and physical examination were not remarkable.Three months after the initial study, a repeat KCT index was 1.4 and the subject asymptomatic.  
Conclusion: From literature review this is the first report of LA in an asymptomatic adult Nigerian; the importance of this finding is discussed. African Health Sciences Vol. 7 (3) 2007: pp. 182-184

R G Cooper;;;;;T Magwere.   
 Mini review - Chloroquine has not disappeared  
 . Vol. 7 No. 3 (2007).   
Abstract  
Chloroquine (CHQ), an antimalarial, is also used as an anti-inflammatory drug for systemic lupus erythematosus and rheumatoid arthritis (RA). Hydroxychloroquine (HCQ) reduces the frequency of organ involvement and disease flares, and relieves skin and joint symptoms. CHQ reduces the immunologically-mediated inflammation of the joints. HCQ and combination therapies have a significant benefit on synovitis, pain and physical disability on RA.We advocate the investment of resistance Plasmodium prevalence determinations in countries beset by malaria, and to match thereafter the quantity of persons administered CHQ. Follow-up investigations are essential to diagnose and prevent visual damage.  
 Keywords: Antimalarial; Chloroquine; Rheumatoid arthritis; Systemic lupus erythematosus African Health Sciences Vol. 7 (3) 2007: pp. 185-186

E Kashala;;;;;T Tylleskar;;;;;I Elgen;;;;;K T Kayembe;;;;;K Sommerfelt.   
 Attention deficit and hyperactivity disorder among school children in Kinshasa, Democratic Republic of Congo  
 . Vol. 5 No. 3 (2005).   
Abstract  
Objectives: To estimate the prevalence and determinants of attention deficit and hyperactivity disorder (ADHD) symptoms among school children in Kinshasa, an African urban setting.   
Methods: The 18-items of the Disruptive Behaviour Disorder rating scale (DBD), which is based on the Diagnostic and Statistical Manual for mental disorders 4th edition (DSM-IV), were used to investigate the presence of ADHD symptoms. Parents interviews, using a questionnaire specially designed for the study, were performed to identify socio-demographic characteristics. All children were subject to a clinical examination.   
Results: The estimated prevalence of DSM-IV ADHD symptoms was 6 %. Those with family health problems, younger age at start of primary school, good nutritional status and poor school performance more often had DSM-IV ADHD symptoms.   
Conclusions: ADHD symptoms are as common among school children in Kinshasa as elsewhere. The socio-demographic factors described as risk factors for ADHD in high-income countries were not identified in this study.  
 Keywords: D, DSM-IV, school children, risk factors. African Health Sciences Vol. 5 (3) 2005: pp. 172-181

M A Adedigba;;;;;E O Ogunbodede;;;;;B A Fajewonyomi;;;;;O O Ojo;;;;;S Naidoo.   
 Gender differences among oral health care workers in caring for HIV/AIDS patients in Osun state, Nigeria  
 . Vol. 5 No. 3 (2005).   
Abstract  
The study investigated the relationship between gender and knowledge, attitude and practice of infection control among oral health care workers in the management of patients with HIV/AIDS in Osun State of Nigeria. It was a cross-sectional survey using 85 oral Health care workers (OHCWs) enlisted in the public dental health clinics. A self-administered questionnaire was designed and used for data collection. A total of 85 questionnaires were distributed. The response rate was 93%; 42 (53%) were males and 37 (47%) females. The majority of the respondents were in the 25-40 year old age group and the mean age was 37.3 years.  
This study found significant differences in gender and ability to identify HIV/AIDS oral manifestations (p <0.001) and recognition of HIV/AIDS risk factors (p <0.001). There was statistically significant gender difference and infection control practices (p =0.02) among the OHCWs. Males were more compliant to the universal cross-infection control principle than the female respondents. A significant association (p < 0.001) was found between OHCW gender and their attitude to the management of HIV/AIDS patients with males showing a better attitude towards the care of HIV/AIDS patients.  
This study shows that there are significant gender difference in attitudes, behaviour and practices of OHCW with males faring better than the females. National AIDS Control Programme, Health Control bodies, Health educators and other organizations should make efforts to improve the attitude and practice of oral health care workers regarding the management of patients with HIV/AIDS.  
 Keywords: Gender difference, Oral health workers, HIV/AIDS. African Health Sciences Vol. 5 (3) 2005: pp. 182-187

T T Langen.   
 Gender power imbalance on women\'s capacity to negotiate self-protection against HIV/AIDS in Botswana and South Africa  
 . Vol. 5 No. 3 (2005).   
Abstract  
Background: Gender power imbalance, which translates into a power imbalance in sexual interactions, is increasingly being recognized as a factor in fueling the spread of HIV/AIDS by increasing the number of unsafe sexual encounters.   
Objectives: To examine the influence of gender power imbalance and other factors on women\'s capacity to negotiate self protection against HIV infection; as well as men\'s response to the suggested condom use.   
Methods: Drawing on data gathered from 2658 women aged 18-49 years in a cross-sectional survey in Kwa Zulu Natal Province of South Africa and Botswana, the study used descriptive statistics and logistic regression to reveal a number of gender related factors that significantly affect women\'s ability to protect themselves against HIV infection.   
Results: Gender power imbalance significantly affects women\'s ability to suggest condom use to their partners. The study showed that it is women with partners 10 or more years older than them, abused women, and those economically dependent on their partners who are less likely to suggest condom use to their partners. Gender power imbalance also influences men\'s inclination towards refusing to use the suggested condom. The study showed that men are more likely to refuse to use the condom when the age difference between them and their female partners is wide, if they are in a married relationship, and where there is no communication about HIV/AIDS between them and their partners. What is more disturbing is the finding that it is men with multiple partners who are significantly more likely to refuse to use the condom.   
Conclusion: Across all levels of society, there is a need to see a social paradigm shift that transforms relationships between women and men, from the one of inequality and dominance as is the case in patriarchal societies, to equality, respect and consideration for one another. African Health Sciences Vol. 5 (3) 2005: pp. 188-197

J Smit;;;;;K Middelkoop;;;;;L Myer;;;;;G Lindegger;;;;;L Swartz;;;;;S Seedat;;;;;T Tucker;;;;;R Wood;;;;;L-G Bekker;;;;;D J Stein.   
 Socio-behaviour challenges to phase III HIV vaccine trials in Sub-Saharan Africa  
 . Vol. 5 No. 3 (2005).   
Abstract  
Background: A number of countries in sub-Saharan Africa are preparing for HIV vaccine efficacy trials. Social and behavioural factors related to HIV transmission require examination in each setting where these trials are considered. As part of this, several countries have also recently begun preparatory research investigating relevant social and behavioural issues. There is a need for a review of the literature to help focus such research efforts in Sub-Saharan Africa.   
Objective: To examine key social and behavioural issues that may impact on the conduct of HIV vaccine efficacy trials in sub-Saharan Africa.   
Design: Literature review   
Methods: Major databases (PubMed, PsychInfo, EBSCOhost, and AIDSline) were searched for literature that discussed social and behavioural issues related to HIV vaccine trials. Three areas are highlighted as being particularly significant for HIV vaccine research: (1) willingness to participate in future HIV vaccine efficacy trials, (2) retention of participants in studies, and (3) sexual risk reporting during trials. For each of these topics, major findings from both developed and developing countries are described and avenues for further research are discussed.   
Results: There are few data from Sub-Saharan Africa regarding willingness to participate in HIV vaccine trials. Data on participant retention rates varies widely, and maintaining large cohorts of individuals within Phase III trials presents an important challenge. In addition, the possible impact of trial participation on sexual disinhibition, and response bias on sexual risk-reporting remain as issues for HIV vaccine trials in African contexts.   
Conclusions: Social and behavioural research forms an important part of preparations for HIV vaccine efficacy trials, and there is a clear need for more research of this type in Sub-Saharan Africa. Innovative approaches are required to address issues such as willingness to participate in vaccine research, participant retention during efficacy trials, and the accurate reporting by participants of sexual risk behaviours.  
 Keywords: Africa, HIV, vaccines, clinical trials, preparation, behaviour, review African Health Sciences Vol. 5 (3) 2005: pp. 198-206

B L Meel.   
 Incidence of HIV infection at the time of incident reporting,in victims of sexual assault, between 2000 and 2004, in Transkei, Eastern Cape, South Africa  
 . Vol. 5 No. 3 (2005).   
Abstract  
Background: HIV/AIDS epidemic and sexual assault have emerged as the most serious public health problems in South Africa. The country has about 5-million HIV infected individuals. About a million women are raped every year.   
Objective: To study the incidence of HIV infection in victims of sexual assaults.   
Methods: This is a retrospective descriptive study. There were 831 victims of sexual assault, who attended the Sinawe Centre during the 5-year (2000-2004) study period. Sinawe Centre is the only unit in this area which deals with cases of sexual assaults. Data were analyzed using PRISM R computer program.   
Results: Eight hundred and thirty one cases of sexual assaults (rape) were reported in last 5-years (2000-2004). Increase in sexual assaults by three-times, and one-and-half-fold increase in HIV seropositivity has recorded over the period of 5 years. In 2000, 76 (9.7%) sexual assault cases were registered, and in 2004, 237 (28.5%) cases. Of them, 443 (53.3%) were children under 15-years of age. A total of 114 (13.7%) tested positive for HIV, and 23 (2.7%) were children less than 15 years. In 2000, only 8 (10.5%) tested positive for HIV, and this had climbed to 39 (16.5%) in 2004. There is significant difference in HIV seropositivity among children compared to adults, p<0.05, and Paired t=3.45 with 3df.   
Conclusion: There is an increasing incidence of HIV infection among victims of sexual assaults in this study. African Health Sciences Vol. 5 (3) 2005: pp. 207-212

T M Doherty;;;;;D McCoy;;;;;S Donohue.   
 Health system constraints to optimal coverage of the prevention of mother-to-child HIV transmission programme in South Africa: lessons from the implementation of the national pilot programme  
 . Vol. 5 No. 3 (2005).   
Abstract  
Background: It is three years since the government of South Africa began implementing a PMTCT programme. Over this period of time attempts have been made to scale up this programme across all provinces under routine health service conditions.   
Objectives: To report on the uptake and performance of South Africa\'s national pilot programme for preventing mother to child HIV transmission (PMTCT) and to identify health system constraints to optimal coverage.   
Methods: Routine programme data were collected from antenatal records and delivery registers at the pilot sites and interviews were conducted with health workers on site and with provincial programme managers.   
Results: Routine PMTCT programme data were collected from all 18 pilot sites for the period January to December 2002. During this period, of 84406 women attending the sites for first antenatal visits, 47267 (56%) agreed to an HIV test. 14340 (30%) of the women tested were HIV positive and of these 7853 (55%) were dispensed nevirapine. 7950 (99%) of infants born to women identified as being HIV positive received nevirapine syrup. 58% (4196/7237) of HIV positive women expressed an intention to exclusively formula feed, and 42% (3041/7237) intended to exclusively breastfeed. 1907 infants were due for 12 month HIV testing between January and December 2002, of these 949 (50%) infants were tested.   
Conclusions: Programme effectiveness was limited by the low rate of HIV test acceptance, poor delivery of nevirapine to mothers and inability to track mother-infant pairs postnatally for 12-month HIV testing of infants. Infant feeding intentions of mothers suggest inadequate counselling and possible negative effects of the provision of free formula milk. The poor perfor- mance of the main components of this programme will seriously reduce its operational effectiveness. There is a need for greater integration of VCT within antenatal care, a review of the current policy of providing free formula milk and an alternative model for mother-infant follow up. African Health Sciences Vol. 5 (3) 2005: pp. 213-218

S Lubega;;;;;G W Zirembuzi;;;;;P Lwabi.   
 Heart disease among children with HIV/AIDS attending the paediatric infectious disease clinic at Mulago Hospital  
 . Vol. 5 No. 3 (2005).   
Abstract  
Background: There are very few published studies of heart disease in HIV infected children living in sub-Saharan Africa, a region with more than 50% of the world's population of HIV infected patients. Objectives: To determine the prevalence, and describe the type and clinical presentation of heart disease among children with HIV attending an ambulatory clinic.   
Methodology: Two hundred and thirty (230) HIV infected children attending the Paediatric Infectious Disease Clinic at Mulago hospital were recruited by simple random sampling in a cross-sectional study. The children were evaluated clinically, and investigated by electrocardiography and echocardiography.   
Results: Thirty-two children (13.9%) had asymptomatic HIV disease, 156 (67.8%) had AIDS related complex while 42 (18.3%) had AIDS. Heart abnormalities were detected in 51% of the children (40.0% by echocardiography alone and 26.5% by electrocardiography alone). Heart abnormalities were most prevalent in children with AIDS (76.2%) and least prevalent in children with asymptomatic HIV disease (25.0%). The abnormalities included; Sinus tachycardia (21%), left ventricular systolic dysfunction (17%), right ventricular dilatation (14%), congenital heart disease (4.8%), dilated cardiomyopathy (3.0%), pericarditis (2.2%) and cor pulmonale (1.3%). Children with left ventricular systolic dysfunction significantly had easy fatigability, dyspnoea on exertion and tachypnoea. Other heart abnormalities presented with non-specific clinical features.   
Conclusions: Heart abnormalities were common especially in children with symptomatic HIV disease and included sinus tachycardia, left ventricular systolic dysfunction and right ventricular dilatation. The detected heart abnormalities, except left ventricular systolic dysfunction, had non-specific clinical features. African Health Sciences Vol. 5 (3) 2005: pp. 219-226

L M Muwazi;;;;;C M Rwenyonyi;;;;;F J Tirwomwe;;;;;C Ssali;;;;;A Kasangaki;;;;;M E Nkamba;;;;;P Ekwaru.   
 Prevalence of oral diseases/conditions in Uganda  
 . Vol. 5 No. 3 (2005).   
Abstract  
Objective: The aim was to report the prevalence of oral diseases/conditions among a Ugandan population.   
Methods: Subjects aged 12 (n=696) and 35-44 years (n=396) were chosen from randomly selected urban and peri-urban areas of Arua, Mbale, Kampala and Mbarara districts. They were clinically examined by 4 trained and calibrated dentists for oral diseases/ conditions using criteria described by World Health Organisation.   
Results: Dental caries (DMFT ≥1) was recorded in 40% and 62.5% of the children and adults, respectively. The overall mean DMFT score was 0.9 for children and 3.4 for adults. Caries was significantly more severe in females as compared to males in children (p<0.05), whereas in adults, there was no significant gender difference. Kampala had a significantly higher mean DMFT score compared to other districts in all age groups (p>0.05). Culculus deposits were generally, more prevalent in adults as compare to children except in Mbarara district. Gum bleeding was also significantly more prevalent among children as compared to adults (p<0.05). Significantly higher prevalence of gum bleeding in both children and adults was recorded in Arua district as compared to other areas (p<0.05). Each of the age groups had a prevalence of malocclusion of 61%. However, the severity of malocclusion varied between age groups and districts. The prevalence of dental fluorosis was 3% and 4% for children and adults, respectively. All subjects in Arua district were fluorosis-free. Tetracycline enamel staining was less than 1% in both age groups. Enamel attrition was more prevalent in adults as compared to children: 19% versus 1%.   
Conclusion: The prevalence of oral diseases/conditions was generally low among the study population. Caries experience was significantly higher in the Kampala (urban) district as compared to rural districts in all age groups; the D - component being the major contributor.  
 African Health Sciences Vol. 5 (3) 2005: pp. 227-233

H Wabinga.   
Helicobacter pylori and histopathological changes of gastric mucosa in Uganda population with varying prevalence of stomach cancer  
 . Vol. 5 No. 3 (2005).   
Abstract  
Objective: Study the pathological changes in gastric mucosa of Nyarwanda, Nkole (both with high prevalence of stomach cancer) and Ganda (with low prevalence of this cancer) ethnic groups in the presence of Helicobacter pylori (H. pylori) infection. Research question: Do pathological changes accompanying H. pylori infection explain the varying prevalence of stomach cancer in these populations?   
Design: Retrospective cross sectional study   
Subjects: A total of 114 patients of the above ethnic groups with upper gastrointestinal symptoms who underwent endoscopic biopsy examination between January 1996 and June 2002 formed the basis of this study.   
Results: The severity of gastritis correlated with the presence of H. pylori in Ganda and Nyarwanda but not in Nkole. Intestinal metaplasia (IM) was observed in Nyarwanda and Nkole and in some of these cases there was H. pylori. Gastric atrophy (GA) was also commonly observed in Nkole and Nyarwanda and H. pylori was detected more in the severe form of GA. Lymphoid follicle formation was not associated with H. pylori infection in all study groups.   
Conclusion: The major histological features relating stomach cancer to H. pylori in this study were presence of the infection in IM and GA that was observed mainly in Nyarwanda and Nkole. The lack of association between presence of lymphoid follicle and H. pylori infection probably explains the rarity of MALT lymphoma in Africa as these tumours are said to arise from H. pylori associated lymphoid follicles. African Health Sciences Vol. 5 (3) 2005: pp. 234-237

E Odongo-Aginya;;;;;G Ssegwanyi;;;;;P Kategere;;;;;P C Vuzi.   
 Relationship between malaria infection intensity and rainfall pattern in Entebbe peninsula, Uganda  
 . Vol. 5 No. 3 (2005).   
Abstract  
Background: This study was to assess malaria prevalence in relation to rainfall pattern in different localities of Entebbe Municipality, Uganda. A cross sectional study was conducted amongst the local community residing in the area from January 2003 to January 2004 to investigate the incidence and intensity of malaria infection.   
Methods: Thick and thin blood smears were made from each patient with fever (body temperature ≥ 37.5° C). The slides were examined microscopically for malaria parasites. A total of 616 residents aged 2 to 50 years were registered in the study by name, age, sex and residential location. Spearman correlation coefficient (r) was used to evaluate relationship between parasite density, age and body temperature on one hand and rainfall plus parasite density on the other hand.   
Results: A direct relationship was observed between malaria transmission and monthly rainfall in Entebbe Municipality. About 69.8% of the patients had fever. Parasite density fluctuated according to monthly rainfall pattern. Two peaks of high parasite density was observed, each peak coinciding with a peak rainfall pattern of the bimodal annual rain seasons. There was a negative but significant correlation (r = -0.09271; p < 0.0214) between parasite density and age, suggesting that mature individuals clear parasites more effectively than children. Furthermore, we observed a bimodal peak of mean parasite density in children and adults; peak in children is higher than of adults, each peak coinciding with rainfall pattern. There is also a significant positive correlation between parasite density and body temperature (r = 0.1927; p = 0.0001). However, there is no significant variation in mean parasite densities in the different locations of Entebbe Municipality.   
Conclusions: Our study confirms rainfall pattern and age influence parasite density and are important determinants of malaria infection and transmission in Entebbe Municipality. Increased parasite density in children is a useful indicator for monitoring intensity of infection. This information is valuable in policy formulation for control of malaria during periods of intense transmission African Health Sciences Vol. 5 (3) 2005: pp. 235-245

I van Schayk;;;;;M Bennett;;;;;N Kamau;;;;;M Alilio;;;;;M Alilio.   
 Crossing the digital divide: the contribution of information technology to the professional performance of malaria researchers in Africa  
 . Vol. 5 No. 3 (2005).   
Abstract  
Background: The US National Library of Medicine supports the Multilateral Initiative on Malaria (MIM) through the design, implementation, and operation of the Multilateral Initiative on Malaria Communications Network (MIMCom.) MIMCom makes possible enhanced access to the Internet and to medical literature.   
Objectives: The main objectives of the present study were to examine the use of MIMCom supported information technology (IT) by scientists, students, and administrative personnel to facilitate communication, retrieve information, obtain documents, write proposals, and prepare papers for publication; and to determine the contribution of this intervention to their professional performance.   
Methods: The authors analyzed the contribution of enhanced Internet connectivity and access to electronic information resources to the performance of malaria research staff and their institutes through a cross-sectional questionnaire survey of 181 respondents at 14 health research centers in Africa. Separate reviews of bandwidth usage, requests for document delivery, and publications in peer reviewed journals support the data of the survey.   
Results: The MIMCom network makes a positive contribution to the performance of malaria researchers and support staff at the sites reviewed by improving e-mail exchange, access to published literature, and research proposal development and submission. Implications of these findings are discussed.   
Conclusion: By providing full access to the Internet and the resources of the WorldWide Web, MIMCom has been shown to be invaluable to malaria researchers and their institutes in Africa. This access has increased visibility of scientists in their respective institutions and provided opportunities for stronger engagement with the international scientific community. African Health Sciences Vol. 5 (3) 2005: pp. 246-254

O C Alebiosu;;;;;O E Ayodele.   
 PRACTICE POINTS - Natural history and epidemiology of post transplantation diabetes mellitus  
 . Vol. 5 No. 3 (2005).   
Abstract  
Objective: High patient mortality continues to be the major threat to the success of solid organ transplantation despite improvements in the control of immunologic phenomena post-transplantation with improvements in grafts survival. Post transplantation diabetes mellitus (PTD) occurring commonly in patients receiving immunosuppressives has been identified as a major culprit.   
Aim: This paper reviews the current concepts of PTD.   
Methods: A Medline literature search limited to research / review articles in English language, spanning 1984 January – 2004 June on post transplantation diabetes mellitus or hyperglycemia was done.   
Results: Post transplantation diabetes mellitus is a heterogeneous condition of abnormal glucose tolerance with a variable onset, duration and severity. It is defined as a fasting plasma glucose = 7.0 mmol / L (126 mg / dL) and / or a 2 hour plasma glucose during an OGTT = 11.1mmol / L (200 mg / dL), or a casual plasma glucose = 11.1 mmol / L (200 mg / dL), on 3 or more occasions over a period of at least 3 months. The risk factors predisposing to PTD are age, recipient's ethnicity, immunosuppressive regimen and family history of diabetes. The condition not only increases the risk of graft – related complications such as graft rejection, graft loss and infection,but also is a major determinant of the increased cardiovascular morbidity and mortality.   
Conclusions: The most important risk factor predisposing to the development of PTD is the immunosuppressive drugs. The selection of immunosuppressive regimen should take into account individuals diabetes risk profile and the relative diabetogenicity and risk for diabetes of each immunosuppressant, balancing minimal risk of diabetes with effective immunosuppression.  
 Keywords: Current concepts, Definition, Diabetes, Epidemiology, Pathogenesis, Post transplantation, Management. African Health Sciences Vol. 5 (3) 2005: pp. 255-260

L O Thanni.   
 CASE REPORTS- Extremity haemangiopericytoma, a case report from Nigeria  
 . Vol. 5 No. 3 (2005).   
Abstract  
Haemangiopericytoma is an uncommon soft tissue sarcoma of vascular origin. It occurs more frequently in the extremities than elsewhere in the body although it can arise in any organ. Wide surgical excision is the mainstay of treatment. However, adjuvant radiotherapy and chemotherapy are desirable because the malignant nature of this tumour is frequently unpredictable. Adjuvant therapy is recommended for metastases, recurrence and incomplete resection. Long term follow up is essential in all cases as recurrence can occur several years after treatment. Where little or no experience with managing this tumor exists, it is important to be aware of its clinical behaviour and the treatment options, hence this case reports.  
 Keywords: haemangiopericytoma, sarcoma, tumour, radiotherapy, chemotherapy African Health Sciences Vol. 5 (3) 2005: pp. 261-264

A A Musa;;;;;C O Alebiosu;;;;;O Akiode;;;;;A M Shonubi.   
 Ruptured false iliac artery aneurysm - a case report from Nigeria  
 . Vol. 5 No. 3 (2005).   
Abstract  
A 23year old male Nigerian presented to the Nephrology unit of the Olabisi Onabanjo University Teaching Hospital, Sagamu, Nigeria with features of chronic renal failure secondary to chronic glomerulonephritis. He was referred to the surgical department of the hospital on account of severe torrential uncontrollable bleeding from an infected cannulation site. He was maintained on regular hemodialysis but developed femoral triangle sepsis at the cannulation site and aneurysm of the external iliac artery. The aneurysm later ruptured with severe jet exsanguinations bleeding. Exploration revealed a-4cm rent in the external iliac artery that was sutured with 6/0 prolene, interrupted, using clamp and suture technique. Perfusion was satisfactory in the immediate post-operative period. The patient was transfused with 11 pints of blood within 12 hours and had an uneventful post-operative period.  
 Keywords: Haemodialysis, False iliac artery aneurysm, Femoral triangle Sepsis, Nigeria African Health Sciences Vol. 5 (3) 2005: pp. 265-269

A A Kaissi;;;;;F B Chehida;;;;;N Nassib;;;;;H Safi;;;;;M Djnziri;;;;;M B Ghachem;;;;;H Gharbi.   
 Subtotal amelia in a child with autosomal recessive hypohidrotic ectodermal dysplasia  
 . Vol. 5 No. 3 (2005).   
Abstract  
We report an inbred Tunisian family, in which the proband manifested signs of hypohidrotic ectodermal dysplasia, subtotal amelia, scoliosis and left renal agenesis. Two other family members had the full clinical criteria of hypohidrotic ectodermal dysplasia, characterized by deficient sweat glands, hypodontia, hypoplasia of the mucous glands, and fine hair. Nine family subjects had variable clinical expression of the disorder.  
 Keywords: Hypohidrotic ectodermal dysplasia (H E D), subtotal amelia, dysplastic ears African Health Sciences Vol. 5 (3) 2005: pp. 270-275

V J Adams;;;;;M B Markus;;;;;J F Adams;;;;;E Jordaan;;;;;B Curtis;;;;;M A Dhansay;;;;;C C Obihara;;;;;J E Fincham.   
 ERRATUM- Paradoxical helminthiasis and giardiasis in Cape Town, South Africa: epidemiology and control  
 . Vol. 5 No. 3 (2005).   
Abstract  
Background: South Africa has endorsed a World Health Assembly (WHA) resolution calling for control of soil-transmitted helminths (STHs). In Cape Town, services and housing that exist in old-established suburbs should minimise the prevalence of intestinal parasitic infections, even when residents are poor. Where families live in shacks in densely-populated areas without effective sanitation, more than 90% of children can be infected by STHs. The humoral immune response to worms theoretically favours infection by Mycobacterium tuberculosis and HIV.   
Objectives: Obtain estimates of gender-, age-, school-related and overall prevalence of helminthiasis and giardiasis in a lowincome but well-serviced community. Assess possible sources of infection. Alert health services to the need for control measures and the threat from protozoal pathogens. Warn that the immune response to intestinal parasites may favour tuberculosis (TB) and HIV/ AIDS.   
Methods: A cross-sectional study of the prevalence of helminthiasis and giardiasis was carried out in a large, non-selective sample of children attending nine schools. Gender, school and age effects were related to non-medical preventive services, sewage disposal practices and possible sources of infection.   
Results: The overall STH infestation rate was 55.8%. Prevalence was in.uenced by school and age but not by gender. Eggs and cysts were seen at the following prevalence: Ascaris 24.8%; Trichuris 50.6%; Hymenolepis nana 2.2%; Enterobius 0.6%; Giardia 17.3%; hookworm 0.08%; and Trichostrongylus 0.1%. Approximately 60% of sewage sludge is used in a form that will contain viable eggs and cysts.   
Conclusions: Prevalence trends in this old community in Cape Town could indicate infection by swallowing eggs or cysts on food or in water, more than by exposure to polluted soil. Sewage sludge and effluent might be sources of infection. In adjacent, under serviced, newer communities, promiscuous defecation occurs. Probable vectors are discussed. The immune response to intestinal parasites might be a risk factor for HIV/AIDS and TB.  
 Keywords: Ascaris; Enterobius; HIV/AIDS; hookworm; IgE; Trichuris; tuberculosis African Health Sciences Vol. 5 (3) 2005: pp. 276-280

OC Kobusingye.   
 Road safety - threats and opportunities for poor countries  
 . Vol. 4 No. 3 (2004).   
Abstract  
No Abstracts. African Health Sciences Vol.4(3) 2004: pp.199-201

KA Adelusola;;;;;DO Sabageh;;;;;CO Ukah.   
 Lymphoreticular diseases in Nigerians  
 . Vol. 8 No. 1 (2008).   
Abstract  
Background: The lymphoreticular system plays a major role in both the innate and adaptive immune responses. This study reviews retrospectively cases of lymphoreticular diseases seen at a tertiary institution in Nigeria. Materials and Methods: This is a retrospective study in which biopsies from the bone marrow, spleen, lymph nodes and extranodal lymphoid tissues reported within a period of 16 years were reviewed with respect to age, sex and pathological diagnosis. Statistical analysis was performed for differences in proportion using Chi square by SPSS version 12. Results: Nine hundred and forty four cases comprising 559 biopsies from lymph nodes and extranodal lymphoid tissues, 272 bone marrow biopsies and 113 spleen biopsies were studied. Non Hodgkin\'s lymphoma (NHL) and tuberculosis were the most common lesions in lymph nodes and extranodal lymphoid tissues. The axillary and cervical nodes accounted for most cases of metastasis. Breast cancer accounted for the majority of metastasis to lymph nodes. The most common pathological changes in bone marrow were NHL and reactive hyperplasia. Patients with chronic lymphocytic leukaemia (CLL) had the highest mean age, which was significantly higher than in those with NHL (p=.001, 95% confidence interval -27.91 to -7.76). The most common finding in the spleen was splenic rupture and haemoperitoneum from road traffic accident. Conclusion: NHL and tuberculosis should be high on the list of differential diagnosis of lymphadenopathy in Nigerians. Whereas trauma from RTA was the major reason for splenectomy in Nigerians, in the elderly splenic biopsy would likely show CLL. African Health Science Vol. 8 (1) 2008: pp. 20-24

DO Simba.   
PRACTICE POINTS Application of ICT in strengthening health information systems in developing countries in the wake of globalisation  
 . Vol. 4 No. 3 (2004).   
Abstract  
Information Communication Technology (ICT) revolution brought opportunities and challenges to developing countries in  
their efforts to strengthen the Health Management Information Systems (HMIS). In the wake of globalisation, developing  
countries have no choice but to take advantage of the opportunities and face the challenges. The last decades saw developing  
countries taking action to strengthen and modernise their HMIS using the existing ICT. Due to poor economic and communication  
infrastructure, the process has been limited to national and provincial / region levels leaving behind majority of health workers  
living in remote / rural areas. Even those with access do not get maximum benefit from ICT advancements due to inadequacies  
in data quality and lack of data utilisation. Therefore, developing countries need to make deliberate efforts to address constraints  
threatening to increase technology gap between urban minority and rural majority by setting up favourable policies and appropriate  
strategies. Concurrently, strategies to improve data quality and utilisation should be instituted to ensure that HMIS has positive  
impact on people's health. Potential strength from private sector and opportunities for sharing experiences among developing  
countries should be utilised. Short of this, advancement in ICT will continue to marginalise health workers in developing  
countries especially those living in remote areas. African Health Sciences Vol.4(3) 2004: pp.194-198

R B Otto;;;;;DT Crane;;;;;B Bolgiano.   
 A study of physico-chemical interactions between Haemophilus influenzae type b and meningococcus group C conjugate vaccines.  
 . Vol. 7 No. 4 (2007).   
Abstract  
Background: Haemophilus influenzae type b (Hib) and Meningococcal group C (MenC) conjugate vaccines, which protect against otitis media, bacteremia and invasive diseases, including pneumonia and meningitis, are attractive candidates for combination, since they are both administered to infants and children. A Hib-MenC combination booster at 12 mo has recently been introduced in the U.K.   
Objectives: To rule out the possibility for the individual vaccine components in a Hib-MenC combination to interact, rendering one or both of them less effective, this work assessed whether these two saccharide-protein conjugates, namely, Hib oligosaccharide-CRM197 (Cross-Reacting Material 197) and MenC-CRM197, interact in solution. Furthermore an evaluation of the size and integrity of the vaccines was also performed.   
Methods: HPLC Size-exclusion chromatography (SEC) with UV-adsorption and refractive index detection was performed with a phosphate and non-phosphate saline buffer to characterize the size of Hib and MenC conjugates as individual components or when combined.   
Results: Hib-CRM197 eluted significantly earlier than MenC-CRM197 in both phosphate-saline and MOPS-saline buffers on a TSK5000 PWXL column. When combined, there was no significant change in their elution. Refractive index monitoring showed no evidence of significant free saccharide or free protein.   
Conclusions: By size-exclusion chromatography and refractive index detection methods, there was no indication of degradation, and no evidence of significant associative interactions between Hib-CRM197 and MenC-CRM197 in saline-based buffers, pH 7.2. African Health Sciences Vol. 7 (4) 2007: pp.190-196

D M Ndetei;;;;;L I Khasakhala;;;;;F A Ongecha;;;;;V Mutiso;;;;;D A Kokonya.   
 Outcome of a working diagnosis of \"psychosis\" in relation to DSM-IV diagnostic criteria in a Kenyan in-patient cohort at Mathari hospital, Nairobi  
 . Vol. 7 No. 4 (2007).   
Abstract  
Background: When a patient presents with mental illness and displays psychotic symptoms which are not clearly delineated, a clinical diagnosis of psychosis is usually entertained.   
Aim: To determine the underlying Diagnostic and Statistical Manual of Mental Disorders-Fourth edition (DSM-IV) disorders in clinical entities admitted with a working diagnosis of \"psychosis\" at Mathari Psychiatric Hospital, Nairobi, Kenya.   
Study Design: Descriptive cross-sectional quantitative study   
Method: A total of 138 patients with a working diagnosis of \"psychosis\" on admission at Mathari Hospital during the period of this study were recruited over a one-month period. Their DSM-IV diagnoses were made using the Structured Clinical Interview for DSM-IV (SCID). Analysis of the results was done using SPSS version 11.5.   
Results: Nearly three quarters (72.5%) of the patients were male, 68.5% were aged between 20 and 34 years and 63.7% reported that they were single. Nearly half (49.2%) had attained up to 12 years of formal education and 90% were dependants of a member of the family. The most common DSM-IV diagnoses were schizophrenia, bipolar disorder, substance abuse, depression and anxiety disorders. Co-morbidity was recorded with an average of three DSM-IV disorders.   
Conclusion: \"Psychosis\" as a working diagnosis was reported in relatively young adults. The patients whose working clinical diagnosis was \"psychosis\" met the criteria for an average of three DSM-IV diagnoses. There is need for a proactive policy in clinical practice so that definitive diagnoses rather than just \"psychosis\" are made and appropriate management initiated as early as possible. African Health Sciences Vol. 7 (4) 2007: pp. 197-201

S Musisi;;;;;E Kinyanda;;;;;N Nakasujja;;;;;J Nakigudde.   
 A comparison of the behavioral and emotional disorders of primary school-going orphans and non-orphans in Uganda  
 . Vol. 7 No. 4 (2007).   
Abstract  
Background: This study investigated the emotional and behavioral problems of orphans in Rakai District, Uganda, and to suggest interventions. Studies, elsewhere, have shown orphans to have high levels of psychological problems. However, in Uganda such studies are limited and no specific interventions have been suggested.   
Methods: The study employed a cross-sectional unmatched case control design to compare emotional and behavioral problems of 210 randomly selected primary school-going orphans and 210 non-orphans using quantitative and qualitative methods employing standardized questionnaires, Focus Group discussions and selected Key Informant interviews. All children were administered Rutter\'s Children\'s Teacher Administered Behavior Questionnaire to measure psychological distress and a modified version of Cooper\'s Self-Report Measure for Social Adjustment. Standardized psychiatric assessments were done on children scoring > 9 on the Rutter\'s Scale, using the WHO-ICD-10 diagnostic checklists.   
Results: Both orphans and non-orphans had high levels of psychological distress as measured using Rutter\'s questionnaire but with no significant statistical difference between the two groups (Rutter score > 9; 45.1% & 36.5% respectively; p= 0.10) and no major psychiatric disorders such as psychotic, major affective or organic mental syndromes. Psychological distress was associated with poor academic performance (p=0.00) in both groups. More orphans, than non-orphans had more common emotional and behavioral problems e.g. more orphans reported finding \"life unfair and difficult\" (p=0.03); 8.3% orphans compared to 5.1 % of the non-orphans reported having had past suicidal wishes (p=0.30) and more reported past \"forced sex / abuse \" (p=0.05). Lastly, the orphans\' social functioning in the family rated significantly worse compared to the non-orphans (p= 0.05). Qualitatively, orphans, compared to non-orphans were described as \"needy, sensitive, isolative with low confidence and self-esteem and who often lacked love, protection, identity, security, play, food and shelter.\" Most lived in big poor families with few resources, faced stigma and were frequently relocated. Community resources were inadequate.   
Conclusion: In conclusion, more orphans compared to non-orphans exhibited common emotional and behavioral problems but no major psychiatric disorders. Orphans were more likely to be emotionally needy, insecure, poor, exploited, abused, or neglected. Most lived in poverty with elderly widowed female caretakers. They showed high resilience in coping. To comprehensively address these problems, we recommend setting up a National Policy and Support Services for Orphans and Other Vulnerable Children and their families, a National Child Protection Agency for all Children, Child Guidance Counselors in those schools with many orphans and lastly social skills training for all children.  
 African Health Sciences Vol. 7 (4) 2007: pp. 202-213

D Kyabaggu;;;;;F Ejobi;;;;;D Olila.   
 The sensitivities to first-line antibiotic therapy of the common urinary tract bacterial infections detected in urine samples at a hospital in metropolitan Kampala (Uganda)  
 . Vol. 7 No. 4 (2007).   
Abstract  
Background: Urinary tract infections (UTIs) are among the most common human infections. Many urinary tract bacteria are capable of expressing drug resistance. Resistant bacteria may be present from the commencement of the infection or may develop during treatment. This study focused on the problem of antibiotic resistance to the first-line drugs that were used to treat patients presenting with urinary tract infections at Rubaga hospital in Kampala, Uganda.   
Objectives: The objective of this study was to isolate and identify the major bacterial pathogens of symptomatic and asymptomatic UTIs among patients at Rubaga hospital. Furthermore, the study sought to determine the antimicrobial susceptibility patterns of the major bacterial isolates to the first-line drugs used to treat UTIs at Rubaga hospital.   
Methods: Urine samples were aseptically collected and examined microscopically and were microbiologically cultured on blood agar, nutrient agar and on MacConkey agar. The isolates obtained were then identified using standard tests and tested for antimicrobial sensitivity by the Kirby-Bauer technique.   
Results: The isolated pathogens included Escherichia coli (10.9%), Staphylococcus (31.9%), Streptococcus (9.2%), Klebsiella species (21.0%) and Proteus species (10.1%). 20 (16.8%) of the isolates were lactose fermenting gram-negative rods that were also indole-negative. These isolates were termed `unclassified coliforms\' in this study but were probably Enterobacter species. On antimicrobial susceptibility testing, all the gram-negative isolates were significantly resistant to amoxycillin, cotrimoxazole, erythromycin, and to nalidixic acid; but were susceptible to nitrofurantoin. Among the gram-negative isolates, only Klebsiella species were significantly resistant (p<0.05) to ciprofloxacin. The gram-positive cocci were susceptible to amoxycillin, ciprofloxacin, and to erythromycin but resistant to cotrimoxazole and nalidixic acid. Unlike the Staphylococcus species that were significantly resistant to nitrofurantoin, Streptococcus species were moderately susceptible to the drug.   
Conclusion: The common urinary tract bacteria detected in Rubaga hospital in Uganda were most sensitive to Ciprofloxacin and Nitrofurantoin.  
 African Health Sciences Vol. 7 (4) 2007: pp. 214-222

I S Ogiehor;;;;;M J Ikenebomeh;;;;;A O Ekundayo.   
 The bioload and aflatoxin content of market garri from some selected states in southern Nigeria: public health significance.  
 . Vol. 7 No. 4 (2007).   
Abstract  
Background: Garri is consumed by several millions of people in the West African sub-region and in Nigeria in particular regardless of ethnicity and socio-economic class. However production and handling methods have not been standardized resulting in a product with varying quality and safety indices hence varying public health concern.   
Objectives: To investigate the microbial contamination level, presence, prevalence and distribution of Aflations B1, B2, G1 and G2 in market garri with the aim of developing useful indices for safe handling and acceptable public health standards.   
Methods: A total of 300 samples comprising of 30 samples each from various market in both urban and rural settings were randomly collected using sterile polyethylene bags. These were analysed for microbiological quality and aflatoxins content using standard procedures.   
Results: Eight bacteria genera (Bacillus, Staphylococcus, Streptococcus, Pseudomonas, Clostridium, Salmonella, Klebsiella and Coliforms groups) genera and six fungi genera (Aspergillus, Penicillium, Rhizopus, Botrytls, Fusarium and Cladosporium) were detected and isolated. B1, B2, G1 and G2 were detected in varying concentrations amongst the samples analysed within and amongst the states investigated with an average occurrence rate of 17.5%   
Conclusion: Market garri was found to contain high bioload with vast array of micro-organisms and Aflatoxins in all the states investigated. Results are useful in developing and establishing public health standards for the production and safe handling of garri. African Health Sciences Vol. 7 (4) 2007: pp. 223-227

R N Ndip;;;;;A E Takang;;;;;C M Echakachi;;;;;A Malongue;;;;;J F Akoachere;;;;;L M Ndip;;;;;H N Luma.   
 In-vitro antimicrobial activity of selected honeys on clinical isolates of Helicobacter pylori   
. Vol. 7 No. 4 (2007).   
Abstract  
Background Helicobacter pylori is a gram-negative bacterium incriminated in gastroduodenal ulcers, and mucosa-associated lymphoid tissue lymphoma imposing a major burden on health care systems worldwide. Honeys have been shown to have in vitro activity against microaorganisms and suitable for use in ulcers, infected wounds and burns.   
Objective: The study was aimed at evaluating the antimicrobial potential of honeys (Manuka™, Capillano®, Eco- and Mountain) at different concentrations (10%v/v, 20%v/v, 50%v/v and 75%v/v) against clinical isolates of H. pylori.   
Methods: H. pylori was isolated from gastric biopsies of patients with gastroduodenal pathologies following standard microbiological procedures. Antimicrobial susceptibility of the isolates to different honey varieties was determined by the disk diffusion assay. Also, the minimum inhibitory concentration (MIC) and minimum bactericidal concentration (MBC) of the most potent honey was determined by the agar dilution method. Data were analysed using the Fisher exact test and statistical significance considered at p<0.05.   
Results: All the four honey varieties exhibited antibacterial activity. The strongest inhibitory activity (82.22%) was demonstrated by Mountain honey at 75%v/v, followed by Capillano® and Manuka™ honeys (75.56%), and Eco-honey (73.36%) at the same concentration. However, no statistically significant difference (p>0.05) was noted between the honeys at different concentrations. The MIC and MBC concentrations of Mountain honey were in the range 0.117 - 0.938ìg/mL and 0.366 - 2.965ìg/mL respectively. The antimicrobial potential of these honeys at different concentrations were highly comparable to clarithromycin, the positive control.   
Conclusion: These honeys may contain compounds with therapeutic potential against our local isolates of H. pylori.  
 African Health Sciences Vol. 7 (4) 2007: pp. 228-31

B Batwala;;;;;E M Mulogo;;;;;W Arubaku.   
 Oral health status of school children in Mbarara, Uganda  
 . Vol. 7 No. 4 (2007).   
Abstract  
Background: Despite the need for oral health morbidity surveys to aid in reviewing of the oral health services, dental data of Ugandan children is scanty.   
Objectives: to describe the magnitude and distribution of selected oral health conditions among primary school children in Mbarara, Uganda.   
Methods: A stratified two-stage cluster sample of 437 children aged 5-6, 8-9 and 11-12 was enrolled. The selected conditions included: dental caries, plaque, calculus, gingivitis, fluorosis and malocclusion (maxillary overjet). These conditions were diagnosed and scored in accordance with World Health Organisation (WHO) criteria.   
Results: The mean decayed, missing, filled permanent teeth (DMFT) was 1.5(±0.8 SD). Females had higher DMFT (1.6±0.8SD) than males (1.3±0.8SD). Decayed, filled milk teeth (dt) was 2.7(±1.8SD) but more in males 3.1(±2.1SD) than in females 2.4(±1.6SD). Children in private schools were likely to have more caries in both permanent teeth (DMFT: 1.6±0.9SD) and milk teeth (dt: 3.0±1.9SD). Day-scholars were likely to have more caries in permanent teeth (DFMT: 1.50.8SD). Those in boarding were likely to have more caries in milk teeth (dt: 3±2.2SD). Milk teeth caries decreased with age (p<0.0001). Eight (1.8%) had very mild to moderate fluorosis. Nine (2%) lost permanent canines due to practice of \"nylon teeth mutilation.\" Majority 325(75%) had dental plaque, which increased with age (p<0.0001). Males significantly had plaque. Children in private schools were associated with less plaque (OR: 0.6, 95%CI: 0.4-0.9), as were those in boarding schools. Some 113(25.9%) had calculus that increased with age (p<0.0001). Calculus was more prevalent in males, government schools, and among day-scholars. Females were less likely to have maxillary overjet (OR: 0.5, 95% CI: 0.3-0.8). Day-scholars were 2 times more likely to have maxillary overjet (OR: 1.9, 95%CI: 1.1-3.5). None had severe gingivitis.   
Conclusion: The oral hygiene of school children was poor with high plaque prevalence demonstrating a lack of established oral hygiene practices. A comprehensive community-focused oral health care intervention that includes oral health education in homes and the strengthening of school health programme is needed to improve the oral health status of children in Mbarara.  
 African Health Sciences Vol. 7 (4) 2007: pp. 232-238

E A Bassey;;;;;F Abasiubong;;;;;U Ekanem;;;;;A M Abasiatai.   
 Attitude of antenatal attendees to people living with HIV/AIDS in Uyo, south-south Nigeria  
 . Vol. 7 No. 4 (2007).   
Abstract  
Background: Stigmatization and discrimination of people living with HIV/AIDS has a negative impact on the global efforts to control the HIV/AIDS pandemic. Due to fear of stigmatization and discrimination, many people are reluctant to undergo voluntary counseling and testing, infected individuals are often unwilling to disclose their status and some of them still engage in high-risk behaviours leading to increased transmission of the virus.   
Study design and setting: A study of the attitudes to people living with HIV/AIDS was carried out among antenatal clinic attendees at the University of Uyo Teaching Hospital with the aim of developing site-specific information and counseling interventions to reduce stigmatization and discrimination of people living with HIV/AIDS. Information was elicited from 265 randomly selected women who booked for antenatal care between September and December 2005 with the use of a self-administered questionnaire.   
Results: 263 questionnaires were duly completed and analyzed. The mean age of the respondents was 27 ± 5.1 years, majority of them (52.1%) were either unemployed or unskilled workers and 42.9% of them had tertiary education. Awareness and knowledge of HIV/AIDS was high, (95.8%) and (86.7%) respectively. Majority of the respondents (55.6%) were also assessed as having a positive attitude to people living with HIV/AIDS (PLWHA). There was a statistically significant association between good knowledge of HIV/AIDS and a positive attitude to PLWHA (P=0.000) and a high educational status with a positive attitude to PLWHA (P=0.009).   
Conclusion: combating stigma and discrimination is an important process in controlling the epidemic. Specific information and counseling interventions aimed at dispelling misconceptions about HIV/AIDS should be reinforced.  
 African Health Sciences Vol. 7 (4) 2007: pp. 239-243

A Y Mengesha.   
 Hypertension and related risk factors in type 2 diabetes mellitus (DM) patients in Gaborone City Council (GCC) clinics, Gaborone, Botswana  
 . Vol. 7 No. 4 (2007).   
Abstract  
Introduction: This cross sectional study was done in Gaborone City Council clinics in Botswana.   
Objective: The aim of the study was to determine the prevalence of hypertension and related cardiovascular risk factors among DM patients.   
Methods: A total of 401 patients were included in a cross sectional study during a three-month period between December 1, 2003 and February 28, 2004.   
Results: During the study it was found out that 61.2%of DM patients had hypertension, 56.4% obesity, 33.5% hypercholesterolemia and 38.9% hypertriglyceredemia. In the study, hypertension was associated with age, sex, type of DM, body mass index (BMI) and hypertriglyceredemia.   
Conclusion: The study found out that most of DM patients suffer from co-existing hypertension and related cardiovascular risk factors African Health Sciences Vol. 7 (4) 2007: pp. 244-245

A Muula;;;;;S Siziya.   
 Prevalence and determinants of ever smoked cigarettes among school-going adolescents in Lusaka, Zambia.  
 . Vol. 7 No. 4 (2007).   
Abstract  
Background: Cigarette smoking is the single most important preventable cause of non-infectious diseases. There is limited data on adolescent smoking and its determinants in developing countries.   
Methods: Further analysis was done on data collected in the Global Youth Tobacco Survey conducted among school-going adolescents in Lusaka, Zambia in 2002. Weighted logistic regression analyses were performed to determine associations between selected explanatory factors and ever smoked cigarettes.   
Results: A total of 2175 students participated in the study out of which 40.1% (95%CI 39.5-40.7%) had ever smoked cigarettes. The prevalence of ever smoked cigarettes was 43.4% (95%CI 42.6-44.2%) among boys, and 35.6% (95%CI 34.8-36.4%) among girls, (p<0.001). Among both boys and girls, history of having ever smoked cigarettes was associated with having a parent or closest friend who smoked. Among girls only, exposure to pro-tobacco advertisement and positive perception towards smoking were associated with ever smoked cigarettes. Adolescent girls who doubted that smoking was harmful to their health were more likely to have ever smoked.   
Conclusions: Public health interventions aimed to prevent teenage adolescent smoking should incorporate a comprehensive understanding of the determinants of smoking. African Health Sciences Vol. 7 (4) 2007: pp.246-252

BA Iwalokun.   
 Enhanced antimalarial effects of chloroquine by aqueous Vernonia amygdalina leaf extract in mice infected with chloroquine resistant and sensitive Plasmodium berghei strains  
 . Vol. 8 No. 1 (2008).   
Abstract  
Background: The emergence and spread of Plasmodium berghei with resistance to chloroquine (CQ), the safest and cheapest antimalarial drug coupled with the increasing cost of alternative drugs especially in developing countries have necessitated the need to optimize antimalarial actions of plant extracts and restore chloroquine efficacy. Objective: The present study determines the ability of Vernonia amygdalina leaf extract to enhance the prophylactic and therapeutic efficacy of chloroquine against Plasmodium berghei malaria in mice. Methods: Chloroquine sensitive (P. bergheiS) and resistant (P. bergheiR) ANKA clones of Plasmodium berghei maintained by serial passage in mice were used to develop respective experimental rodent malaria models based on intraperitoneal injection of 106 parasitize erythrocyte suspension in PBS (pH 7.2) and subsequent development of parasitaemia. These models were then used to investigate the prophylactic enhancement of chloroquine (CQ) at 5 mg/kg via combination with selected doses (31.25, 62.5, 125mg/kbw) of Vernonia amygdalina leaf extracts using a 4-day suppression test. Effect of these combinations on the therapeutic efficacy of CQ at 30mg/kg over 3 days were evaluated. Treatment outcomes including parasite clearance (PCT) and rescrudescent time (RT) were compared with CQchlorpheniramine combination. The acute toxicity of the extract-CQ combinations was also determined enzymatically. Results: Prophylatically, chloroquine (5mg/kg) in combination with vernonia extracts achieved a dose-dependent (57.2 – 72.7%) suppression of parasitaemia due to CQ sensitive and resistant P berghei strains in the experimental animals. Therapeutically, chloroquine (30mg/kg for 3 days) combined with vernonia to dose-dependently shorten the parasite clearance times (2.6 – 4.4 vs. 4.8 days; P < 0.05 for CQ-V62.5/125 combination), prolong the recrudescent times (8.9 – 18.9 vs. 7.2 days; P < 0.05) and improve day 14 cure rate (66.7 – 100 vs. 58.3%) in the treated P. bergheiS infected mice compared to CQ monotherapy. Whereas CQ monotherapy failed, resolution of parasitaemia due to the CQ resistant parasite with day 14 cure rates of 25 – 100% were also observed with these combinations. In therapeutic terms, the potencies of CQ-V125 combination were comparable to those of CQ-chlorpheniramine (0.25mg/kg, 12hourly, 7 days) in the infected animals. Toxicity testing indicates that these combinations elicited mild to – moderate increases in the liver enzymes measured when administered orally to mice for 7 days. Conclusion: This study indicates that Vernonia amygdalina leaf extract dose – dependently restore the efficacy of CQ against CQ resistance P. berghei malaria in mice. African Health Science Vol. 8 (1) 2008: pp. 25-35

HO Eid;;;;;AF Hefny;;;;;S Joshi;;;;;FM Abu-Zidan.   
 Non-traumatic perforation of the small bowel  
 . Vol. 8 No. 1 (2008).   
Abstract  
Background: Non-traumatic perforation of the small bowel is an uncommon serious complication associated with high morbidity and mortality. Diseases that cause small bowel perforation vary in different areas of the world. Objective: To highlight difficulties in the diagnosis and management of non-traumatic perforation of small bowel. Material and methods: The medical records of four patients who have presented with non-traumatic perforation of the small bowel and were treated at Al-Ain Hospital during the last 5 years were studied retrospectively. Results: The presenting symptoms of all patients were similar. Erect chest X-ray has shown free air under diaphragm in 3 patients. Leukocytosis was present in only one patient. HIV was confirmed in one patient. Patients were diagnosed to have typhoid, HIV, hook worms and tuberculosis. Only the HIV patient died while the others were discharged home in a good condition. Conclusion: Clinical findings of small bowel perforation are usually non specific and diagnosis is usually reached after surgery. The  
Histopathological examination of the small bowel ulcer were non conclusive in three patients. We have made our management plan according to the clinical findings. Non traumatic perforation in developing countries can be due to typhoid, HIV, tuberculosis and  
possibly hook worms. African Health Science Vol. 8 (1) 2008: pp. 36-39

N Ameh;;;;;TS Kene;;;;;ES Ameh.   
 Computer knowledge amongst clinical year medical students in a resource poor setting  
 . Vol. 8 No. 1 (2008).   
Abstract  
Objective: To study the computer knowledge and desires of clinical year medical students at one of the oldest and largest medical schools in Nigeria. Design: A survey using validated structured questionnaires. Setting: Medical school of Ahmadu Bello University, Zaria, Nigeria. Subjects: Two hundred and thirty seven clinical year (4th, 5th and 6th years) medical students. Outcome measures: Computer knowledge, mode of acquiring computer knowledge, regular access to computer, desire for inclusion of computer training in curriculum. Results: One hundred twenty (50.6%) students had knowledge of computer technology and it use. Of these, 108 (90%) had no regular access to a computer and none owned a computer; only 32 (26.7%) were sufficiently familiar with computer tools to perform advanced tasks, but 72 (60%) were comfortable with word processing. Seventy two of the 120 students acquired their computer knowledge through self-learning efforts while 45 (37.5%) attended short periods of formal training. Overall, 45.7% of males and 64.5% of females had computer knowledge. The main reason for lack of computer knowledge was lack of time and lack of access to a computer. Eighty percent of all students would like computer education to be included in medical school curriculum. Conclusion: Knowledge and use of computers amongst clinical year medical students in this setting is low. It is important that computer education be taught to the students to enhance their ability to use electronic information and communicate more effectively using computer resources. African Health Science Vol. 8 (1) 2008: pp. 40-43

P Kiondo;;;;;J Wandabwa;;;;;P Doyle.   
 Risk factors for placenta praevia presenting with severe vaginal bleeding in Mulago hospital, Kampala, Uganda  
 . Vol. 8 No. 1 (2008).   
Abstract  
Objective: To determine the risk factors for placenta praevia presenting with severe vaginal bleeding in Mulago hospital, Kampala, Uganda. Design: A case control study.  
Setting: Mulago hospital labour suite Participants: Between 15th November 2001 and 30th November 2002 we identified and recruited thirty six parturients with placenta  
previa who developed severe bleeding and 180 women with normal delivery. The risk factors were studied. Variables of interest: Socio demographic characteristics, social and family history, gynaecological operations, blood transfusion, medical conditions, past and present obstetric performance and HIV status. Results: Significant predictors for severe bleeding in parturients with placenta praevia were: previous history of evacuation of the uterus or dilation and curettage (O.R. 3.6, CI: 1.1-12.5), delivery by caesarean section in previous pregnancy (O.R. 19.9, CI: 6.4-61.7), residing more than ten kilometres from Mulago hospital (O.R. 2.4, CI: 1.0-5.7) and recurrent vaginal bleeding during the current pregnancy (O.R. 7.3, CI 2.4-63.7). Conclusion: Severe bleeding in placenta praevia is associated with high maternal morbidity and mortality. The determinants of severe bleeding in placenta praevia can be used in the antenatal period to identify mothers at risk. These, with prompt interventions to deliver the women can be used to reduce the maternal morbidity associated with this condition. African Health Science Vol. 8 (1) 2008: pp. 44-49

BO Adegbehingbe.   
 Blindness from bilateral bullous retinal detachment: tragedy of a Nigerian family  
 . Vol. 8 No. 1 (2008).   
Abstract  
Objective: To present a scourge of blindness possibly due to an inherited condition causing retinal detachment in 3 siblings   
Methods: In February 2004, three siblings from a monogamous family from Ipetu-Ijesha in Osun state, Nigerian presented to the author consecutively with history of visual impairment/ blindness. A detailed history and comprehensive ocular examination was conducted on each of them. Information obtained included patients demographic, family history of blindness, eye diseases and other medical conditions. Visual acuity assessment, slit lamp examination, direct and indirect ophthalmoscopy, intra-ocular pressure measurement, visual field test and systemic evaluation were conducted on each of the patients.   
Results: Two males and a female patient from the same parents who were systemically healthy are reported. Their ages were 67years, 58years and 52years respectively. Each presented with bilaterally poor vision ranging from 6/36 to no light perception, intra-ocular pressure ranging between 6 and 18mmHg and bilateral grayish white bullous retinal detachment.   
Conclusion: The mode of inheritance in these patients was most probably autosomal dominant or X-linked recessive. Ignorance and poverty causing failure to seek prompt specialize eye care were responsible for blindness in these siblings African Health Science Vol. 8 (1) 2008: pp. 50-53

JN Legbo;;;;;W Ek Opara;;;;;JF Legbo.   
 Mature sacrococcygeal teratoma: case report  
 . Vol. 8 No. 1 (2008).   
Abstract  
Background: Mature sacrococcygeal teratomas (SCT) are uncommon neoplasms comprised of mixed elements derived from the three germ cell layers. They attract attention because of their gross appearance and bizarre histology. Aim: To demonstrate the clinical presentation and management of mature SCT in a neonate. Patient and Method: A case report of a neonate with mature SCT is hereby presented. Results: A 10-day old baby boy presented with a mature SCT comprising well- developed lower limb, rudimentary external genitalia and teeth. He had complete surgical excision (including coccygectomy) with primary wound closure and uneventful postoperative recovery. Follow-up at three years using clinical, biochemical and radiological assessment revealed no evidence of recurrence.  
Conclusion: Mature SCT appear to be entirely benign during the neonatal period. Complete surgical excision remains the mainstay of treatment. African Health Science Vol. 8 (1) 2008: pp. 54-57

GI Ogbole;;;;;OA Ogunseyinde;;;;;AL Akinwuntan.   
 Intrapartum Rupture of the Uterus Diagnosed by Ultrasound  
 . Vol. 8 No. 1 (2008).   
Abstract  
Background: Spontaneous uterine rupture is a life threatening obstetrical emergency encountered infrequently in the emergency department. Its diagnosis is often missed or delayed, leading to maternal and fetal mortality. Method: We present a case of ruptured uterus diagnosed by ultrasound in a 33-year-old gravid female with two previous cesarean sections. Objective: To show the role of ultrasound in uterine rupture  
Result: Ultrasound demonstrates uterine laceration and intra-abdominal dislocation of placenta and foetus Conclusion: Because of the severity of the complication and the great variation of symptoms in connection with it, the authors encourage the use of ultrasound screening in the detection of this rare, but often catastrophic complication. African Health Science Vol. 8 (1) 2008: pp. 57-59

A Hassan;;;;; Muktar;;;;;AI Mamman;;;;;AJ Ahmed;;;;;AH Isa;;;;;AA Babadoko.   
 The incidence of HIV among blood donors in Kaduna, Nigeria  
 . Vol. 8 No. 1 (2008).   
Abstract  
No Abstract. African Health Science Vol. 8 (1) 2008: pp. 60-60

RM Towey;;;;;S Ojara.   
 Practice of intensive care in rural Africa: an assessment of data from Northern Uganda  
 . Vol. 8 No. 1 (2008).   
Abstract  
No Abstract. African Health Science Vol. 8 (1) 2008: pp. 61-64

JN Kalyango;;;;;E Owino;;;;;AP Nambuya.   
 Non-adherence to diabetes treatment at Mulago Hospital in Uganda: prevalence and associated factors  
 . Vol. 8 No. 2 (2008).   
Abstract  
Background: Non-adherence to diabetes treatment leads to poor glucose control and increases the risk of disease complications. The prevalence and factors associated with non-adherence in resource limited settings should be determined so as to lower the impact of a disease that is on the increase, on the health systems which are already overburdened with communicable diseases. Objectives: To determine the prevalence and factors associated with non-adherence to diabetes treatment. Methods: A cross sectional study was carried out from February to April 2004 in Mulago Hospital, Uganda. The participants were 402 type 1 and 2 diabetic patients selected from the outpatients' diabetic clinic using systematic sampling. They were aged 18 years and above, had been taking diabetes treatment for at least one month and gave informed consent to participate. Non-adherence was assessed using patients' self reports. Results: The prevalence of non-adherence was 28.9% (n = 116, 95%CI = 24.5 – 33.3%). Factors that were independently  
associated with non-adherence were: female gender (OR = 2.9, 95%CI = 1.4 – 6.3), not understanding the drug regimen well (OR = 4.0, 95%CI = 1.0 – 16.3), affording only some or none of prescribed drugs (OR = 3.7, 95%CI = 1.8 – 7.6) and longer time since  
last since last visit to a health worker (OR = 7.3, 95%CI = 2.7 – 19.9). Conclusions: Adherence to diabetic treatment was suboptimal. There is need to improve it through strategies helping patients understand their drug regimens, always availing drugs in the hospital so that they do not have to buy them and giving shorter time between visits to health worker. Further studies should be done to find out why females were not adhering to treatment so as to improve their adherence. African Health Science Vol. 8 (2) 2008: pp. 67-73

NN Wannang;;;;;JA Anuka;;;;;HO Kwanashie;;;;;S Gyang;;;;;A Auta.   
 Anti-seizure activity of the aqueous leaf extract of Solanum nigrum linn (solanaceae) in experimental animals  
 . Vol. 8 No. 2 (2008).   
Abstract  
Background: Solanum nigrum is claimed in traditional medical practice, to be useful in the treatment of epilepsy in some parts of Nigeria. Objectives: To study the anti-convulsant property of the aqueous extract of the leaves of S. nigrum in chicks, mice and rats. Method: Aqueous extracts were administered intraperitoneally, at a pre-treatment time of 30 minutes, at graded doses and animals were challenged with different types of proconvulsants. Results: The aqueous leaf extract produced a significantly (P<0.05) dose dependent protection against electrically-induced seizure in chicks and rats, pentylenetetrazole-induced seizure in mice and rats and picrotoxin-induced seizure in mice and rats. The antiseizure property of the extract was potentiated by amphetamine.  
Conclusion: The result obtained in this study suggests that the leaves of this plant may possess anti-convulsant property in chicks, mice and rats. African Health Science Vol. 8 (2) 2008: pp. 74-79

P Ocama;;;;;MM Kagimu;;;;;M Odida;;;;;H Wabinga;;;;;CK Opio;;;;;B Colebunders;;;;;S van Ierssel;;;;;R Colebunders.   
 Factors associated with carcinoma of the oesophagus at Mulago Hospital, Uganda.  
 . Vol. 8 No. 2 (2008).   
Abstract  
Background: In Uganda, as in many other parts of the world cancer of the oesophagus (CAE) is on the rise. Squamous cell carcinoma and adenocarcinoma are the common subtypes. Risk factors for this cancer have been identified but not studied systematically in Uganda. Identification of these factors would enable establishment of preventive measures. Objective To determine the prevalence, histological features and associated factors for CAE among patients referred to the endoscopic unit of Mulago hospital, Kampala, Uganda. Methods: We performed a 1-year cross-sectional study in 2004 and 2005 of all patients presenting for oesophageal-gastro-duodenoscopy (EGD) at Mulago Hospital. Demographic characteristics, behavioural practices, endoscopy findings and histology results where biopsies were performed were collected using a study tool. Data analysis was done using STATA 8® statistical package Results: Two hundred nineteen patients were enrolled in the study, three were excluded because they could not tolerate the endoscopy procedure. Fifty five (19%) of the 287 had histologically proven CAE. Squamous cell carcinoma was found in 100% of tumours of the upper third, 91% middle third, and 73% lower third of the oesophagus. Four patients had a histological diagnosis of  
adenocarcinoma of the oesophagus. Factors that were associated with CAE included age (OR 1.63, CI 1.34-1.98, p value <0.001), smoking (OR 3.63, CI 1.82-7.23, p value <0.001) and gender (OR 2.17, CI 1.07-4.41, p value 0.032). Conclusion: Many patients referred for EGD in Uganda had esophageal cancer most of which were.squamous cell type. Smoking,  
male gender and older age were risk factors. Preventive measures should target stopping smoking. African Health Science Vol. 8 (2) 2008: pp. 80-84

J-F Akoachere;;;;;PM Oben;;;;;BS Mbivnjo;;;;;LM Ndip;;;;;G Nkwelang;;;;;RN Ndip.   
 Bacterial indicators of pollution of the Douala lagoon, Cameroon: Public health implications.  
 . Vol. 8 No. 2 (2008).   
Abstract  
Background: Indiscriminate disposal of untreated wastes which are often heavily laden with sewage microorganisms some of which are pathogenic to humans into aquatic environments near cities could serve as potential dangers to human health. Objective: A prospective study was undertaken to investigate the scope of potential bacterial pathogens and to assess the extent of pollution of the Douala lagoon. Methods: A total of eighty water samples were collected fortnightly from the lagoon at five stations from March to October 2005 and analysed for heterotrophic bacterial densities, coliform counts, faecal coliform and faecal streptococcal counts. Bacteria were isolated and identified using standard microbiology and biochemical techniques. Results: High heterotrophic bacterial counts (33 × 105 –161 ×105 CFU/ mL), total coliform counts (1.8 ×102 - 2.4 ×102 CFU/ 100 mL), faecal coliform counts (2.2 × 102 – 2.4 × 102 CFU/ 100 mL) and faecal streptococcal counts (2.1 × 102 – 2.3 x 102 CFU/ 100 mL) were observed in all sampling stations. Eleven species of bacteria: Bacteroides fragilis, Proteus vulgaris, Klebsiella pneumoniae, E. coli, Enterococcus faecalis, Enterobacter aerogenes, Citrobacter freundii, Aeromonas hydrophila, Pseudomonas aeruginosa, Bacillus mycoides and Serratia marcesens, were frequently isolated. Conclusion: The presence of potential bacterial agents such as Bacteroides fragilis, Pseudomonas aeruginosa, Aeromonas hydrophila, Klebsiella pneumoniae and E. coli in the lagoon may pose a serious threat to the health and well being of users of the Lagoon and calls for urgent intervention. African Health Science Vol. 8 (2) 2008: pp. 85-89

R Dumba;;;;;JB Kaddu;;;;;FW Mangen.   
 Intestinal helminths in Luweero district, Uganda  
 . Vol. 8 No. 2 (2008).   
Abstract  
Background: Intestinal helminthiasis is a debilitating parasitic disease found in many parts of Uganda including Luweero district. In the district, the disease causes as high as 9% morbidity in children below five years. There was very scanty district information on the disease based mainly on hospital records despite this figure. The current study was carried out to provide data to plan for its effective control. Objective: To investigate risk factors that promote helminth infections among children under five years of age in Luweero district. Methods: Stool samples from 727 children were examined for presence of helminth ova using Kato-Katz technique. The subjects' parents or guardians were interviewed using a semi-structured questionnaire to establish their demographic, social-cultural characteristics; information on water accessibility and usage; child toileting practices and knowledge about helminthiasis. Results: Risk factors strongly associated with helminth infections included methods of anal cleaning, how compounds and latrines were maintained, keeping of pigs and age of the subjects, (P <0.001). In addition, methods of hand washing after latrine visits, the respondents' education level, type of house floor and household compound as well as accessibility to water were associated with worm infection.  
Conclusion: The hygiene practices of the parents/guardians and environmental surroundings in which the child grows play a big part in determining his or her helminth status. The District Health workers, community leaders and extension staff should educate the community on the importance of personal hygiene and environmental sanitation to minimize the risks of helminth infections. African Health Science Vol. 8 (2) 2008: pp. 90-96

VN Yebei;;;;;JB Fortenberry;;;;;DO Ayuku.   
 Felt stigma among people living with HIV/AIDS in rural and urban Kenya  
 . Vol. 8 No. 2 (2008).   
Abstract  
Background: Individuals suffer from felt stigma when they internalize negative perceptions regarding themselves. People living with HIV (PLWH) employ diverse coping mechanisms when their self worth and networks are disrupted by stigma. The social network perspective suggests response to stigma is shaped by social context. Objective: This paper examines whether internalized HIV stigma among PLWH changes over time, and whether it differs with demographics and rural or urban location. Methods: Semi-structured interviews were conducted with support group members in two waves that were 12 months apart. Current analyses focus on examining whether HIV felt stigma differs with demographic characteristics and rural or urban location. Further, we explore whether there is variation in magnitude of change at the two sites over time. T-tests are used to compare each stigma item by waves and sites. Factor analysis is utilized to correlate and reveal the relationship between stigma items, while bivariate and logit models investigate the relationship between stigma items and site, gender, marital status and education.  
Results: Study findings highlight a gender and rural-urban dichotomy that seems to influence the experience of HIV felt stigma. Being urbanite and being female significantly decreases agreement with selected stigma items. While the urban sample reveals significant  
difference between the two waves, the rural experience indicates insignificant change over time. The difference between the two sites reflects a distinction between modern and pre-modern social structures. Conclusions: This study suggests internalized feelings of HIV stigma may vary with social context and gender. Thus, interventions to support PLWH in Kenya must take into account gender and unique social configurations. African Health Science Vol. 8 (2) 2008: pp. 97-102

G Irimu;;;;;RW Nduati;;;;;E Wafula;;;;;J Lenja.   
 Community understanding of pneumonia in Kenya  
 . Vol. 8 No. 2 (2008).   
Abstract  
Background: Effective management of pneumonia demands active participation by the caretaker to facilitate early seeking of appropriate health care and adequate compliance to home care messages. This would only be possible if the caretakers\' perception of pneumonia is appropriate. This study aims to determine community\'s perception of childhood pneumonia in a suburb of Nairobi. Objectives: To determine community perception of childhood pneumonia. Design: Cross sectional study utilizing qualitative ethnographic methodology. Participants: Six key informants for in-depth interview and eight groups for focus group discussions from the study community. Results: Pneumonia was perceived to be the most serious childhood illness. There was a great deal of diversity of Kikuyu phrases for  
chest-in drawing. There was no term for rapid breathing. Chest in-drawing, fever, difficult in breathing, startling at night and convulsions were perceived as features of pneumonia. Chest in-drawing, fever and convulsions were indicative of severe disease. Conclusion: The caretakers perceived severe pneumonia as outlined in the IMCI guidelines. Non-severe pneumonia was not perceived for what it should be. Inappropriate knowledge on causes of pneumonia and signs of non severe pneumonia are likely to interfere with compliance with home care messages. African Health Science Vol. 8 (2) 2008: pp. 103-107

OO Adewole;;;;;H Adeyemo;;;;;F Ayeni;;;;;EA Anteyi;;;;;ZO Ajuwon;;;;;GE Erhabor;;;;;TT Adewole.   
 Prevalence and correlates of snoring among adults in Nigeria  
 . Vol. 8 No. 2 (2008).   
Abstract  
Introduction: Snoring is a common sleep problem with significant public health concerns. Studies have characterized this in most developed countries. Hitherto there have been no published studies on this subject in Nigeria. Objectives: To determine the prevalence and correlates of snoring in addition to morbidity in an adult population in Nigeria. Design: A cross – sectional survey of 370 young adult and adult living in Abuja, Nigeria.. Data were collected on socio- demographic characteristics, sleep pattern as well as occurrence of snoring, apneas and excessive day time sleepiness was determined using  
Epworth Sleepiness Scale (ESS). Body Mass Index (BMI) and blood pressure were measured.  
Results: Of the 370 respondents, 218 (59%) were females. The overall prevalence of snoring was 31.6%; habitual snoring (14%) and moderate snoring (17%). Apnea was reported in about 2% of the respondents while the prevalence of Clinically Suspected  
Obstructive Sleep Apneas (CSOSA) was 1%, (1.9% in males, 0.5% in females). Snoring was significantly associated with male sex, old age, increased BMI and cigarette consumption . The severity of snoring was also associated with a higher ESS score, day time symptoms and other morbidities. Conclusions: Snoring among Nigerians is associated with multiple factors. There is a need for more awareness about this condition in order to control measures of factors associated with snoring. African Health Science Vol. 8 (2) 2008: pp. 108-113

LE Mboera;;;;;ML Kamugisha;;;;;SF Rumisha;;;;;WN Kisinza;;;;;KP Senkoro;;;;;AY Kitua.   
 Malaria and mosquito net utilisation among schoolchildren in villages with or without healthcare facilities at different altitudes in Iringa District, Tanzania.  
 . Vol. 8 No. 2 (2008).   
Abstract  
Background: The endemicity of malaria in Tanzania is heterogenous, mainly associated with physical factors such as topography, climate and socio-economic status. The contributions of these factors in many regions of Tanzania have not been studied in detail. Objective: This study was carried out to determine the prevalence and transmission of malaria and mosquito nets coverage among schoolchildren in relation to altitude in villages with or without healthcare facilities in Iringa District, Tanzania. Methods: A cross-sectional survey of schoolchildren was carried out in six villages in three altitude transects (965-2075 m). In each transect a village with and without a healthcare facility were selected. The villages included Idodi (965m), Makifu (985m), Tosamaganga (1561m) Mangalali (1520m) Lulanzi (1917) and Kilolo (2075m). For the purpose of this study, the villages were categorised as lowlands (Idodi and Makifu), intermediate (Tosamaganga and Mangalali) and highlands (Lulanzi and Kilolo. Healthcare facilities were available at Idodi, Tosamaganga and Kilolo. Each child was asked whether or not slept under a mosquito net during the previous night. Mosquitoes were collected using pyrethrum spray catch technique in ten houses in each study village. Results: Blood smears from a total of 1643 schoolchildren (mean age = 5.9-12.3 years) were examined for malaria infection.  
Plasmodium falciparum accounted for 93.1% of the malaria parasites. The prevalence of P. falciparum among children in Idodi, Makifu, Mangalali, Tosamaganga, was 51.51%, 73.66%, 22.79%, and 14.83%, respectively. Malaria parasites were not found among children  
in the highland villages of Lulanzi and Kilolo). The prevalence of malaria parasitaemia, packed cell volume, geometric mean parasite density and spleen rates were higher in children living in villages without healthcare facilities (P<0.001). Of the children, 16.1%  
(264/1643) slept under a mosquito net during the previous night. About three quarters (253/344) of the schoolchildren who had malaria parasites were not using mosquito nets. Mosquito net coverage was higher in lowland villages, accounting for 61.7% (163/  
264) of the total net use in the district. The majority (75.5%) of the mosquito net users were from village with health facilities (P<0.001). A total of 228 mosquitoes were collected, with Anopheles gambiae s.l. accounting for the majority (53.5%). Overall, 8.7%  
of the An. gambiae s.l. were infected with malaria sporozoites. Higher sporozoite rates were observed in mosquitoes collected in the lowlands.  
Conclusion: Communities living in areas without health facilities form the largest proportion of malaria-infected populations in Iringa district. Availability of healthcare service has an influence on mosquito net coverage. The results provide more evidence of the  
existence of a relationship between altitude variability or accessibility to healthcare services, and the burden of malaria in rural communities of Tanzania. African Health Science Vol. 8 (2) 2008: pp. 114-119

MO Esere.   
 Effect of sex education programme on at-risk sexual behaviour of school-going adolescents in Ilorin, Nigeria.  
 . Vol. 8 No. 2 (2008).   
Abstract  
Background: Adolescents display sexual behaviours and developmental characteristics that place them at risk for Sexually Transmitted Diseases (STDs). Because young people experiment sexually and because of the consequences of indiscriminate sexual activities on the youth, there is the need to mount sex education programmes that are geared towards enlightenment and appropriate education about sex and sexuality.  
Objective: To determine whether Sex Education Intervention Programme would reduce at-risk sexual behaviours of school-going adolescents. Design: Pre-test, post-test control group quasi-experimental design Setting: A randomly selected co-educational school in Ilorin Metropolis, Nigeria Participants: 24 school-going adolescents aged 13-19 years  
Intervention: Sex Education Programme (treatment group) versus Control programme (placebo) Main Outcome Measures: Self-reported exposure to sexually transmitted diseases, multiple sex partners, anal sex, oral sex, non use of condom. Result: When the treatment (intervention) group was compared with the control group in an intention to treat analysis, there were significant differences in at-risk sexual behaviours of the two groups. Those in the intervention group reported less at-risk sexual behaviours than their counterparts in the control group. The treatment group evaluated the intervention programme positively and their knowledge of sexual health improved. Lack of behavioural effect on the control group could be linked to differential quality of delivery of intervention.  
Conclusion: Compared with the control group, this specially designed intervention sex education programme reduced at-risk sexual behaviour in adolescents. Based on this finding, it was recommended that sex education be introduced into the curriculum of  
secondary school education in Nigeria. African Health Science Vol. 8 (2) 2008: pp. 120-125

B Castelnuovo;;;;;A Nanyonjo;;;;;M Kamya;;;;;P Ocama.   
 Case Report: Is it safe to switch from stavudine to zidovudine after developing symptomatic hyperlactatemia?  
 . Vol. 8 No. 2 (2008).   
Abstract  
Introduction: In resource limited settings patients on antiretroviral treatment who develop stavudine induced hyperlactatemia are often switched to zidovudine on the basis of published studies that demonstrate that this agent can be a safe alternative. Case report: We describe here a case of a 60 year old female that experienced a relapse of symptomatic hyperlactatemia after being switched from stavudine to zidovudine and how the case was managed at the Infectious Diseases Institute, Kampala, Uganda. Discussion: This case shows that switching to zidovudine potentially can lead to a hyperlactatemia relapse. Therefore we recommend close follow up for patients that are switched from stavudine to zidovudine and, in case lactate measurement is not possible, free programs should provide safer drugs such as abacavir and tenofovir for patients that develop hyperlactatemia. African Health Science Vol. 8 (2) 2008: pp. 133-134

CA Enwuru;;;;;A Ogunledun;;;;;N Idika;;;;;NV Enwuru;;;;;E Ogbonna;;;;;M Aniedobe;;;;;A Adeiga.   
 Fluconazole resistant opportunistic oro-pharyngeal candida and non-candida yeast-like isolates from HIV infected patients attending ARV clinics in Lagos, Nigeria.  
 . Vol. 8 No. 3 (2008).   
Abstract  
Background: Oro-Pharyngeal Candidiasis (OPC) continues to be considered the most common opportunistic fungal disease in HIV/AIDS patients globally. Azole antifungal agent has become important in the treatment of mucosal candidiasis in HIV patients.  
Presently, antifungal drug resistance is fast becoming a major problem particularly with the immune depleted population.  
Objectives: This study was designed to investigate the: existence of OPC, species distribution fluconazole susceptibility profile of yeast cells isolated from oral specimens of HIV/AIDS patients from Lagos Nigeria, between Oct. 2004 and June, 2005.  
Methodology: The venous blood samples were screened for HIV antibodies using the Cappillus HIV I and II test kit (Trinity Biotech Plc UK), and Genie II HIV I and II EIA kit (Bio-Rad France). The positive results were subsequently confirmed at the laboratory  
attached to each of the clinics, using the Nigerian Federal Ministry of Health approved algorithm. The samples from 213 (108 females and 105 males) HIV positive patients were plated onto SD agar. The isolates were identified by morphotyping, microscopy and  
speciated using germ tube test and battery of biochemical sugar fermentation and assimilation tests. Fluconazole agar diffusion susceptibility testing was carried out on each isolates.  
Results: Seventy-four (34.7%) isolates were recovered including one person with double isolates. Only 70(94.6%) of the isolates could be adequately speciated. Candida albicans 30 (40.5%) was the most frequently isolated species, the rest were non-albicans  
species, with the frequency of C. tropicalis › C. Krusei › C. glabrata and C. neoformans for species for species having up to 4 isolates. Four (30.8%) out of 13 isolates of C. tropicalis showed germ tube formation. While one C. albicans was germ-tube negative. Out of the 74  
isolates tested for fluconazole sensitivity, 58(78.4%) were sensitive, MIC d” 8μg/ml, 9(12.1%) were susceptible Dose Dependant (SDD), MIC 16-32 μg/ml and 7(9.5%) were resistant, MICs e” 64μg/ml. Among the C. albicans isolates, 26(86.7%) were sensitive to  
fluconazole. The rank of susceptibility was C. albicans > C. tropicalis > C. Krusei for the most prevalent species.  
Conclusion: We conclude that fluconazole resistant strains of oro-pharyngeal yeast-like cells exist in about 9.5% of HIV/AIDS patients with the above stated species distribution. We therefore, highlight the need for routine antifungal susceptibility testing on HIV patients with cases of initial or repeat episodes of OPC. Keywords: Oropharyngeal Candida (yeast-like cells), HIV/AIDS and Fluconazole Resistance. African Health Sciences Vol. 8 (3) 2008: pp. 142-148

E Ovuga;;;;;TO Oyok;;;;;EB Moro.   
 Post traumatic stress disorder among former child soldiers attending a rehabilitative service and primary school education in northern Uganda.  
 . Vol. 8 No. 3 (2008).   
Abstract  
Background: This study was prompted by the psychiatric hospitalization of 12 former child soldiers of the Lord's Resistance Army (LRA) at a rehabilitation school in northern Uganda with a case of mass psychotic behavior.   
Objectives: To report the prevalence of post-traumatic stress disorder, depressed mood, and associated risk factors.  
Methods: Data on post-traumatic stress disorder, depressed mood, physical disabilities, socio-demographic variables, and the children's war experiences were collected in face-to-face interviews using the Harvard Trauma Questionnaire (HTQ), a modified Hopkins Symptoms Check-List (HSCL), and a 15-item War Trauma Experience Check-list (WTECL-15). Data was analyzed with SPSS version 11.0.  
Results: There were 58 girls and 44 boys. Eighty nine children (87.3%) reported having experienced ten or more war-related traumatic psychological events; 55.9% of the children suffered from symptoms of post-traumatic stress disorder, 88.2%, symptoms of  
depressed mood and 21.6% had various forms of physical disability. Nearly half of the children (42.2%) reported a positive family history of severe mental illness; 10.8%, a family history of suicide; 22.5%, a family history of suicide attempt; and 45.1%, a family  
history of alcohol abuse. Children who experienced 10 or more traumatic war events were more likely than the rest to experience depressed mood. Return through a reception center or through a cleansing ritual did not protect against depression.  
Discussion: Post-traumatic stress disorder among former LRA child soldiers at a rehabilitation centre in northern Uganda is presented. The report highlights the huge unmet need for psychological services among former child soldiers of the LRA. African Health Sciences Vol. 8 (3) 2008: pp. 136-141

A Chauhan;;;;;H Singh;;;;;T Sharma;;;;;KK Manocha.   
 Gemcitabine concurrent with radiation therapy for locally advanced head and neck carcinomas  
 . Vol. 8 No. 3 (2008).   
Abstract  
Background: Management of advanced head and neck carcinoma is a challenging proposition. Presently concomitant chemoirradiation has become the standard of care in such patients. Many chemotherapeutic drugs have shown radio-sensitising effects when  
used concomitantly along with radiation. The present study was carried out with the objective of assessing the feasibility and efficacy of low dose gemcitabine as radiosensitizer when used during radical radiotherapeutic management of patients with locally advanced  
head and neck carcinomas.  
Patients and methods: From November 2000 to March 2003, Eighty histopathologically proven cases of squamous cell head and neck carcinoma were included in this trial, 40 patients were randomly assigned to receive radiotherapy alone and 40 patients to  
receive gemcitabine along with radiotherapy.  
Results: All patients were assessable for toxicity and response. Severe mucositis (WHO level 5 reactions were observed in 67% patients in the CT/RT group vs 16% patients in the RT only group. No severe hematological toxicity was seen. The rates of complete  
and partial responses were 42.5% & 57.5% respectively for RT only and 62.5% &37.5%, respectively for CT/RT group. There was no significant difference in the response rates at the end of treatment but disease free survival at three years was better in the CT/RT  
group (63.3% vs 20%). Nine of the 17 patients with complete response in the radiation only group developed relapse while no relapses were seen in CT/RT group.  
Conclusion: In the present study the combination of gemcitabine and radiotherapy has not shown any statistical difference in locoregional control but survival advantage was seen as compared to radiotherapy alone. At the same time more mucosal and skin toxicity was encountered when Gemcitabine is given concurrently with radiation. African Health Sciences Vol. 8 (3) 2008: pp. 149-155

MT Nakitto;;;;;M Mutto;;;;;A Howard;;;;;R Lett.   
 Pedestrian traffic injuries among school children in Kawempe, Uganda  
 . Vol. 8 No. 3 (2008).   
Abstract  
Background: Traffic injuries are an important problem in low income countries. In Uganda road traffic is the largest single cause of injury in Kampala; pedestrians, and children are most affected. Pedestrian injury affects school children in Uganda.  
Objective: To determine the overall risk of pedestrian traffic injury among school children in Kawempe, Uganda.  
Methods: A cohort was assembled at 35 primary schools and followed for 3 terms. Ten of the schools had participated in previous injury programs, others were systematically selected. Injuries were recorded by teachers using a questionnaire. Data collected  
included ID, school, age, grade, gender, incident date, vehicle type, and injury outcome. Demographic characteristics are described and cumulative incidences calculated.  
Results: The cohort included 8,165 children (49% male) from 35 primary schools. The mean age was 9 years (Sd=2.78). Of the 35 schools, 92% were day; the others mixed day and boarding. 53 children (27girls) were involved in a traffic incident. 25% of the injuries  
reported were serious and warranted care in a health facility. No deaths occurred. Forty % of incidents involved commercial motorcycles, 41% bicycles, 9% cars, 8% taxis, and 2% trucks. The cumulative incidence was 0.168% each term. Over the 3 terms of  
the year the cumulative incidence was 0.5 + 0.02. There were no gender differences in the cumulative incidence.  
Conclusion: Each school year about ½ % of Kawempe school children are involved in a traffic incident. Interventions are necessary to reduce the unacceptably high incidents of pedestrian traffic. Interventions to alleviate this situation including safer routes, teaching  
skills of road crossing to children as well as better regulation and road safety education to two wheelers could reduce the unacceptably high incidents of pedestrian traffic injury. African Health Sciences Vol. 8 (3) 2008: pp. 156-159

EA Agbakwuru;;;;;AA Salako;;;;;AO Olajide;;;;;AO Takure;;;;;AK Eziyi.   
 Hydrocelectomy under local anaesthesia in a Nigerian adult population  
 . Vol. 8 No. 3 (2008).   
Abstract  
Background : Hydrocele is abnormal collection of serous fluid in the tunica vaginalis or a patent processus vaginalis. It is commonly encountered in our practice and often requires surgical treatment. However in our setting and in many underdeveloped countries, availability of general anaesthetic service is poor due to lack of trained personnel and equipment.  
Objectives: To ascertain the practicability and acceptability of hydrocelectomy under sedation and local anaesthesia in Nigerian adults with hydrocele  
Patients and Methods: A prospective study was carried out over a two year period on patients that had hydrocelectomy at the surgery unit of the Obafemi Awolowo University Teaching Hospitals Complex,Wesley Guild Hospital, Ilesa. Consecutive patients  
with diagnosis of hydrocele who consented had hydrocelectomy using intramuscular diazepam sedation and spermatic-cord block with 0.5% plane xylocaine and the scrotum infiltrated with same along the line of incision.  
Results: Fifty adult patients were studied: age range 15-94 years. Eighty percent of the patients had unilateral hydrocele and the commonest type was vaginal hydrocele (94%). All patients had hydrocelectomy, 96% were under local anaesthesia while 4% were  
converted to general anaesthesia. All patients except one prefer to have future surgery under such local anaesthesia and sedation.  
Conclusion: Hydrocelectomy under local anaesthesia and sedation is practicable and was tolerated and accepted by the adults patients studied. Keywords: Hydrocele, hydrocelectomy, local anaesthesia,sedation African Health Sciences Vol. 8 (3) 2008: pp. 160-162

CN Uchendu;;;;;T Isek.   
 Antifertility activity of aqueous ethanolic leaf extract of Spondias mombin (Anacardiaceae) in rats  
 . Vol. 8 No. 3 (2008).   
Abstract  
Back ground:Despite the availability of modern (orthodox) medicine, many developing countries, especially in the rural areas, still rely heavily on traditional healers and medicinal plants to meet their primary health care needs and that of their domestic animals. This has been attributed to easy accessibility and low cost of herbal medicine. In Eastern Nigeria, fresh leaves of Spondias mombin is widely used by the natives to aid delivery and to expel the placenta in small ruminants (sheep and goats), especially during difficult labour.   
Objective: The present study was designed to evaluate the in vivo effects of leaf extracts of S. mombin on reproductive performance of female rats.  
Methods: Acute toxicity test of the plant extract was carried out in rats of both sexes. The anticonceptive and abortifacient activity of the extract were investigated, including the Fertility Index or embryo score of control and treated animals. The estrogenic activity  
was determined using ovariectomized rats.  
Results:The results revealed a relatively non-toxic plant extract. The extract displayed anticonceptive but not abortifacient activity as judged by the number of pregnant animals at the end of the third trimester of pregnancy. The extract did not exhibit any oestrogenic  
activity.   
Conclusion: Aqueous ethanol leaf extract of S. mombin has significant anticonceptive activity attributed to a direct action of the extract on the uterus. African Health Sciences Vol. 8 (3) 2008: pp. 163-167

Sc Gbotolorun;;;;;AA Osinubi;;;;;CC Noronha;;;;;AO Okanlawon.   
 Antifertility potential of Neem flower extract on adult female Sprague-Dawley rats  
 . Vol. 8 No. 3 (2008).   
Abstract  
Background: The search for a relatively cheap, widely available, widely accepted and effective contraceptive of plant origin; that is equally non-invasive in administration, non-hormonal in action, non-toxic and that is relatively long-acting, generated our interest in  
this study (in order to meet the increasing need for population control). The aim of this study was to determine the effects of alcoholic extract of Neem flowers on the estrous cycle, ovulation, fertility and foetal morphology of cyclic adult Sprague-Dawley rats.  
Materials and Methods: Adult female Sprague-Dawley rats, weighing between 140-180g were used. There were 3 main experimental groups. Group 1 rats received 1 g/kg of alcoholic extract of Neem flower by gavage for 3 weeks and the effect on estrous cycle studied. Group 2 rats were administered 1 g/kg of Neem flower alcoholic extract at 9 a.m. and at 6 p.m. on proestrus and the effect on the number of ova shed on the morning of estrus observed. Rats in Group 3 were treated with 1 g/kg of alcoholic extract of Neem flower on days 1 to 5 postcoitum, and observation was made for anti-implantion / abortifacient effects and possible teratogenic effects on the foetuses. All the groups were control-matched. Results: The estrous cycle of 80% of the rats was altered with a marked prolongation of the diestrus phase. Neem flower caused a statistically significant (p < 0.05) reduction in the number of ova shed in the morning of estrus in rats fed with the extract at 9 a.m. on proestrus. Neither anti-implantion / abortifacient nor teratogenic effect was observed in the rats treated with Neem flower. Conclusion: Administration of alcoholic extract of Neem flower disrupted the estrous cycle in Sprague-Dawley rats and caused a partial block in ovulation and thus has the potential of being developed into a female contraceptive. Keywords: Neem Flower, Ovulation, Estrous cycle, Fertility African Health Sciences Vol. 8 (3) 2008: pp. 168-173

A Chiabi;;;;;PF Tchokoteu;;;;;V Takou;;;;;F Fru;;;;;F Tchouine.   
 Anthropometric measurements of children attending a vaccination clinic in Yaounde, Cameroon.  
 . Vol. 8 No. 3 (2008).   
Abstract  
Background: Growth faltering is a frequent public health problem in children and anthropometric measurements are useful tools for follow-up and early diagnosis. This problem has not been studied in the Cameroonian setting, that\'s why we undertook this study.  
Objectives: To have a synopsis of the nutritional status in apparently healthy children attending a vaccination clinic and show the importance of anthropometric measurements in routine child health care.  
Design: A retrospective study.  
Patients and Participants: 1351 children aged (6-24months), who attended the vaccination clinic of the Yaounde Gynaeco-Obstetric and Pediatric Hospital over a 6 month period, were enrolled in the study.  
Method: The registers of the vaccination clinic of the above hospital were retrospectively reviewed from 1st March to 31st August 2005. The following parameters were noted: age, height, weight, mid-upper arm circumference (MUAC), and Z scores calculated for  
the following indicators: weight for age (WAZ), weight for height (WHZ), and height for age (HAZ).   
Results: Our results show that 12 children (1.1percent) in the 0-6 months age group and 4 (1.6 percent) in the 6-12 months age group had WAZ less than -2 indicating underweight. Also 10 children (0.9 percent) and 2 (0.8 percent) in the 0-6 and 6-12 months  
age groups respectively had WHZ less than -2, indicating wasting. HAZ was less than -2 in 70 children (6.4 percent) and in 8 (3.2 percent) in the 0-6 and 6-12 months age groups respectively indicating stunting. The MUAC was less than 12.5 cm in 6 children (2.4  
percent).   
Conclusions: From our results, we conclude that growth faltering is common in supposedly healthy children attending our vaccination clinic. Anthropometric measurements are thus recommended and should be encouraged in routine child care settings for  
early diagnosis of growth retardation and to provide useful interventions.. Keywords: Anthropometry - Children - Growth - Z scores - Yaounde - Cameroon. African Health Sciences Vol. 8 (3) 2008: pp. 174-179

I Taga;;;;;VAS Oumbe;;;;;R Johns;;;;;MA Zaidi;;;;;JN Yonkeu;;;;;I Altosaar.   
 Youth of west-Cameroon are at high risk of developing IDD due to low dietary iodine and high dietary thiocyanate.  
 . Vol. 8 No. 3 (2008).   
Abstract  
Background: Hypothyroidism in utero leading to mental retardation is highly prevalent in developing countries where iodine deficiency and thiocyanate overload are combined.  
Objective: To explore prevalence of IDD in Bamougoum, a mountain region of western Cameroon, by studying urinary iodine and thiocyanate excretion levels in children.  
Methods: Bamougoum district in western Cameroon was selected for closer study due to its geographic location predisposing to iodine deficiency disorders (IDD). A comprehensive sampling strategy included 24-h urine samples collected over three days from 120  
school-aged children. Urinary iodine and thiocyanate levels were measured by colorimetric methods.   
Results: Twenty one percent of boys between the ages 3 and 19 were classified as iodine deficient. The prevalence of thiocyanate overload in the same population was found to be 20%.  
Conclusion: Presence of endemic iodine deficiency and excessive thiocyanate in the population indicates that the region is at risk of iodine deficiency disorder. A multifactorial approach that includes improvement of diet, increasing iodine and minimizing goitrogen  
substances intake, soil and crop improvement and an iodine supplementation program may help alleviate IDD in the affected area studied. Keywords: iodine deficiency, Cameroon, iodine, thiocyanate, food, urine. African Health Sciences Vol. 8 (3) 2008: pp. 180-185

AA Musa;;;;;SB Adebayo;;;;;AAF Banjo;;;;;EA Oyewole;;;;;SO Olateju.   
 Case Report: Emergency partial thyroidectomy under cervical block to relieve severe acute airway obstruction from thyroid cancer  
 . Vol. 8 No. 3 (2008).   
Abstract  
A 75year old male, Nigerian, retired civil servant presented to the Surgical Endocrine Unit of the Olabisi University Teaching Hospital, Sagamu, Nigeria with features of severe acute airway obstruction from advanced thyroid cancer. He was immediately worked up for an emergency partial thyroidectomy within an hour of arrival in the hospital under superficial bilateral cervical blockage using 2% xylocaine with aderanalin (30mls) 1:100,000 with mild sedation, using 10mg pentazocine and 5mg diazepam as other forms of  
anaesthesia were not feasible because of his worsening respiratory distress. Findings at operation were a very haemorrhagic, friable thyroid gland with all the lobes matted together. He had isthmusectomy with bilateral partial lobectomy to relieve pressure on the  
trachea. Respiration improved in the immediate post-operative period as reflected by the values of arterial blood gases. He was maintained on respiration and intranasal oxygen therapy in Intensive Care Unit (ICU) for 2 days. He had an uneventful recovery and  
was discharged 2weeks after surgery. He had radiotherapy and was followed up in the clinic for a year. African Health Sciences Vol. 8 (3) 2008: pp. 186-189

J Baalwa;;;;;H Mayanja-Kizza;;;;;MR Kamya;;;;;L John;;;;;A Kambugu;;;;;R Colebunders.   
 Short Report: Worsening and unmasking of tuberculosis in HIV-1 infected patients after initiating highly active anti-retroviral therapy in Uganda  
 . Vol. 8 No. 3 (2008).   
Abstract  
Objectives: To determine the proportion of patients developing active tuberculosis (TB) versus that of patients who experience worsening of TB, after initiating highly active anti retroviral therapy (HAART).   
Methods: Charts of HAART naïve patients with or without clinically active TB who consecutively commenced HAART at Mulago Hospital Infectious Diseases Institute were reviewed. Patients were assessed for worsening of TB on treatment or development of new  
active TB (unmasking of TB) after initiating HAART.  
Results: Of 271 patients without active TB at baseline who initiated HAART, 16 (5.9%) developed active TB within 6 months (early unmasking) and 10 (2.7%) after 6 months (late unmasking). Seven of 10 late unmasking patients had a past history of treatment for  
a TB disease episode. Of 45 patients who commenced HAART with coexisting active TB, 13 (29%) experienced worsening of TB symptoms, signs and/or radiological features. Nine of these 45 commenced HAART during the intensive phase of TB treatment, of whom 2 (22%) experienced worsening of TB. Thirty six of 45 started HAART during the continuation phase of TB treatment of whom 11 (31%), experienced worsening of TB. The median time from initiation of HAART to worsening of TB in patients on concurrent active TB treatment was 5 weeks, and 18 weeks to unmasking of new active tuberculosis.  
Conclusion: Unmasking of TB was commonest in the first 6 months of HAART and declined in the subsequent months with most in the late unmasking group being TB recurrences. Worsening of TB occurred even after HAART was delayed to the continuation phase  
of TB treatment. Keywords: Immune reconstitution, tuberculosis, antiretroviral therapy African Health Sciences Vol. 8 (3) 2008: pp. 190-195

NS Al Oulaqi;;;;;AF Hefny;;;;;S Joshi;;;;;K Salim;;;;;FM Abu-Zidan.   
 Case Report: Endometriosis of the Appendix  
 . Vol. 8 No. 3 (2008).   
Abstract  
Endometriosis is a well known cause of infertility. Endometriosis of the appendix is a very rare condition. To highlight this rare entity, we are reporting a case of a young lady who was admitted with recurrent attacks of lower abdominal pain associated with  
primary infertility. Preoperative diagnosis was acute appendicitis. Histopathological examination of the appendix revealed endometriosis. Endometriosis should be considered in the differential diagnosis of recurrent lower abdominal pain in young females especially with history of infertility.. Keywords: appendix, endometriosis, female, infertility. African Health Sciences Vol. 8 (3) 2008: pp. 196-198

DJ Kyabayinze;;;;;C Karamagi;;;;;M Kiggundu;;;;;MR Kamya;;;;;F Wabwire-Mangen;;;;;F Kironde;;;;;A Talisuna.   
 Multiplicity of Plasmodium falciparum infection predicts antimalarial treatment outcome in Ugandan children  
 . Vol. 8 No. 4 (2008).   
Abstract  
Background: In areas with intense malaria transmission, individuals are often simultaneously infected with multiple parasite strains. This study assessed the effect of multiple infections on treatment response in Ugandan children with uncomplicated malaria.  
Methods: Four hundred and seventy six blood specimens were analysed for parasite genetic diversity. The P.falciparum merozoite surface protein-2 (msp-2) was analysed to establish multiplicity of infection for pre and post treatment specimens. Results: There were 32 different msp-2 alleles, 15 corresponding to the IC/3D7 and 17 to the FC27 allelic family. The majority of the isolates (343, 72 %) were multiple infections resulting into an overall mean multiplicity of infection of 2.15 (SD±1.02). Children infected with multiple strains had nearly a 3-fold increase in treatment failure (Hazard Ratio = 2.8, 95 % CI: 1.5-5.3) compared to their age mates infected with a single strain. Conclusion: Multiple-strain infection reduced response to antimalarial therapy. Strategies that reduce multiple-strain infections (intermitted presumptive treatment, indoor residual spraying, insecticide treated nets and efficacious drugs) are likely to improve antimalarial drug efficacy and reduce rate of spread of drug resistance. Running head: Multiplicity of infection and antimalarial treatment outcome African Health Sciences Vol. 8 (4) 2008: pp. 200-205

P Nahirya;;;;;J Byarugaba;;;;;J Kiguli;;;;;D Kaddu-Mulindwa.   
 Intravascular catheter related infections in children admitted on the paediatric wards of Mulago hospital, Uganda.  
 . Vol. 8 No. 4 (2008).   
Abstract  
Introduction: Worldwide use of intravascular catheters (IVC) has been associated with both local and systemic infections. No studies have been done in the sub-Saharan region on IVC related infections. Objective: To determine the prevalence, causative organisms and their antimicrobial susceptibility pattern and the factors associated with infections related to short term peripheral venous catheters in children admitted to the general paediatric wards in Mulago Hospital, Uganda. Methods: A cross-sectional study of 391 children aged one day to 12 years, on Jelliffe ward in Mulago Hospital, who had short  
peripheral venous intravascular catheters uncoated with no antibiotic or antiseptic, was done. Social demographic characteristics, anthropometry, clinical examination including the catheter site were determined at enrollment. The children had their blood, catheter tip and hub samples taken off for culture and sensitivity as well as complete blood counts. The data collected was entered using EPIINFO and analysed with SPSS packages.  
Results: Out of the 391 short term peripheral venous catheters collected, 20.7% catheter tips and 11.3% catheter hubs were colonised. Phlebitis was observed in 17.4%. Bacteria isolated from colonised catheter tips were Staphylococcus aureus (60.5%), Staphylococcus epidermidis (23.5%). The most common organism isolated from the hub was Staphylococcus aureus (56.8%) followed by Staphylococcus epidermidis (18.1%). Gram positive and negative organisms were sensitive to ciprofloxacin, gentamycin for gramnegative organisms and augmentin, cefuroxime, ceftriaxone for the gram-positive organisms. After logistic regression, factors such oedema, modified Glasgow coma score of <10/15, 6 hourly benzyl penicillin were significantly associated with colonisation of the tip while use of 25% dextrose, chloramphenicol 6 hourly and blood transfusion were significantly associated with colonisation of the hub. Conclusion: The study showed that infections related to short peripheral venous catheters in paediatric general wards in Mulago Hospital occurs and prevalence was 20.72% for tips and 11.3% for hubs. African Health Sciences Vol. 8 (4) 2008: pp. 206-216

R Omoregie;;;;;JE Adeghe;;;;;HO Ogefere;;;;;EU Omokaro;;;;;CC Ekeh.   
 Haemorheologic and fibrinolytic activity in Nigerian HIV infected  
 . Vol. 8 No. 4 (2008).   
Abstract  
Objective: Human immunodeficiency virus (HIV)-infected patients, especially those on antiretrovirals are at risk of cardiovascular disease (CVD). The haemorheologic and fibrinolgtic activity of treatment naïve Nigerian HIV-infected patients were investigated.  
Methods: Blood was collected from 50 newly diagnosed treatment naïve HIV-infected patients and 50 apparently healthy HIV seronegative individuals that served as controls. Haematocrit values, plasma and serum viscosity, plasma fibrinogen concentration and  
euglobin lysis time were determined. Result: The mean ± standard deviation of haematocrit value of HIV infected patients (31.70 ± 6.33%) was significantly lower (p<0.0001) than those of controls (39.50 ± 2.43%). The plasma serum viscosity, plasma fibrinogen concentration and euglobin lysis time of HIV-infected patients were significantly higher compared with those of controls (p<0.0001). Conclusion: Treatment naive Nigerian HIV-infected patients have a defective blood flow and fibrinolytic system, which may  
predispose them to CVD. African Health Sciences Vol. 8 (4) 2008: pp. 217-219

MA Olwedo;;;;;E Mworozi;;;;;H Bachou;;;;;CG Orach.   
 Factors associated with malnutrition among children in internally displaced person\'s camps, northern Uganda  
 . Vol. 8 No. 4 (2008).   
Abstract  
Introduction Since mid 1990s, Uganda has had an estimated 1.6 million internally displaced persons (IDPs) in the northern and eastern districts. A major cause of morbidity and mortality amongst children in displaced settings is protein energy malnutrition. Objective To estimate the prevalence of and describe the risk factors for protein energy malnutrition among under five years old children living in internally displaced persons camps in Omoro county Gulu district. Methods This was a cross sectional study undertaken among internally displaced people\'s in Omoro county, Gulu district during 13 - 23rd September 2006. Anthropometric measurements of 672 children aged 3 – 59 months were undertaken and all their caretakers interviewed. The anthropometric measurements were analyzed using z- scores of height-for-age (H/A) and weight-for-height (W/ H) indices. Qualitative data were collected through 6 focus group discussions, key informant interviews and observation. Data were captured using Epi Data version 3.0 and analyzed using EPI-INFO version 3.3.2 and SPSS version 12.0 computer packages respectively. Results The prevalence of global stunting was found to be 52.4% and of global acute malnutrition 6.0%. Male children are at risk of being stunted Adjusted OR 1.57 95% CI 1.15-2.13; p value=0.004. Children in the age group 3 – 24 months were at risk of acute malnutrition Adjusted OR 2.78 95% CI 1.26-6.15; p value=0.012 while de-worming was protective Adjusted OR 0.44 95% CI 0.22-0.88; p value=0.018. The main sources of foodstuff for IDPs include food rations distributed by WFP, cultivation and purchase. Conclusion and Recommendations There is high prevalence of protein energy malnutrition (stunting) among children in the internally displaced people\'s camps in Gulu district. Male children are at an increased risk of stunting while children aged between 3 – 24 months are at an increased risk of suffering from acute malnutrition. Stakeholders including local government and relief organizations should intensify efforts to improve the nutritional status of IDPs especially children in the camp settings. The quantity of and access to household food supplies, health education on infant and child feeding and integrated management of childhood illnesses (IMCI) activities in the camps should be strengthened. African Health Sciences Vol. 8 (4) 2008: pp. 244-252

WA Tumwikirize;;;;;JW Ogwal-Okeng;;;;;A Vernby;;;;;WW Anokbonggo;;;;;LL Gustafsson;;;;;CL Lundborg.   
 Access and use of medicines information sources by physicians in public hospitals in Uganda: a cross-sectional survey  
 . Vol. 8 No. 4 (2008).   
Abstract  
Background: Rational and cost-effective prescription of medicines requires up-to-date and readily accessible medicines information. There are several studies on availability and access to medicines information sources, but have been conducted only in high-income  
countries. Objective: To assess medicines information sources accessed by physicians in public hospitals in Uganda, and physicians' opinion on establishment of a medicines information centre in the country. Methods: A cross-sectional survey including 369 physicians from six district, six regional and two university hospitals. Data was collected using a semi-structured self-administered questionnaire. Results Response rate was 91%. This included 31, 136 and 168 physicians from the district, regional and university hospitals,  
respectively. In the district hospitals the source of medicines information reported to be most available was colleagues (100%), while in the regional and university hospitals it was literature from pharmaceutical companies (98%) and hard copy of research publications  
(99%) respectively. The most frequently used source in the district and regional hospitals was National Standard Treatment Guideline (90% and 73% respectively), and colleagues in university hospitals (89%). Accessibility problems with reported available sources were commonest with research publications in medical journals, both hard copy and through the internet, MIMS, pharmacists and pharmacologists. Need for a medicines information centre was indicated by 80% of the respondents. Conclusion: Majority of the physicians in public hospitals in Uganda have limited access to unbiased drug information. Therefore, there is need to assess the feasibility of establishing a drug information centre, and then assess its use during a trial period. African Health Sciences Vol. 8 (4) 2008: pp. 220-226

I Taga;;;;;VAS Oumbe;;;;;R Johns;;;;;MA Zaidi;;;;;JN Yonkeu;;;;;I Altosaar.   
 Youth of West Cameroon are at high risk of developing IDD due to low dietary iodine and high dietary thiocyanate.  
 . Vol. 8 No. 4 (2008).   
Abstract  
Objectives: Hypothyroidism in utero leading to mental retardation is highly prevalent and recurrent in developing countries where iodine deficiency and thiocyanate overload are combined. So, to explore and identify human population's risks for developing iodine deficiency disorders and their endemicity in Western Cameroon, with the aim to prevent this deficiency and to fight again it, urinary iodine and thiocyanate levels were determined. Methods: The district of Bamougoum in Western Cameroon was selected for closer study due to its geographic location predisposing for iodine deficiency disorders (IDD). A comprehensive sampling strategy included 24-h urine samples collected over three days from 120 school-aged children. Urinary iodine and thiocyanate levels were measured by colorimetric methods. Results: Twenty one percent of boys between the ages 3 and 19 were classified as iodine deficient. The prevalence of thiocyanate overload in the same population was found to be 20%. Conclusion: Presence of endemic iodine deficiency and excessive thiocyanate in the population indicates that the region is at risk of iodine deficiency disorder. A multifactorial approach that includes improvement of diet, increasing iodine and minimizing goitrogen substances intake, soil and crop improvement and an iodine supplementation program may help alleviate IDD in the affected area studied. African Health Sciences Vol. 8 (4) 2008: pp. 227-233

I Emmanuel;;;Gulu university Department of Microbiology  
;Faculty of Medicine P.O.BOX 166 Gulu;;;;;O Aginya;;;;;E Doehring.   
 Epidemiology, of bilharzias (schistosomiasis) in Uganda from 1902 until 2005  
 . Vol. 8 No. 4 (2008).   
Abstract  
Background: Schistosoma mansoni was observed and reported in Kuluva hospital Arua District in north western Uganda as early as 1902. S. mansoni is widely distributed in Uganda along permanent water bodies. Objective: To review the litreture on scistosomiasis in Uganda, since 1902. Method: The core literature for this short review was searched from reports and publications by the British colonial Ministry of Health Districts Medical officers and Entomologists. Additional information was obtained from Makerere University Medical School library archives, London School of Hygiene and Tropical Medicine library archives, University of Antrwap, and post independence publications on schistosomiasis in Uganda in various journals. Results: Since it was first detected in 1902 Schistosoma (S) mansoni is more widely distributed in Uganda than S. haematobium. However Schistosoma mansoni and S. haematobium are of public health importance in Uganda and the importance of migrants and fishermen in disseminating infections into non-infested areas and intensifying infection in areas already infested have been reported. Conclusion: S. mansoni has been on the increase in Uganda whereas S. haematobium is localized in sporadic foci in the north of Uganda. Treatment with praziquantel the drug of choice in Uganda used in schistosomiasis control programme has reduced development of severe schistosomiasis. African Health Sciences Vol. 8 (4) 2008: pp. 239-243

PF Rambau;;;;;M Odida;;;;;H Wabinga.   
 p53 expression in colorectal carcinoma in relation to histopathological features in Ugandan patients  
 . Vol. 8 No. 4 (2008).   
Abstract  
Background: It has been shown that colorectal carcinoma is increasing in incidence in African countries. This could be due to change in life style. Molecular pathogenesis of colorectal cancer commonly involves mutation in p53 gene which leads to expression of p53 protein in tumor cells. Expression of p53 protein has been associated with poor clinical outcome and reduced survival in patients. Objective: This was a retrospective laboratory based study carried out in the Department of Pathology Makerere University, Kampala, Uganda. The aim of the study was to evaluate the expression of p53 protein in colorectal carcinoma in Ugandan patients, specifically its association with histological types, degree of differentiation, sites of the tumor and demographic characteristics of the patients. Methods: Immunohistochemistry was carried out on 109 patient\'s paraffin embedded tissue blocks of colorectal carcinoma diagnosed  
in the Pathology Department, Faculty of Medicine Makerere University Kampala during the period 1995 to 2005. The indirect immunoperoxidase method using monoclonal antibody p53 DO-7 and Envision + Dual link system-HRP to detect p53 expression was used. Haematoxylin and eosin stain was used for evaluation of histological types and degree of differentiation of the tumors. Topography of the tumors and demographic data were obtained from accompanying histological request forms. Results: Out of 109 patient\'s tissue blocks that were studied, 61 cases (56%) expressed p53 protein in the nucleus of malignant cells. Right sided colonic tumors were commoner (53.2%) than left sided colonic tumors (46.8%). p53 protein was expressed more in left sided colonic tumors with a significant difference (p<0.05), it was also expressed more in well differentiated tumors and non mucinous adenocarcinomas but with no significant difference (p>0.05). p53 expression was not affected by age or sex. Conclusion: Frequency of p53 protein expression in Ugandan patients did not differ from that reported in the other parts of the world. It was expressed more in the left sided colonic tumors and this could support the hypothesis that right and left colonic tumors could have different pathogenesis and probably also responsible for difference in prognosis in these two topographic sites. African Health Sciences Vol. 8 (4) 2008: pp. 234-238

S Lamina;;;;;S Hanif.   
 Pattern of Ptosis in Kano North-West Nigeria  
 . Vol. 8 No. 4 (2008).   
Abstract  
Objective: Epidemiological data on ptosis are generally lacking in the developing nations. The aim of this study was to assess the seven years pattern of ptosis in a Nigerian Specialist Hospital, Kano North-West Nigeria. Method: The records of patients' diagnosis as ptosis between 2000 and 2006 were scrutinized. Data such as age, sex, cause, socioeconomic status, side of ptosis and management were obtained. Result: A total number of 104 patients were recorded. High prevalence was found as follows: male 102(65.4%); right side (61.5%); trauma (RTA) (60.9%); civil servants (38.5.8%) and age group: 51-60 years (25.6%). Conclusion: It was concluded that trauma from road traffic accident (RTA) is the major aetiological factor and the right side mostly affected. Recommendation: It is recommended that surgical training and facilities for ptosis correction is off priority. African Health Sciences Vol. 8 (4) 2008: pp. 253-255

J Opio;;;;;E Kiguli-Malwadde;;;;;RK Byanyima.   
 Coarctation of aorta presenting as acute haemorrhagic stroke in a 14-year old. A case report.  
 . Vol. 8 No. 4 (2008).   
Abstract  
No Abstract African Health Sciences Vol. 8 (4) 2008: pp. 256-258

AM Almedom.   
 Resilience research and policy/practice discourse in health, social, behavioral, and environmental sciences over the last ten years.  
 . Vol. 8 (2008): Special Edition.   
Abstract  
Background: Resilience research has gained increased scientific interest and political currency over the last ten years. Objective: To set this volume in the wider context of scholarly debate conducted in previous special theme issue and/or special section publications of refereed journals on resilience and related concepts (1998-2008).  
Method: Peer reviewed journals of health, social, behavioral, and environmental sciences were searched systematically for articles on resilience and/or related themes published as a set. Non-English language publications were included, while those involving nonhuman  
subjects were excluded. Results: A total of fifteen journal special issues and/or special sections (including a debate and a roundtable discussion) on resilience and/or related themes were retrieved and examined with the aim of teasing out salient points of direct relevance to African social policy and health care systems. Viewed chronologically, this series of public discussions and debates charts a progressive paradigm shift from the pathogenic perspectives on risk and vulnerability to a clear turn of attention to health-centered approaches to building resilience to disasters and preventing vulnerability to disease, social dysfunction, human and environmental resource depletion. Conclusion: Resilience is a dynamic and multi-dimensional process of adaptation to adverse and/or turbulent changes in human, institutional, and ecological systems across scales, and thus requires a composite, multi-faceted Resilience Index (RI), in order to be meaningfully gauged. Collaborative links between interdisciplinary research institutions, policy makers and practitioners involved in promoting sustainable social and health care systems are called for, particularly in Africa. African Health Sciences Vol. 8 Special Edition 2008: pp. S5-S13

L Pietrantoni;;;;;G Prati.   
 Resilience among first responders  
 . Vol. 8 (2008): Special Edition.   
Abstract  
Background. Emergency rescue personnel can be considered a ‘‘high risk\'\' occupational group in that they could experience a broad range of health and mental health consequences as a result of work-related exposures to critical incidents. Objectives. This study examined the resilience factors that protect mental health among first responders.  
Methods. Nine hundred and sixty-one first responders filled out an on-line questionnaire, containing measure of sense of community, collective efficacy, self-efficacy and work-related mental health outcomes (compassion fatigue, burnout and compassion satisfaction).  
Results. First responders reported high level of compassion satisfaction and low level of burnout and compassion fatigue. Compassion fatigue was predicted by self-efficacy, burnout was predicted by self-efficacy, collective efficacy and sense of community, compassion satisfaction was predicted by self-efficacy and sense of community. Conclusions. Resilience following critical events is common among first responders. Self-efficacy, collective efficacy and sense of community could be considered resilience factors that preserve first responders\' work-related mental health. African Health Sciences Vol. 8 Special Edition 2008: pp. S14-S20

DM Glandon;;;;;J Muller;;;;;AM Almedom.   
 Resilience in Post-Katrina New Orleans, Louisiana: A Preliminary Study  
 . Vol. 8 (2008): Special Edition.   
Abstract  
Background: Much scholarly and practitioner attention to the impact of Hurricane Katrina on the city of New Orleans, Louisiana has focused on the failures of government disaster prevention and management at all levels, often overlooking the human strength and resourcefulness observed in individuals and groups among the worst-affected communities. Objectives: This preliminary study sought to investigate human resilience in the city of New Orleans, State of Louisiana, eighteen months after Hurricane Katrina struck the Mississippi delta region. Methods: The Sense of Coherence scale, short form (SOC-13) was administered to a sample of 41 residents of Lower Ninth Ward and adjacent Wards who had been displaced by Hurricane Katrina but were either living in or visiting their home area during March 2007. Study participants were recruited through the local branch of the Association of Community Organizations for Reform Now (ACORN), a nation-wide grassroots organization whose mission is to promote the housing rights of low and moderate-income  
individuals and families across the USA and in several other countries.  
Results: Those who had returned to their homes had significantly higher SOC scores compared to those who were still displaced (p<0.001). Among the latter, those who were members of ACORN scored significantly higher than non-members (p<0.005), and  
their SOC-13 scores were not significantly different from the scores of study participants who had returned home (including both members and non-members of ACORN).  
Conclusions: The findings of this preliminary study concur with previous reports in the literature on the deleterious impact of displacement on individual and collective resilience to disasters. Relevant insight gleaned from the qualitative data gathered during the course of administering the SOC-13 scale compensate for the limitations of the small sample size as they draw attention to the importance of the study participants\' sources of social support. Possible avenues for further research are outlined. African Health Sciences Vol. 8 Special Edition 2008: pp. S21-S27

AM Strauch;;;;;JM Muller;;;;;AM Almedom.   
 Exploring the Dynamics of social-ecological resilience in East and West Africa:Preliminary evidence from Tanzania and Niger  
 . Vol. 8 (2008): Special Edition.   
Abstract  
Background: Social-ecological resilience refers to the dynamic process of adaptive learning, reorganization and meaning-making demonstrated in linked human, animal, and plant ecosystems often organized in formal and/or informal social institutions, as they  
anticipate, withstand and/or judiciously engage with adversity while maintaining function without fundamentally losing their identity. Objective: To present two sets of examples that illustrate the complex ways in which transformation and persistence, two key aspects  
of the adaptive cycle may work together to preserve established patterns of human and/or animal uses of water resources and food plant species, in rural East and West Africa, respectively around the Serengeti National Park (Tanzania), and “Park W” (Niger), with  
the aim of identifying possible indicators of social-ecological resilience. Methods: Selective combinations of ecological and anthropological, quantitative and qualitative methods, including participatory tools of investigation and analysis. Results and Discussion: Our preliminary results are presented with minimal commentary and discussion in order to avoid hasty and/or unwarranted interpretation of the ongoing purposely iterative processes of investigation and analysis in the two study sites. Nevertheless we have identified a number of possible indicators of social-ecological resilience that may be tested in other localities in  
Africa and elsewhere. African Health Sciences Vol. 8 Special Edition 2008: pp. S28-S35

R Amlôt;;;;;H Carter.   
 What can emergency planners learn from research on human resilience?  
 . Vol. 8 (2008): Special Edition.   
Abstract  
No Abstract African Health Sciences Vol. 8 Special Edition 2008: pp. S36-S36

S Broz;;;Garden of the Righteous Worldwide (GARIWO), Sarajevo http://gariwo.net/eng/ethnic\_c/garden.htm.   
 Civil courage: Good people in an evil time, building and promoting resilience  
 . Vol. 8 (2008): Special Edition.   
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L Christensen.   
 From trauma to resilience  
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S Cowley.   
 Developing and measuring resilience for population health  
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A Filot;;;;;C Uriarte.   
 Resilience in MSF and its Personnel  
 . Vol. 8 (2008): Special Edition.   
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 Animals as key promoters of human resilience  
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F Westley.   
 Renewal and Resilience: the role of social innovation in building institutional resilience  
 . Vol. 8 (2008): Special Edition.   
Abstract  
No Abstract African Health Sciences Vol. 8 Special Edition 2008: pp. S47

J Beyeza-Kashesya;;;;;F Kaharuza;;;;;F Mirembe;;;;;S Neema;;;;;AM Ekstrom;;;;;AS Kulane.   
 The dilemma of safe sex and having children: challenges facing HIV sero-discordant couples in Uganda  
 . Vol. 9 No. 1 (2009).   
Abstract  
Background: Sixty percent of new HIV infections in Uganda occur in stable relationships between HIV discordant couples. Given the importance of fertility in Uganda, we hypothesized that unsafe sexual practices may be used to found a family/replace a dead  
child. Thus, we explored sexual practices to understand to what extent these are influenced by the desire to have children and the implications for HIV transmission among discordant couples.  
Methods: A cross-sectional survey of 114 HIV discordant couples in Kampala, and in-depth interviews with 15 purposively selected couples. Quantitative data were analysed using STATA. Multivariate logistic regression analysis done to identify factors associated  
with consistent condom use. Thematic content analysis of qualitative data was done using NVIVO 2.  
Results: Participants wanting children and those with multiple sexual partners were less likely to use condoms (Adj OR 0.51, and 0.36 respectively). Three of the five types of sexual practices used by couples do not allow pregnancy to occur. Main reasons for wanting a child included: ensuring lineage continuity and posterity, securing relationships and pressure from relatives to reproduce.  
Challenges included: risk of HIV transmission to partner and child, lack of negotiating power for safer sex, failure of health systems to offer safe methods of reproduction  
Conclusions: HIV sero-discordant couples with strong desire for childbearing have a dilemma of risking HIV infection or infecting their spouse. Some risk transmission of HIV infection to reproduce. We need to address gender issues, risky behaviour and reproductive  
health services for HIV sero-discordant couples. Keywords: HIV Sero-discordance, condom use, desire for children African Health Sciences Vol. 9 (1) 2009: pp. 2-12

C Opoku-Okrah;;;;;P Feglo;;;;;N Amidu;;;;;MP Dakorah.   
 Bacterial contamination of donor blood at the Tamale Teaching Hospital, Ghana.  
 . Vol. 9 No. 1 (2009).   
Abstract  
Background: Transfusion of bacterially contaminated blood can result in sepsis and will constitute a substantial health burden to the patient.  
Objective: To assess the level of transfusion related sepsis and the bacterial types responsible for the contamination at the Tamale Teaching Hospital in Ghana.  
Method: We sampled 80 refrigerated donor blood at the blood bank and cultured them for bacteria. The antimicrobial sensitivities of the isolates were also determined.  
Results: 14 blood bags representing 17.5% grew isolates of various bacteria. Ten (10) of the 14 isolates were Gram positive cocci representing 71.42% making it the commonest contaminant. 50% of the gram positive cocci were identified to be coagulase negative  
staphylococci and 21.42% were Staphylococcus aureus. There were 14.28% isolates which were Gram positive rods, and were identified to be Corynebacterium diphtheroids. There were two isolates which were Gram negative rods; one was identified as Escherichia coli and the other one Klebsiella pneumoniae. Sensitivity among the organisms were varied; as all the 14 (100%) of the organisms isolated were sensitive to amikacin, only 14.28% of the coagulase negative staphylococci were sensitive to co-trimoxazole, 28.5% were sensitive  
to ampicillin, 42.8% were sensitive to cefuroxime and 71.4% were sensitive to ciprofloxacin. Sensitivity to gentamicin was observed to be 85.7% and 28.5% were sensitive to Tetracycline. Only the 10 Gram positive cocci were tested against erythromycin and  
Cloxacillin; where 70.00% were sensitive to cloxacillin and 90% were sensitive to erythromycin.   
Conclusion: All the Staphylococcus aureus isolated were resistant to both ampicillin and cotrimoxazole. Potential dangers and consequences of transfusing multidrug resistance bacteria have been discussed. Keywords: Donor blood, Bacteraemia, Tamale Teaching Hospital, GhanaAfrican Health Sciences Vol. 9 (1) 2009: pp. 13-18

OS Arulogun;;;;;MO Adesoro.   
 Potential risk of HIV transmission in barbering practice among professional barbers in Ibadan, Nigeria  
 . Vol. 9 No. 1 (2009).   
Abstract  
Background: There is a growing concern that barbering procedures could create opportunities for HIV transmission. However, little is known about Nigerian barbers' practices relating to the prevention of HIV.   
Objectives: This study assessed the precautionary measures for the prevention of HIV among commercial barbers in Ibadan, Nigeria.  
Methods: Data were collected using validated checklist to directly observe ninety barbering procedures in forty-five barber shops randomly selected from three communities that have been categorized as inner-core, transitory and peripheral.  
Results: Respondents were all males with mean age of 36(±10.2) years. Ninety-eight percent had at least primary school education and all of them learnt barbering through apprenticeship. The instruments used were razor blades (11.1%), manual clippers (8.9%) and electric clippers (80%). Clippers were sterilized in 10% and disinfected in 72.5%, while no decontamination was carried out in 17.5% of the sessions. Fifty two percent of the disinfections involved the use of kerosene, a disinfectant not recommended for HIV  
inactivation; 48.3% of the disinfectants were not in the original containers while 53.4% of the sessions involved the use of same brush for cleaning clipper and brushing hair. Hand-held flame and Ultra-violet light sterilizer were used in 50% of the sterilization process.  
Barbers in the high-class peripheral communities were more likely to practice appropriate equipment decontamination than those from lower-class inner-core communities. There was blade-to-skin contact in all and accidental cuts occurred in three of the sessions and none was properly managed.  
Conclusion: The risk of transmitting HIV is high in the barbershops in the study area. Health education strategies such as training, supportive supervision and peer education are needed to facilitate the adoption of effective precautionary measures against HIV  
infection among barbers. African Health Sciences Vol. 9 (1) 2009: pp. 19-25

I Kadowa;;;;;F Nuwaha.   
 Factors influencing disclosure of HIV positive status in Mityana district of Uganda  
 . Vol. 9 No. 1 (2009).   
Abstract  
Background: Disclosure of HIV positive sero-status to sexual partners, friends or relatives is useful for prevention and care. Identifying factors associated with disclosure is a research priority as a high proportion of persons living with HIV/AIDS (PHA) never  
disclose.  
Objective: To identify factors associated with disclosure among PHAs in Mityana district of Uganda.  
Methods: Using a case control design, we compared 139 PHAs who had disclosed to 139 PHA who had not disclosed regarding socio demographic characteristics, sexual behaviour, individual experiences and perceptions about disclosure, as well as on health  
facility/community correlates of disclosure.  
Results: The independent factors that favour disclosure are not fearing negative outcomes of disclosure adjusted odds ratio (AOR) 7.00, 95 % confidence interval (95% CI) 3.03-16.95, having communication skills to disclose (AOR 12.08, 95% CI 4.94-29.51), having initiated anti-retroviral therapy (AOR 7.51, 95% CI 3.42-16.49), not having tested for HIV during ante-natal clinic (AOR 5.07, 95% CI 1.95-13.10), receiving ongoing counselling (AOR 4.33, 95% CI 1.50-12.51) and having ever seen a PHA publicly disclose his/her HIV status AOR 2.73, 95% CI 1.24-6.02).  
Conclusions  
PHAs that have not initiated anti-retroviral therapy (ART), test for HIV in ante-natal clinic and fear negative outcomes need more help in disclosure. Measures that empower PHA to disclose such as those that lead to improved communication skills should be  
reinforced during ongoing counselling Keywords: HIV/AIDS, disclosure, communication skills, HAART, HIV counselling and testing, Voluntary counselling and testing,  
HIV care, ongoing counselling African Health Sciences Vol. 9 (1) 2009: pp. 26-33

KD Mwambete.   
 The in vitro antimicrobial activity of fruit and leaf crude extracts of Momordica charantia: A Tanzania medicinal plant  
 . Vol. 9 No. 1 (2009).   
Abstract  
Objective: To evaluate the antimicrobial activity of Momordica charantia extracts on reference strains and microorganisms isolated from clinical specimens.  
Method: Petroleum ether and methanolic crude extracts of fruits and leaves of the plant were evaluated for antimicrobial activity using the disk diffusion method on four reference microorganisms (Pseudomonas aeruginosa, Escherichia coli, Candida albicans and Staphylococcus aureus; and four clinical strains of Klebsiella pneumoniae, Proteus vulgaris, Salmonella typhi and Cryptococcus neoformans.  
Result: Antimicrobial activity was observed against all the tested microorganisms with exception to P. mirabilis and C. neoformans. Methanolic crude extracts exhibited relatively broader antimicrobial spectrum of activity than petroleum ether extracts with the as  
lower concentration as 0.075mg/μl. Methanolic fruit crude extract displayed the broadest antimicrobial spectrum by inhibiting majority (75%) of the tested microorganisms. Neither was there synergistic nor addition effect upon mixing leaf and fruit extracts of  
equal concentrations derived from the same solvent.  
Conclusion: Extracts of M.charantia demonstrated antimicrobial activity on tested microorganisms except on Proteus mirabilis and Cryptococcus neoformans. Fruit extracts showed higher antimicrobial activity than leaf extract. Further studies are recommended that  
will involve various parts of the plant, select different fractions of extracts and purify the active antimicrobial components Keywords: Antimicrobial activity, Momordica charantia, petroleum ether and methanolic crude extractsAfrican Health Sciences Vol. 9 (1) 2009: pp. 34-39

C Kirimuhuzya;;;;;P Waako;;;;;M Joloba;;;;;O Odyek.   
 The anti-mycobacterial activity of Lantana camara a plant traditionally used to treat symptoms of tuberculosis in South-western Uganda  
 . Vol. 9 No. 1 (2009).   
Abstract  
Introduction: Tuberculosis continues to be a devastating public health problem. Many communities in Uganda use medicinal plants to treat various infections, including respiratory tract infections. There are claims that some can treat tuberculosis. Verifying some of these claims could lead to discovery of lead compounds for development of a TB drug.  
Methods: Chloroform and methanol extracts of L. camara collected from South-western Uganda were screened against three strains of Mycobacterium tuberculosis using the agar-well diffusion method. H37Rv, the rifampicin-resistant TMC-331 and a non-resistant wild  
strain (28-25271). The MIC and MBC were determined using the Agar dilution method on Middle brook 7H11.  
Results: The methanol extract showed the highest activity against all the three strains used, with zones of inhibition of 18.0-22.5 mm and MIC values of 20 μg/ml for H37Rv and 15 μg/ml for both TMC-331 and wild stain. The values for rifampicin were 1.0 μg/ml  
for both H37Rv and wild strain but rifampicin hardly showed any activity on TMC-331. The MBC value for the methanol extract of L. camara was 30μg/ml for the H37Rv, and 20μg/ml for both the TMC-331 and wild strains of M. tuberculosis. The MBC for rifampicin  
was 2.0μg/ml for both H37Rv and the wild strain.  
Conclusion: We conclude that L. camara contains principles active against M. tuberculosis, which merit further research. Keywords: Anti-mycobacterial; In vitro activity; Medicinal plant; Lantana camara; Mycobacterium tuberculosis; rifampicinAfrican Health Sciences Vol. 9 (1) 2009: pp. 40-45

TR Kotila;;;;;AA Adeyemo;;;;;OO Mewoyeka;;;;;WA Shokunb.   
 Beta thalassaemiatriat in western Nigeria  
 . Vol. 9 No. 1 (2009).   
Abstract  
Background: Genes for thalassaemia, haemoglobin S, Glucose-6-phosphate dehydrogenase which confer resistance to malaria are found in high frequencies in Nigeria, 25% of the population being carriers of the sickle cell trait while another 25% are hemizygous for the G6PD gene. The frequency of alpha thalassaemia is equally high among Nigerians but there is little information on beta thalassaemia in this population. A recent study however suggest a high prevalence of beta thalassaemia in the same population, hence the need for this study.  
Methods: Haemoglobin A2 and HbF were determined in healthy adults who have haemoglobin A genotype by elution after electrophoresis and alkaline denaturation methods respectively.  
Results: The mean HbA2 among the subjects was 3.3% (range 2.0-5.6%) while the mean HbF was 2.6% (range 0.4-8.8%). Twentysix percent of the subjects had HbA2 values higher than 3.9% while 86% had HbF values greater than 1%, twenty-four percent had  
elevated HbA2 and HbF. The mean HbA2 value was 2.7% among those with HbF <1%, 3.6% among those with HbF 1-3% and 3.1% among those with HbF >3%.  
Conclusion: These findings confirm that the frequency of beta thalassaemia in western Nigeria is higher than previously thought and that many of the individuals studied may be silent carriers of the beta thalassaemia trait. Its presence may also have been masked by  
the high prevalence of alpha thalassaemia in the same environment. It is therefore important to consider beta thalassaemia trait as a differential diagnosis in patients who present with haemolytic anaemia in this environment Keywords: Beta thalassaemia trait, haemoglobin A2, haemoglobin F, silent carrierAfrican Health Sciences Vol. 9 (1) 2009: pp. 46-48

P Watcho;;;;;E Ngadjui;;;;;NP Alango;;;;;NT Benoît;;;;;A Kamanyi.   
 Reproductive effects of Ficus asperifolia (Moraceae) in female rats  
 . Vol. 9 No. 1 (2009).   
Abstract  
The reproductive effects of Ficus asperifolia in female rats were investigated in the present study. Sperm-positive adult female rats were orally administered (P.O.) either the aqueous and methanol extracts of Ficus asperifolia (100 and 500mg/kg), distilled water (10ml/kg) or 5%Tween 80 (10ml/kg) for seven days. On day 10 of pregnancy, the implantation sites were recorded. In the fertility study, adult female rats received the same test substances for 21 days and, the fertility index and litter size determined. In the uterotrophic test, normal and ovariectomized immature rats  
were treated for seven days with the dry extract of Ficus asperifolia (100 and 500mg/kg) in the absence and presence of 17â-estradiol benzoate 1μg/animal/day, s.c. On day 8, the uterine growth index was measured. Results of the study showed a significant increase (p<0.05) in the implantation sites and litter size of animals receiving 100mg/kg of  
the aqueous extract of Ficus asperifolia . In the estrogenic assay, normal immature rats were sensitive to the treatment with Ficus asperifolia than the ovariectomized ones. Our results give added scientific support to the popular use of Ficus asperifolia in the treatment of some cases of women's sterility/infertility related problems Keywords: Ficus asperifolia , implantation, fertility, uterotrophic, ratAfrican Health Sciences Vol. 9 (1) 2009: pp. 49-53

AI Mamman;;;;;AJ Yusuf;;;;;S Aminu;;;;;TL Sheikh;;;;;A Hassan.   
 Severe depression following á-interferon usage in a patient with chronic myeloid leukemia  
 . Vol. 9 No. 1 (2009).   
Abstract  
Chronic myeloid leukaemia (CML), with a median age of 40 years, is one of the commonest haematological malignancies in Nigeria. Cytoreductive agents, which were hitherto the mainstay of treatment, neither induce cytogenetic nor haematologic remission. Alphainterferon (á-IFN), an endogenous glycoprotein with cytotoxic and natural killer cell enhancer effects has been found to induce haematologic and cytogenetic remission in patients with CML, but neuro- psychiatric complications of á -interferon (á-IFN) usage  
were not reported in Nigeria.  
Objective: To report a case of deliberate self-harm in University Lecturer as a side effect of á-IFN in the treatment of CML Method: Clinical and laboratory follow up of a patient receiving á-IFN in the management of CML from the time of diagnosis of  
CML to the point of loss of contact.  
Result: Severe depression is a complication that may adversely influence the clinical outcome of á-IFN usage Conclusions/Recommendations: Although interferon related depression is uncommon, it is suggested that pre-therapy interferon  
assays and neuro-psychiatric assessment are carried out in prospective users of á-IFN Keywords: Chronic myeloid leukaemia, interferon-á, depressionAfrican Health Sciences Vol. 9 (1) 2009: pp. 54-56

S Gupta;;;;;CB Jani.   
 Oxygen Cylinders: “life” or “death”?  
 . Vol. 9 No. 1 (2009).   
Abstract  
Oxygen is crucial to maintain and save human life. Other than medical purposes it is widely used for manufacture of mineral water, fabrication works and other industrial activities. If adequate precautionary measures are not adopted while handling, storage or  
transport of oxygen cylinder or container, accidental blast may claim human life and other damage as well. The case involving three victims is presented to highlight various relevant aspects i.e. autopsy findings, cause/s of blast and recommended precautions are  
discussed in the light of oxygen cylinder blast case in an” oxygen filling factory”, claiming three human lives Keywords: Oxygen cylinder, accidental blast, autopsy findings, causes and precautions.African Health Sciences Vol. 9 (1) 2009: pp. 57-60

BL Meel.   
 Witchcraft in Transkei Region of South African: case report  
 . Vol. 9 No. 1 (2009).   
Abstract  
Witchcraft and witch-hunt have been practiced widely almost all over the world. It is known as magic in Europe, maleficium (wrongdoing) in Latin America, and superpower in Asia. In Africa those accused of being witches often face execution. A range of accusations  
are leveled against witches such as causing impotence, turning milk sour, causing disease and death. Three cases are presented here to highlight the issues related to witch craft in Transkei area. The information was given by the next of kin at the time of autopsy. All were elderly women over 50 years of age. The first was related to tuberculosis of the brother  
of the perpetrator the second, death of the culprit's relative and third the death of culprits brother in Johannesburg. The first and third victims were brutally chopped by axe and in the second it was a firearm injury. The case history, the type of wounds, and medico- legal  
aspects of death are discussed in these reports. There law related to witchcraft and their implementations to prevent such deaths are discussed. Keywords: Witchcraft, unnatural deaths, homicideAfrican Health Sciences Vol. 9 (1) 2009: pp. 61-64