

## CONFERENCE ABSTRACTS

### A001

#### Evaluation of HIV/AIDS Drug Therapy Related Problems in Ahmadu Bello University Teaching Hospital (ABUTH) Zaria, Nigeria

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**Background:** Human immunodeficiency virus (HIV) is a devastating pandemic that affects about 1.5 million people in Nigeria. Antiretroviral therapy (ART) while having a positive impact on quality of life is associated with drug therapy problems (DTPs).

**Objectives:** To determine the number and types of DTPs; and outcomes of therapy in HIV patients in Zaria, Nigeria.

**Methods:** 210 consenting HIV patients in ABUTH who started ART in the year 2012 and met inclusion criteria were enrolled. They were interviewed and structured questionnaires filled. DTP Reporting Form V5.01 (PCNE Classification 2006) was filled by the researcher.

**Result:** A total of 1,260 prescriptions were reviewed. In these, 308 DTPs were found and classified into 9 categories; the most common was "no drug but clear indication" (27.92%) and the least common DTP was "wrong drug administered" (0.32%). Other DTPs included "inappropriate adherence" (12.01%), "adverse drug reactions" (13.96%), and "inappropriate drug" (23.38%). Each DTP resulted from 1 to 3 causes. Manifested side effect was responsible for majority of the DTPs (30.84%). Pharmacist interventions were 419 categorised into 8, the most common being patient medication counselling. Most DTPs were eventually solved. Weights, CD4<sup>+</sup> count and viral load improved after more than 6 months on ART.

**Conclusion:** The outcomes of therapy were good. Most of the DTPs were totally solved. Many DTPs were discovered by the pharmacist and this shows the great importance of the role a pharmacist plays through pharmaceutical care.

**Key words:** HIV/AIDS, drug therapy related problems , university teaching hospital

### A002

#### Evaluation of the health related quality of life of the elderly attending a tertiary hospital in Benin city

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**Background:** Ageing is a universal process and it affects every individual, family, community and society. Studies have shown that the elderly are at a higher risk of developing multi-morbidity.

**Objectives:** The study was carried out to assess the overall Quality of life (QOL) of the elderly and to compare their QOL in the following facets of health; Sensory Abilities, Autonomy, Past, Present and Future Abilities, Social Participation, Death and Dying and Intimacy.

**Methods:** This was a descriptive cross sectional survey utilizing simple random sampling technique. The WHOQOL-HIV Bref questionnaire was used to assess QOL of respondents. Means, Standard deviations and statistical tests

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differences were performed.

**Results:** About 241 respondents were surveyed. The mean age of the group was 70.4 years with a modal age of 60years. 125(51.9%) of the respondents were females. Overall, QOL in the six facets of health was good as indicated by the overall mean facet score (14.73±1.00). The mean QOL facet score was highest in the intimacy facet but lowest in the social participation facet. Age and female gender impacted negatively on respondents' QOL. Respondents with social support had significantly higher QOL than respondents without social support (P=0.0207).

**Conclusion:** The overall quality of life among the elderly was good. The elderly recorded good QOL in all facets except the social participation and death and dying facets. Age, gender but not income had a negative impact on respondents' QOL. Respondents with social support had a better QOL.

**Keywords:** Ageing, elderly, health related quality of life (HRQoL).

### A003

#### Potential drug interaction of antiretroviral drugs: case study in HIV treatment centre of Lagos university teaching hospital

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**Background:** Treatment failure and increased toxicity during antiretroviral therapy may be caused by interaction between antiretroviral regimens and co-prescribed non-antiretroviral drugs that are often used for the treatment of opportunistic infections and co-morbid illnesses.

**Objectives:** This study aimed to document the most commonly co-prescribed antiretroviral and non-antiretroviral drugs and determine the clinically significant drug interactions that may occur between them.

**Methods:** All the prescriptions received between January 2009 and June 2014 totaling 24,548, from 500 out of 1894 patients registered in HIV clinic of the Lagos University Teaching Hospital in 2009, were reviewed with a view to documenting all the co-prescribed antiretroviral and non-antiretroviral drugs which were later screened for clinically significant drug interaction using the drug interaction checker database of the Liverpool HIV Pharmacology Group website.

**Results:** Cotrimoxazole (7546/9302; 81.12%) was the most commonly co-prescribed non-antiretroviral drugs followed by multivitamin (433/9302; 4.65%) and rifampin (316/9302; 3.40%) while Zidovudine+lamivudine+nevirapine (4996/9302; 53.71%) was the most commonly co-prescribed antiretroviral therapy regimen followed

by tenofovir/emtricitabine/efavirenz (1468/9302; 15.78%), and zidovudine/lamivudine/efavirenz (683/9302; 7.34%). All classes of the co-prescribed drugs except the haematinics were associated with clinically significant drug interactions.

**Conclusion:** Zidovudine+lamivudine+nevirapine and co-trimoxazole were the most commonly co-prescribed antiretroviral regimen and non-antiretroviral drug respectively. All classes of the co-prescribed drugs except the haematinics were associated with potential clinically significant drug interactions. Further studies are required to correlate the latter with the actual therapeutic outcome using laboratory and clinical data of the HIV-infected individuals.

**Key words:** Potential drug interaction, antiretroviral drugs, HIV treatment centre, teaching hospital

#### A004

### Community health screening: awareness and practices in Ifako-Ijaiye local government Lagos, Nigeria

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**Background:** There is an increasing incidence of sudden deaths from preventable and non-communicable diseases warranting the need to strengthen activities that will prevent diseases, ensure early detection and possible interventions.

**Objectives:** The study was to assess the awareness, knowledge, attitude and practices of community members towards Health Screening in Ifako-Ijaiye local government area.

**Methods:** A descriptive cross-sectional study using pre- tested questionnaire was conducted on 426 respondents through stratified random sampling. Data analysis was done using the statistical software Epi info 3.5.1 version and Chi- square test was used to determine the associations between variables at 95% confidence level.

**Results:** The result indicated a high level of awareness (95%) of health screening, awareness being higher in males than females. Occupation was significantly associated with knowledge of health screening ( $p < 0.0048$ ). Most respondents showed positive attitude towards health screening but 28% of respondents had never carried out any health check. It was observed that 40.8% of the screened respondents had high blood pressure and 2.1% had a high blood sugar. This showed disparity between the reported level of knowledge, awareness, practice and survey biomedical results.

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**Background:** School health services are geared at preventing, protecting and improving the health status of the school population to enable them benefit fully from the school system. In Nigeria where infant and early childhood mortality is high its importance cannot be overemphasized.

**Objectives:** This study assessed the state of school health services in primary schools of Ibadan North Local

**Conclusion:** Though participants awareness and knowledge levels were high, the practices of health screening as reflected by the on-spot screening interventions results was inadequate and will require efforts at improving access, health education, public enlightenment on health seeking behaviours and interprofessional collaboration.

**Key words:** Community health screening, non-communicable diseases, practice, health checks

#### A005

##### Assessment of school health services in primary schools in Ibadan north local government area

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Government and determined the extent of implementation of the National School Health Policy.

**Methods:** A pre-tested questionnaire designed to evaluate the status of school health services was administered to 143 head teachers of 80 private and 63 public primary schools in Ibadan North Local Government Area of Oyo State, Nigeria. School premises were also inspected using an observation checklist adapted from the National School Health Policy to check for the provision of pipe borne water, sick bay, toilet facilities and the adequacy of the school environment among other things.

**Results:** Majority (76%) of the head teachers had poor knowledge of the National School Health Policy with a higher level of knowledge among head teachers of private schools than those of public schools ( $\chi^2=1.3894$ ,  $p<0.05$ ). Only 10% of schools had a nurse, while 56% had a trained first aider. Water and sanitation facilities were found to be grossly inadequate. None of the schools had a free school meal policy.

**Conclusion:** School health services in the primary schools of Ibadan North Local Government Area are not adequate and there has not been any appreciable implementation of the National School Health Policy **Keywords:** Health services, primary schools, health policy

#### A006

##### Outcomes of pharmaceutical care interventions in diabetes care in specialist hospital Sokoto, north-west Nigeria.

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**Background:** Pharmaceutical care intervention developed and implemented carefully by pharmacists in collaboration with other members of the health care team, improves the quality of care and life of patients with a variety of chronic diseases such as diabetes mellitus.

**Objectives:** To determine patients response to pharmaceutical care interventions. To afford all diabetic patients the opportunity for pharmacist interactions and open the road map to collaborative care in advancing the health and well being of diabetics in Specialist Hospital Sokoto.

**Methods:** A total of 32 volunteered patients with diabetes mellitus during the study period were recruited nonrandomly and prospectively with the follow up pre-post clinical study for 6-months. The validated 8-item modified Morisky Adherence scale (MMAS) was used to determine adherence to medications by patients. A range of clinical measures and health related quality of life (Short Form – 12) were evaluated at baseline and up to 6-months. The researcher gave pharmaceutical care to the study patients. The most important outcome

measure chosen was change in HbA1C and percentage of drug therapy problems resolved. An online health calculator was used to estimate changes in 10-year coronary heart disease risk scores in the study patients. Point of Care Tests (PCTs) was used to evaluate a range of clinical measures.

**Results:** The total number of study patients that completed the study was 24. At the end of the research, it was found that a clinically important and statistically significant ( $P < 0.05$ ), reductions in mean values (at base line vs. 6-months) of BMI ( $\text{Kg m}^2$ ) [29.22 vs. 27.52,  $P = 0.017$ ]; HbA<sub>1c</sub> (%) [8.86 vs. 6.85,  $P = 0.018$ ]; SBP (mmHg) [144.32 vs. 128.85,  $P = 0.014$ ]; 10 years CHD risk score (%) [13.03 vs. 10.45]; physical domain score of SF – 12 survey [40.57 vs. 53.72,  $P = 0.002$ ]. Drug therapy problem (84.7%) resolved including adherence to medication problems which accounted for about (29.8%) of the causes of adverse drug reactions.

**Conclusion:** Pharmaceutical care intervention in diabetes mellitus management in Specialist Hospital Sokoto, has shown significant improvements in glucose control, blood pressure and cardiovascular risk scores, as well as, appreciable improvement in percentage of drug therapy problems resolved and health related quality of life of diabetic study patients over the 6-months period.

**Keywords:** Pharmaceutical care, outcomes interventions, diabetes, specialist hospital

#### A007

**Knowledge, Attitude and Practice of Community Pharmacists in the use of Low Osmolarity Oral Rehydration Salts (LO-ORS) and Zinc for the treatment of acute diarrhoea in children under 5 years in Abuja Municipal Area Council .  
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**Background:** Diarrhoea is the passage of three or more loose stools per day. It accounts for nineteen percent of the causes of under-five mortality. Community Pharmacists have been found to be the most accessible care providers and are the first port of call for the generally ill. The current guidelines for the management of childhood diarrhoea recommend the use of low osmolarity oral rehydration salts (LO-ORS) and zinc. It is therefore necessary for the Pharmacist to have the knowledge of the guidelines for their practice.

**Objectives:** To assess the knowledge of Community Pharmacists on the use of LO-ORS and Zinc as the current treatment guidelines for management of acute childhood diarrhoea and to confirm their use of the guidelines.

**Methods:** The study was a descriptive, cross-sectional survey. Data were collated using a questionnaire from one hundred and forty-five participants. Data were analysed using the Statistical Package for Social Sciences software package.

**Result:** Results showed that over ninety per cent of participants had the knowledge of use of LO-ORS and Zinc as the current treatment guidelines. About seventy percent carried out practice related activities for the diagnosis of childhood diarrhoea but only eighteen percent conducted the skin pinch test for the verification of dehydration. Their years of experience and the acquisition of additional qualifications had no association with their knowledge of treatment guidelines.

**Conclusion:** Community Pharmacists have the requisite knowledge for the management of acute diarrhoea in children under five. However, further training will be promising for reduction of mortality in children.

**Key words:** Community Pharmacists, Low Osmolarity Oral Rehydration Salts, acute diarrhoea

## A008

### **Outcomes of pharmaceutical care interventions in type 2 diabetes mellitus patients: a prospective randomized controlled clinical study at annunciation specialist hospital Enugu MC Okafor<sup>1</sup>, CV Ukwe<sup>2</sup>, SI Okorie<sup>3</sup>, AT Muobike<sup>1</sup>, and II Umeakunne<sup>1</sup>**

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**Background:** Although glycemic goals are often not achieved in type 2 diabetes mellitus patients despite the availability of many effective treatments, research has shown that pharmaceutical care interventions by pharmacists can improve the outcomes of care in patients suffering from chronic diseases like type 2 diabetes mellitus.

**Objective:** To assess the outcomes of pharmaceutical care interventions in type 2 diabetic patients treated at Annunciation Specialist Hospital Enugu.

**Methods:** A total of 49 type 2 diabetic patients were recruited into a randomized controlled clinical study. Clinical and humanistic outcome measures were assessed at baseline and up to 6 months. The intervention and control group patients received pharmaceutical care and usual care respectively. The primary outcome measures chosen were changes in glycosylated hemoglobin A1C, adherence assessed using the Morisky Medication Adherence Scale – 8 items and health related quality of life assessed using short form – 12 questionnaire.

**Results:** Forty three (43) patients completed the study. The mean values  $\pm$  standard deviation (P – value) of the control vs. intervention group reduced for glycosylated hemoglobin A1C (%) [ $8.34 \pm 1.38$  vs.  $6.40 \pm 0.65$  (0.000)], but increased for Morisky Medication Adherence Scale – 8 item [ $4.53 \pm 2.47$  vs.  $6.17 \pm 2.06$  (0.025)] and short form – 12 mental domain score [ $47.44 \pm 8.96$  vs.  $54.61 \pm 7.69$  (0.008)]. A p-value < 0.05 was significant.

**Conclusion:** The pharmaceutical care intervention implemented in this study produced clinically important and statistically significant improvements in glycemic control; adherence and health related quality of life of type 2 diabetic patients.

**Keywords:** Pharmaceutical care, type 2 diabetes mellitus : prospective randomized controlled clinical

## A009

### **Health promotion beliefs amongst community pharmacists in Jos, Nigeria. Nasir N<sup>1</sup> and Adeniyi, Ma<sup>2</sup>.**

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**Background:** Health promotion and disease prevention have long been recognised as effective tools towards increasing the quality of life for individuals, eliminating health disparities and improving overall public health. Evidence suggests that utilizing Pharmacists in public health settings helps improve health outcomes, decrease costs and prevent diseases.

**Objective:** To assess the attitude and beliefs of Community Pharmacists in Jos towards health promotion services. Methods: A cross-sectional survey of 70 Community Pharmacists was conducted in Jos. Attitudes towards health promotion services were assessed using a validated and pre-tested Twenty-two item scale. Percentages were used to describe the grouped attitudes. Principal axis factor analysis with Oblimin rotation and Kaiser normalization was



used to determine the dimensions of Community Pharmacists' attitudes towards health promotion services.

**Results:** Most of the study participants had favourable attitudes towards health promotion services. Of the twentytwo items on the health promotion attitude scale, factor analysis extracted four dimensions explaining most of the variability of Community Pharmacists attitudes toward health promotion services. Factor one showed Community Pharmacists' involvement in Health Promotion services was widely accepted. The second factor showed Community Pharmacists' thought they had the skills to effectively communicate with patients. Factor three showed Community Pharmacists perceived health promotion as a mandatory service in their practice and the fourth factor showed they were aware of the need for their involvement in providing such services.

**Conclusion:** Community Pharmacists have a favourable attitude towards an extended role in providing health promotion.

Key words: Health Promotion Beliefs, Community Pharmacists Health Promotion services

#### A010

### Evaluation of some quality parameters of dermatocide-3m soap produced in national veterinary research institute, Vom, Nigeria

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**Background:** The human skin is the interface between the body and the external environment. Therefore, it plays a vital role of protection against disease pathogens, adverse weather and water loss. It is thus susceptible to many insults within and outside the body. These insults can overwhelm the coping capacity of the skin and make it to lose some integrity. When this happens, measures taken to restore the integrity include the use of medicated soaps. Dermatocide-3M is a herbal medicated soap produced in the National Veterinary Research Institute, Vom for the treatment of skin diseases in animals. It is increasingly being used for various human skin diseases.

**Objective:** To determine the suitability of Dermatocide-3M soap for use on human skin.

**Methods:** Soap samples produced monthly for six months were analyzed immediately for some quality parameters (pH, percentage free alkali, total fatty matter, alcohol insoluble content, weight conformity, moisture content and foam height). These parameters were compared with Standards Organizations of Nigeria standards for medicated soaps, East African Standards and Bureau of Indian Standards for toilet soaps.

**Results:** The pH, total fatty matter and moisture content fell within the regulatory limits. The alcohol insoluble matter and total alkali were above regulatory limits.

**Conclusion:** Dermatocide-3M can be classified as grade II soap by the Bureau of Indian Standards and suitable for human use.

The quality of the soap can further be improved by increasing the total fatty matter and reducing free alkali content to make it friendlier to the human skin.

Key words: Dermatocide soap, veterinary, standards, skin

#### A011

### Influence of disease knowledge and treatment beliefs on medication adherence amongst hypertensive patients in a tertiary and secondary health care facilities in southern Nigeria

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**Background** Hypertension is a significant cardiovascular risk factor and is a leading cause of death among non communicable diseases. A number of patient-related barriers to optimizing blood pressure (BP) control have been identified, ranging from lack of patient knowledge, personal beliefs that conflict with hypertension treatment goals, to other patient issues such as social economic status, cultural beliefs, Access to care, psychosocial factors, and health literacy.

**Objective:** This study sought to evaluate the influence of hypertension knowledge, treatment beliefs and medication adherence among hypertensive patients at the university of Benin teaching hospital and Central hospital both in Benin City.

**Methods:** A questionnaire based description cross sectional study. The Morisky Medication Adherence Scale (MMSA-8<sup>®</sup>) was used to assess medication adherence.

**Results:** Two hundred and twenty five patients participated .The mean  $\pm$  SD age of the participants for UBTH and Central Hospital were 58.26 $\pm$ 6.37 and 57.84 $\pm$ 87. More than half of the participants were females (150; 66.7%). Approximately 55.4% of the study sample were considered non-adherent (MMAS-8<sup>®</sup> score of < 2). Test of association of some variables showed that the disease related knowledge and some specific beliefs were significantly associated with non-adherent.

**Conclusion:** There is a direct relationship of disease knowledge on the level of medication adherence and better Bp control. Respondents' belief on the efficacy of medication had higher adherence. Overall, the 44.6% level of adherence found in this study is quite low and does not reflect what is expected in this era of pharmaceutical care.

**Keywords:** Medication adherence, hypertensive patients, knowledge, beliefs

## **A012**

### **Evaluation of the management of type 2 diabetes in Lagos university teaching hospital**

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**Background:** The use and conformance with the recommendations of clinical guidelines is one of the best strategies in the management of type 2 diabetes and is a measure of the quality of care.

**Objective:** To determine the extent to which management of type 2 diabetes in Lagos University Teaching Hospital (LUTH) conforms to 2 international guidelines (American Diabetes Association, National Institute for Health and Care Excellence).

**Methods:** A cross-sectional, retrospective study conducted on 193 patients attending the outpatient diabetes clinic from January 2009 to December 2013 using a pre tested structured data collection form. Adherence to the guidelines were classified as low if <50%, moderate if 50% - 80%, high if > 80%. Descriptive and comparative analysis was conducted using SPSS version 20.0.



**Results:** Metformin was the most frequently prescribed (92.7%) drug and the major comorbidity is hypertension (82.9%). About 91.7%, 0.5%, 80.3% and 17.1% of the patients have complete (100%) adherence to medical History taking, initial monitoring, treatment of Hyperglycemia and follow up monitoring respectively. The mean adherence to physical examination, laboratory evaluation, follow-up monitoring and treatment of compelling indications were  $33.65 \pm 3.4\%$ ,  $62.51 \pm 16.1\%$ ,  $64.35 \pm 19.7\%$  and  $79.36 \pm 19.5\%$  respectively. About 72%, 57.4%, 69.4%. 42.6% of patient met the recommended target for FBS, HbA<sub>1c</sub>, BP and LDL respectively.

**Conclusion:** The adherence to the different components of the clinical guideline showed important variations. Adherence to treatment of hyperglycemia was moderate while targets for LDL and HBAIC monitoring were sub optimal.

**Keywords:** Adherence, Treatment guidelines, Management, Type 2 Diabetes

### A013

#### Assessment of medication errors in a paediatric outpatient clinic of a primary healthcare centre in Lagos A Omoloye and T Fajemirokun

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**Background:** Investigating medication therapy errors in the paediatric population is a concrete safety measure that guarantees little or no exposure to adverse drug effect for vulnerable subjects.

**Objective:** The study aims at evaluating the degree to which medication errors contribute to adverse drug reactions. It also seeks to find the incidence and types of medication therapy errors. This is undertaken by identifying such medications and ascertaining the severity of exposure.

**Methodology:** A 12-month retrospective study involving eighty-five out-patient paediatric prescriptions aged 0-5 years were systematically sampled and the selection was based on the presence of any medication related problem. A concurrent prospective study among consenting thirty six caregivers, using a modified self-assessment questionnaire developed by Levy was also undertaken.

**Results:** The results revealed a non statistical significant correlation between the demography of the subjects and occurrence of medication errors ( $p > 0.05$ ) and errors detected were in the order of; high dosage (25%), ineffective drug (21.4%), low dosage (17.9%), additional drug therapy (15%), unnecessary drug therapy (5.7%) and non compliance (4.3%). Therapeutic groups of serious concern for medication errors were antibacterial (22.8%), antipyretic (22.3%) and antimalarial (19.5%).

**Conclusion:** Though not to any degree of statistical significance, medication errors nonetheless contributed to adverse reactions in the studied population. Also, various types of medication errors, representing the different classes, were found to be present.

**Keywords:** Medication errors, paediatrics, outpatient, primary health centre

### A014

#### An Intervention to Improve Knowledge and Practice of Pharmacovigilance among Healthcare Professionals in Private Hospitals in Lagos State Nigeria

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**Background:** The current thrust of pharmacovigilance (PVG) in Nigeria is creating awareness of spontaneous reporting of Adverse Drug Reactions (ADRs). Spontaneous reporting of ADRs has faced the challenge of under reporting and studies have suggested educational intervention as a way of improving this reporting. The private sector is the first point of contact for most Nigerians seeking health care, considering their number and closeness to the community. Appropriate practice of PVG will require total involvement of the private medical practitioners.

**Objectives:** The study aimed to assess the effect of an educational intervention on the knowledge and practice of Pharmacovigilance among healthcare professionals in private hospitals in Lagos state.

**Methods:** This study involved a cross sectional study using a pre tested self administered questionnaire to healthcare professionals (Doctors, nurses and pharmacists) from selected private hospitals in Lagos state. The questionnaire assessed a baseline knowledge, attitude and practice of PVG. After a five (5) hour training, post-test intervention knowledge was assessed. Reminders for ADR reporting were sent via emails and SMS to respondents. This report presented a 'three month' monitoring of the level and quality of ADR reporting. A paired t-test was used to compare the mean knowledge scores.

**Results:** Pre intervention knowledge and practice was unsatisfactory but at the end of the training, the mean knowledge significantly improved from  $6.59 \pm 2.84$  to  $9.65 \pm 2.04$  ( $p=0.0000$ ). However, the improvement in the knowledge did reflect in the level of reporting as one ADR report has been received within the three months period.

**Conclusions:** Knowledge of PVG can be improved through regular educational intervention but more effective means of follow up and monitoring might be needed to improve levels of reporting of ADRs by these professionals.

#### A015

### Assessment of basic knowledge, skill and attitude of graduating pharmacists to pharmacy informatics at Obafemi Awolowo University, Ile-Ife, Nigeria OJ Ola-Olorun, AE Akinade and MO Afolabi

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**Background:** As part of critical requirements for health-system pharmacy practice models that achieve optimal use of medicines, graduating pharmacists should possess adequate basic knowledge and skill in the acquisition, storage, analysis and dissemination of medication-related information to support practice.

**Objectives:** The objectives of the study were to assess the basic knowledge and skill in, and attitude to, pharmacy informatics among graduating pharmacists of Obafemi Awolowo University, Ile-Ife, Nigeria.

**Methods:** Eighty five graduating students were randomly selected from a population of 100. Pre-tested self-administered questionnaire was used to collect primary data. The instrument sought information on knowledge and skill in application of pharmacy informatics using 'yes' or 'no' responses computed in percentages of the 'yes' alternatives and graded as poor (0-44%), marginal (45-54%), fair (55-69%), good (70-79%) or excellent (80-100%). Students' attitude to pharmacy informatics was measured using a Likert type scale of five (0-4) alternative responses and overall type of attitude computed in mean of weighted averages (MWA) of respondents' scores.

**Results:** The results showed that the level of basic knowledge of pharmacy informatics possessed by the students was poor (33.4%) and their level of skill in its application was marginal (48.6%) but their attitude was positive (MWA=3.29).

**Conclusion:** The study concluded that graduating pharmacists had sub-optimal exposure to pharmacy informatics to meet current international standard for best practices. However, the knowledge, skill and attitude of graduating pharmacists can be improved upon by appropriate modification in the current Bachelor of Pharmacy curriculum.

**Key words:** Graduating pharmacists, pharmacy informatics, pharmacy informatics knowledge, pharmacy informatics skill, attitude to pharmacy informatics

#### A016

##### **Evaluation and Validation of Pictographic Medication Instructions in a tertiary hospital in Southwest Nigeria** **O Odunfa<sup>1</sup>, F Ajayi<sup>2</sup>, R Valliancourt<sup>3</sup>, A Pouliot<sup>4</sup>, A Adediran<sup>5</sup> and T Lawal<sup>2</sup>**

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**Background:** Written medication instructions are often too complex for poorly educated people to comprehend. Pictograms have the ability to simplify medication instructions in improving compliance

**Objectives:** The study aimed to validate a set of pictograms intended to depict medication information

**Methods:** Pictogram comprehension was assessed through structured pre and post interview using a “guessability” test where participant were asked to identify the meaning of a particular image. To be considered validated, a pictogram was to be correctly guessed by at least 85% of the participants. A translucency test was also administered to numerically assess the degree to which participants associate an image to its intended meaning. Participants were made to undergo a “REALM” (Rapid Estimate of Adult Literacy in Medicine) test to identify their level of health literacy

**Results:** The 36 volunteers who participated comprised adults- majorly highly literate and teens who were mostly above 10<sup>th</sup> graders. On the overall, the mean guessability score was 86.5±13.13% initially which rose to 96.3±5.8% on recall interview of the pictographic instructions. The mean translucency score was 6.3±0.53 while suggestions for improvement of the drawings were given about 11.7% of the time. Males and adults had a non-significant higher odd ratios compared to females and teens respectively as regards guessability scores {1.49(0.31-7.13,*p*=0.617), 3.51(0.56-22.12,*p*=0.18)}respectively. A Similar trend occurred with translucency scores{1.25(0.22-7.2,*p*=0.80), 1.68(0.23-12.49,*p*=0.61)}. Pictograms were easily recognized and interpreted correctly by volunteers (*p*= 0.065)

**Conclusion:** The high guessability score presupposes that the pictograms will be an ideal, valid and easily understood tool to be used for explaining medication instructions to patients attending the Federal Medical Centre, Abeokuta **Keywords:** Pictographic medication, tertiary hospital, guessability score

#### A017

##### **The *in vivo* antiplasmodial activity of *Phyllanthus amarus* extracts**

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**Background:** Malaria constitutes a significant public health problem in sub-saharan Africa and especially Nigeria where it accounts for 30-50 % morbidity and 25 % mortality in infants.

**Objective:** This study was to evaluate the *in vivo* antiplasmodial activity of *Phyllanthus amarus* extracts in animal model.

**Methods:** The aqueous and ethanol extracts of *Phyllanthus amarus* whole plant were obtained by maceration and characterized using phytochemical analysis, FTIR, brine shrimp toxicity assay, moisture content and pH. The extracts were administered orally in doses of 200 to 1600 mg/kg/day to Swiss albino mice infected with *Plasmodium yoelii*.

**Results:** The extracts contained alkaloids, tannins, saponins, and anthraquinones and FTIR showed functional groups depicting alkaloid with an indole chromophore. The LC<sub>50</sub> was 431.40 µg/ml for ethanol while aqueous extract had 833.30 µg/ml, moisture contents were within acceptable limits for plant products and pH was weakly acidic. The extracts exhibited significant and dose-dependent chemotherapeutic and chemoprophylactic antiplasmodial effect. The prophylactic outcome was observed to be higher than the therapeutic and the aqueous extract showed a slightly higher effect than the ethanol extract.

**Conclusion:** The extracts of *Phyllanthus amarus* can be further developed for the treatment and prevention of malaria.

**Keywords:** Antiplasmodial, *Phyllanthus amarus*, malaria, chemoprophylactic

## A018

### Evaluation of domestic medical and pharmaceutical waste disposal practices in Uyo, Southern Nigeria

**Emmanuel O. Olorunsola<sup>1\*</sup> and David U. Adje<sup>2</sup>**

**Objective:** This study was aimed at evaluating the domestic medical and pharmaceutical waste disposal practices in Uyo, Southern Nigeria.

**Methods:** The town was demarcated into three zones A, B and C equivalent to the north-eastern area, southern area and north-western area respectively. A total of forty households were selected from zone A, forty households from zone B and sixty households from zone C. Data were collected using questionnaires distributed to the head

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**Background:** Improper waste disposal has become an important aspect of urban management crises with social, health and economic implications. Potential public health risks are particularly associated with improper disposal of medical and pharmaceutical wastes.

or representative of each household. The practice of the households with respect to disposal of sharp medical waste, non-sharp medical waste and unused and expired pharmaceutical products were evaluated.

**Results:** Dumping in garbage receptacles was the predominant method of disposing domestic medical wastes in each of the three zones. This method was also the predominant for disposing unwanted drug products. There was no significant difference ( $p \geq 0.05$ ) in the proportion of households in each of the three zones using this method. Conclusion: The disposal of domestic medical and pharmaceutical wastes especially 'the sharps' does not meet the international standard. Potential public health risk is associated with the predominant method. Wastes dumped in the receptacles must be sorted out as they contain different classes of wastes. This should be followed by appropriate disposal of each class of the wastes.

**Keywords:** Medical waste, pharmaceutical waste, disposal practice

#### A019

### Is primary open angle glaucoma (POAG) a public health issue?

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**Background:** The World Health Organization (WHO) programme for prevention of blindness was created in 1978 following a resolution adopted by world health assembly in 1975. In 1994 world population data indicated that the global magnitude of visual disability were 37.9 million blind and 109.9 million with low vision. In February, 1998, WHO in collaboration with more than 20 international non-governmental organizations involved in eye care launched vision 2020 as a global initiative that aimed at eliminating avoidable blindness by the year 2020.

**Objectives:** This presentation aims to create among pharmacists, awareness and interest in POAG as a global public health issue and knowledge about the drugs used in the treatment of POAG.

**Methods:** A review of the literature on glaucoma using relevant keywords

**Results:** Primary open angle glaucoma (POAG) glaucoma is regarded as a group of eye diseases that is characterized by increased intraocular pressure (IOP) resulting in damage to the optic nerve and retinal nerve fibres, with typical visual field defects and increased optic cup. If left untreated, POAG leads to permanent blindness. POAG is a WHO priority eye disease and was added to public health agenda due to its widespread nature as number one cause of irreversible blindness in the world, difficulties in its early diagnosis, and necessity for lifelong treatment with drugs and surgery.

**Conclusion:** Pharmacists must also be front liners in the formation of glaucoma patient support groups to prevent further loss of sight due to primary open angle glaucoma

**Keywords:** Primary open angle glaucoma (POAG), intraocular pressure, public health, blindness

#### A020P

### Assessment of ART knowledge and adherence to ARVs amongst PLWHA accessing care in two Nigerian military HIV sites

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**Background:** Adherence to highly active antiretroviral therapy (HAART) is a potent predictor of therapeutic effectiveness, both in clinical trials and cohort studies. Non-adherence to HAART can lead to resistance, crossresistance and treatment failure.

**Objectives:** The objective of this study is to evaluate the ART knowledge level and adherence rate of PLWHA receiving care in two Nigerian Military HIV/AIDS sites located in Port Harcourt and Warri respectively.

**Methods:** A cross-sectional study was conducted on HAART respondents receiving care in Military HIV sites in Warri and Port Harcourt using systematic random sampling. Information was obtained from 400 respondents using a semistructured, pretested, questionnaire. Adherence was measured via patients self report using Simplified Medication Adherence Questionnaire (SMAQ). Chi square was used to explore associations between categorical variables. Predictors of adherence to HAART were determined by binary logistic regression. Level of significance was set at  $p < 0.05$ .

**Results:** A total of 400 respondents participated in the survey and majority were aged 31-40(46.4%). Females were 69% while 31% were males. About 60% of the respondents lacked adequate knowledge of ART while only 40% showed appreciable knowledge of ARVs. The adherence level in this study was 63.8%. The major reasons cited for non-adherence were away from home (23.6%), simply forgot (17.1%), busy schedule (14%), and fear of stigmatization (12.7%).

**Conclusion:** The ART knowledge level reported in this study was inadequate and adherence rate was slightly above average. Appropriate adherence enhancing strategy to expand patients' knowledge about ARVs during every counselling session is strongly advocated.

**Keywords:** Antiretroviral therapy, adherence, military, human immunodeficiency virus

**A021P**

**Incidence and management of pre-eclampsia and eclampsia in pregnant women  
in a tertiary health care facility**

**RO Mazai<sup>1</sup> and VU Odili<sup>2</sup>**

**Methods:** This was a retrospective descriptive study conducted using patients' case files from Federal Medical Centre Keffi, Nasarawa State. A data collection form was designed to collect demographic data, laboratory results, medication and clinical outcomes.

**Results:** The incidence of pre eclampsia and eclampsia which was 1 in 67 (1.5%) and 1 in 63 (1.6%) respectively was highest among primigravidae (50%). There was statistically significant positive association between age and

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**Background:** Overall, 10 – 15% of maternal deaths are associated directly with pre-eclampsia and eclampsia in low and middle income countries. It is important to assess the incidence of pre-eclampsia and eclampsia in our local setting.

**Objectives:** To establish the incidence of pre-eclampsia and eclampsia and identify possible predisposing factors.



both systolic and diastolic blood pressure. Pearson correlation ( $r$ ) = 0.3295, (95% CI: 0.2070 to 0.4417 and 0.2074, (95% CI: 0.07811 to 0.3298).  $p < 0.01$  respectively. 71.8% of subjects had no antenatal care while 64.1% had low socioeconomic status. Most patients received Magnesium sulphate either prophylactically or to control fits and the majority 45 (57.7%) had Caesarean delivery. Out of eighty three (83) babies, 47 (56.6%) had birth weight less than 2.5kg, 5(6.02%) had neonatal asphyxia while 12 (14.46%) died. The maternal case fatality was 5%.

**Conclusion:** The incidence of pre-eclampsia and eclampsia in Federal Medical Centre Keffi was 1.5% and 1.6% respectively. The identified predisposing factors were age, parity, poor antenatal history and low socioeconomic status.

**Keywords:** Pre-eclampsia and eclampsia, pregnant women, tertiary health care facility

## A022P

### Drug utilization studies of psychotropic drugs in a Nigerian psychiatric hospital

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**Background:** Assessment of drug use pattern is important to promote the rational use of drugs especially in developing countries.

This study aims at assessing the drug prescription patterns and health facility indicators at the Federal Neuropsychiatric Hospital, Yaba, using the World Health Organization drug use indicators.

**Method:** A retrospective study was carried out to determine the current prescribing practices and health facility indicators at the Federal Neuropsychiatric Hospital Yaba, Lagos, Nigeria. Six hundred patient prescriptions were reviewed from August to December 2013 and data augmented from the Records department.

**Result:** The study involved 336 females and 264 males; most in the age group of 18-40 (67.83%). Average number of drugs per prescription was 3.3 (range 1-7). The percentages of drugs prescribed by generic name and from Essential Drugs List (EDL) were 72.58% and 62.11% respectively. 1.5% of encounters had an injection. Percentage of key drugs available was 85.71% and no copy of EDL or formulary was available. The most commonly prescribed psychotropics were antipsychotics, antidepressants and mood stabilizers accounting for 94.67%, 32.67% and 24.50% respectively of all prescriptions encountered. Anticholinergics had a frequency of 54.5%. The most common psychiatric diagnoses encountered were schizophrenia (35.83%), depression (22%) and psychotic disorders (11.5%). Atypical antipsychotics were more expensive than the typical antipsychotics. The antidepressant paroxetine was the most expensive drug encountered in only five prescriptions while benzhexol was the cheapest drug occurring in 53.12% of the total prescriptions.

**Conclusion:** The study showed polypharmacy, unavailability of Essential drugs List or a hospital formulary and a high use of antipsychotics and the anticholinergic, benzhexol. It also showed a high incidence of schizophrenia and depressive disorders in the facility.

**Keywords:** Drug utilization studies, psychotropic drugs, psychiatric hospital, health facility indicators

## A023P

### Effects of direct-to-consumer advertising on medication choice in Nigeria: a case study of antimalarial drugs.

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**Background:** Direct-to-consumer advertising is one of the most common and prominent types of health communication the public receives though it has both beneficial and detrimental effects.

**Objectives:** To determine any relationship between direct-to-consumer advertising and medication choice and to assess the effects.

**Method:** A cross-sectional analytical study was done in Agege Local Government, Nigeria. 430 respondents aged 18 and above were selected using a self-administered questionnaire. Frequency and cross tabulations were generated and a chi-square test was used to determine significance in the cross tabulated variables.

**Results:** The respondents mean age was  $35.49 \pm 11.31$ . Most (82.2%) of them had treated malaria within 12 months preceding this research and 85.97% were treated in the hospital, 9.36% did self-medication, 3.5% and 1.17% went to the Pharmacy and traditional healers respectively. About half (47.9%) of the respondents that used antimalarial knew about it through the doctor's prescription, 31.3% through television, and 8.2% through pharmacists while 4.7%, 3.5%, 3.2% and 1.2% through drug representatives, medicine dealers, radio and internet respectively. All (100%) respondents with at least secondary education and 50% of those with no formal education had seen/ heard of antimalarial advertisement. About 75.5 % of respondents were influenced by advert to buy antimalarial ( $p=0.000$ ).

**Conclusion:** Direct-to consumer advertising influences patients' decision on antimalarials. It is recommended that Pharmaceutical companies ensure ethical advertising that demonstrates the benefits of drugs without ignoring possible side effects.

**Key words:** Direct-to-consumer advertising, medication choice, antimalarial drugs.

#### A024P

### Assessing the quality of pharmaceutical care in an out-patient pharmacy OR Aghaebe and OC Azuka

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**Background:** The implementation and practice of pharmaceutical care as a patient oriented service is supported and improved by measuring and assessing pharmaceutical care activities utilizing the conceptual framework of continuous quality improvement.

**Objective:** To assess the quality of pharmaceutical care in the out -patient pharmacy of Nyanya General Hospital using predetermined indicators after establishing the existence of pharmaceutical care behaviour in the hospital.

**Methods:** The existence of pharmaceutical care behaviour was established from the literature followed by a patient satisfaction survey and drug specific analysis. Data were obtained from patients who visited the hospital within the period of the study. An educational intervention tagged *Pharmaceutical Care Conference* to improve the ability of pharmacists to render pharmaceutical care was described and evaluated.

**Results:** The patient satisfaction survey revealed that 91.1% strongly agreed that services were excellent while 84.5% opined that certain aspects need improvement. The drug specific survey showed that 92.8% of the prescribed drugs were dispensed, average number of drugs per prescription was 2.3, 57% by generic names. 83.1% from essential drugs list, injections 2.7% and antibiotics 29.7%. Responses to questions on drug use were positive. The educational intervention improved the knowledge, attitudes and confidence of pharmacists.

**Conclusion:** There is an above average pharmaceutical care behaviour in Nyanya General Hospital Outpatient Pharmacy. The drug use is rational, and patients are generally satisfied with the pharmaceutical care services but there is need to improve certain areas of the practice.

**Keywords:** Pharmaceutical care, out-patient pharmacy, general hospital

#### A025P

### Adherence to antiretroviral therapy among adult persons living with HIV/AIDS in tertiary hospitals in Bayelsa state, Nigeria.

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**Background:** A high level ( $\geq 95\%$ ) of adherence to Highly Active Antiretroviral Therapy by Persons Living With HIV/AIDS (PLWHA) is required to achieve full and durable viral suppression, lower risk of drug resistance and reduce morbidity and mortality.

**Objectives:** To determine the adherence level and factors that may influence adherence among PLWHA in Bayelsa State.

**Methods:** A cross-sectional study of 601 adult Persons Living With HIV/AIDS receiving Anti-Retroviral Therapy at the two tertiary hospitals in Bayelsa State was conducted using a structured, pre-tested questionnaire. Data was analyzed using SPSS this is a tool not analytical method and Chi-square. Levels of significance was set at  $p \leq 0.05$ .

**Results:** Of the 601 participants, about 73.4% ( $n = 441$ ) had  $\geq 95\%$  adherence, while 31.4% ( $n=189$ ) had 100% adherence. Major reasons for missing drugs were forgetfulness (36.1%), too busy (14.5%), side effects and felt better (6.7%). Sex, age, marital status, educational level, employment status, depression, Knowledge of HIV and Antiretroviral Therapy, Antiretroviral drug Regimen and Duration on Antiretroviral drugs significantly affected adherence level. Disclosure of status to family, to friends and frequency of alcohol use did not significantly affect adherence level.

**Conclusion:** The adherence level in this study, though encouraging compared to those found in other parts of Nigeria, still needs improvement. Therefore, a structured practical adherence monitoring system and procedure to identify and address barriers to adherence needs to be institutionalized.

**Key words:** Adherence, antiretroviral therapy, persons living with HIV/AIDS, tertiary hospitals

#### A026P

### Evaluation of factors influencing pattern of self medication among pregnant women in Abia state

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**Background:** Self-medication is common among pregnant women and the danger of this, on the developing foetus is incontrovertible. Although, women are usually educated on the health implications, the prevalent rate of self-medication is high in our environment.

**Objectives:** The purpose of this study was to evaluate the pattern of self medication among pregnant women attending Antenatal clinic in Abia State.

**Methods:** In this descriptive cross-sectional study, 412 pregnant women attending antenatal clinic at various levels of health care (primary, secondary and tertiary centers) in Abia State, Nigeria were randomly selected and then interviewed through a pretested, self-administered, semi structured questionnaire. Frequencies and percentages were calculated, tables were created and comparisons of categorical data were done using descriptive methods.

**Results:** The results indicated that 244 out of 412 of the women under the study have practiced self-medication during their current pregnancy giving a prevalence rate of 59.7%. The most common complaints for which they did so were perceived malaria fever, aches and pain. The most common reasons for self-medication were prior experience with the condition, the fact that it saves money and time. The patent medicine dealers were the commonest source of medications. There was a significant relationship between self-medication practices, place of residence, age, education level, employment status, monthly income and parity level.

**Conclusion:** Self-medication calls for concern among pregnant women in our society, as evidence abound that the potential adverse outcomes associated with self medication is unknown especially on the developing foetus.

**Keywords:** Self medication, pregnant women, antenatal clinics

#### A027P

### Evaluation of performance measurement tools in health quality improvement: a case study of HIV programme of Nigeria ministry of defence AK Okechukwu

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**Background:** The performance of special skills in the Management of HIV/AIDS involves Continuous Quality Improvements. It is expected that facilities involved in HIV Programme should obtain perfect or close to perfect scores in various Performance Measurement tools, when evaluated.

**Objectives:** The objectives of the study were to assess Performance/Health Quality Improvements and to determine the level of patients' satisfaction in Nigeria Ministry of Defence HIV Programme in DHQ Medical Centre, Abuja.

**Methods:** Qualitative method involving Patients' Satisfaction Survey (using Questionnaires) and quantitative method (audits of medical records of randomly sampled HIV Clients, evaluation of Logistics of HIV Commodities and Program Management), to measure Performance based on Nigeria Qual Indicators/Tools were done.

**Results:** Patients' Level of Satisfaction was very high in the Quality of Care they receive. Also, there is appreciable Health Quality Improvement, as many performance measures were close or equal to 100%.

**Conclusion:** The level of Health Quality Improvements in DHQ Medical Centre is encouraging. The Performances of healthcare providers and organizations in the HIV Programme were high. Also, Patients are generally satisfied with the Quality of Care in DHQ Medical Centre.

**Keywords:** Health quality improvement, HIV programme, performance measures

#### A028P

### Hypertension-related knowledge and lifestyle practices amongst hypertensive patients in tertiary health care facilities in Jos. CR Okunlola,<sup>1</sup> and MA Adeniyi<sup>2</sup>

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**Background:** Hypertension is the commonest non-communicable disease and the leading cause of cardiovascular disease in the world. It is a major contributor to morbidity and mortality in sub-Saharan Africa, hence the need for its timely prevention, detection, treatment and control.

**Objective:** To assess hypertension related knowledge and lifestyle practices amongst hypertensive patients in tertiary health care facilities in Jos.

**Method:** This study was conducted among hypertensive patients in Plateau State Specialist Hospital and Bingham University Teaching Hospital, Jos with the aid of a pretested structured questionnaire. It was a descriptive cross-sectional survey of 275 patients and systematic random sampling was adopted. Data was analysed with simple percentage, mean and standard deviation, and chi-square statistical tools with the aid of Statistical Package for Social Sciences (SPSS) v. 20.0.

**Results:** One hundred and sixty-two (59.8%) of hypertensive patients in the study had a significantly high knowledge of hypertension while 59.6% of the study population had high hypertension-related practice levels. In addition, 81% believed hypertension is caused by witches and wizards and 70% believed that treatment could be stopped when symptoms are absent. The study showed that gender, religion, marital status, education level, occupation, and duration of hypertension were not significant factors that affected hypertension related knowledge. Patient compliance to antihypertensive therapy had a significantly high percentage (82.2%).

**Conclusion:** Hypertensive patients in the tertiary healthcare facilities in Jos, demonstrated high levels of hypertension related knowledge and lifestyle practices and compliance to antihypertensive therapy.

**Keywords:** hypertension, tertiary health facilities, lifestyle practices.

#### A029P

### Evaluation of self-medication practices among health personnel at military hospital, Awolowo road, Ikoyi, Lagos. MO Chibututu<sup>1</sup> and O Awodele<sup>2</sup>

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**Background:** Antiretroviral therapy has proved effective in reducing the rates of Mother-to-Child Transmission of Human Immunodeficiency Virus (HIV) to very low levels not only in resource-rich countries but also in some resource-limited contexts.

**Background:-** Self medication is a familiar, convenient and inexpensive way of maintaining one's own health if practiced responsibly. It is, however, not completely safe and is prevalent among health personnel despite knowing its negative consequences and potential risks.

**Objectives:-** This descriptive cross sectional study was aimed at evaluating the self medication practices of health personnel at Military Hospital, Awolowo Road, Ikoyi through documentation of reasons for the practice, drugs used and conditions treated through self medication. It was also aimed at determining if the practice of self medication was responsible or irresponsible.

**Methods:-** A pretested semi-structured, self administered questionnaire was distributed to two hundred and six eligible health personnel all of whose completed questionnaires were retrieved. Data contained therein were fed into Statistical Package for Social Sciences and analysed using chi square test.

**Results:-**Self medication was practiced by nearly half of the respondents. Reasons for self medication were illness not serious, convenience, hospital cost and lack of time. Antibiotics, analgesics and antimalarials were the most common category of medicines used followed by cough medicines, sleeping tablets, tramadol, herbal medicines, vitamins.

Common conditions treated include headache, fever, cold, cough, and body ache.

There was a statistically significant association ( $p \leq 0.05$ ) between the specialty of respondent and category of medicines used for self medication

**Conclusion:-**There was high prevalence of self medication among all the categories of health personnel in this study especially amongst doctors, nurses and pharmacists. Antibiotics, analgesics and antimalarials were among drugs mostly used for the practice.

**Key words:** Evaluation, self-medication, practices, health personnel, military hospital

#### A030P

### Outcome of a prevention of mother-to-child transmission (PMTCT) of HIV infection programme

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**Objectives:** The objective of the study was to assess the outcome of Prevention of mother-to-child transmission of HIV (PMTCT) programme in Karshi, Abuja, Nigeria.

**Methods:** This was a retrospective descriptive study. Data from hospital records of HIV-infected pregnant women who accessed care in July, 2010-December, 2013 at Karshi General Hospital service for prevention of mother-to-child transmission (PMTCT) were evaluated. Data were obtained from PMTCT registers, Ante-natal care folders of mothers, children follow-up registers and children's PCR (polymerase chain reaction) result register. The main outcome measure was HIV transmission to infants and breastfeeding practices.

**Results:** There were 326 mother-infant pairs included in this study. HIV infection was confirmed in 12 (3.7%) infants using PCR while 314 (96.3%) infants were uninfected. HIV transmission from mother to infants was lower in infants who underwent the full PMTCT programme. Exclusive breastfeeding was the main breastfeeding practice employed by most PMTCT mothers. Majority of the infants were lost-to-follow-ups.

**Conclusion:** The PMTCT programme at Karshi General Hospital effectively reduced the number of HIV infected infants from HIV positive mothers to less than 5%.

**Key words:** Prevention of mother-to-child transmission (PMTCT), HIV, pregnant women, general hospital

#### A031P

### Evaluation of antihypertensive drug use in pregnant women in Lagos university teaching hospital

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**Background:** Hypertensive disorders are the most frequent medical complications of pregnancy and are a major cause of maternal mortality worldwide. The goal of antihypertensive therapy is to protect the mother from the extremes of hypertension and morbidity, and at the same time protecting the growing fetus. Targeted medication use evaluation is therefore necessary to allow successful control of inappropriate prescribing.

**Objectives:** To evaluate antihypertensive drug use in pregnant women of Lagos University Teaching Hospital attending antenatal clinic.

**Methods:** This study was a twelve-month retrospective, descriptive cross-sectional study of hypertensive pregnant women attending antenatal clinic at the outpatient department (OPD) of the Lagos University Teaching Hospital. 139 case notes of these patients were used to study the antihypertensive drug use in pregnant women using one single visit.

**Results:** Diagnosis ranged from gestational hypertension (33.8%) severe hypertension (17.3%), 99% received antihypertensive drugs, most commonly prescribed were Methyldopa, Nifedipine, and Labetalol. The mean number of antihypertensive prescribed per prescription was 2.59. 87% of the antihypertensive drugs were written in generic name, 91% of the antihypertensive drugs prescribed complied with the WHO list, While 60.9% was in the local formulary. Prescribing error was 12%. Pharmacist intervention was 1%. There was a statistically significant ( $p=0.001$  at 5% level of significance) relationship between parity and diagnosis.

**Conclusion:** Antihypertensive drug use in pregnancy in LUTH is inadequate and interventions to reduce medication errors were seriously insufficient. The incidence of poly pharmacy was high. Irrational prescriptions were few.

**Keywords:** Antihypertensive, drug use, pregnant women, teaching hospital

#### A032P

### An evaluation of pharmacy students' knowledge and perceptions of pharmacovigilance activities in Nigeria KP Osemene and MO Afolabi

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**Background:** In spite of the use of the Modified-Prescription Event Monitoring (M-PEM) technique to facilitate the understanding and reporting of pharmacovigilance (PV), PV activities are misunderstood among pharmacy students in Nigeria.

**Objective:** To evaluate pharmacy students' knowledge, perceptions on PV and assess the demographic factors related to PV activities.

**Methods:** The study was undertaken in three Universities in February, 2015 with due permission from the Institutions and consents from respondents. Questionnaires were used to elicit information on the study objectives. Demographic variables were presented with descriptive statistics. Inferential statistics were used to test formulated hypotheses and for group comparisons at  $P < 0.05$ .

**Results:** Results were presented using the STROBE Statement. Response rate was 98.3%. Sixty-five per cent of the students were males. Mean age of students was  $25.5 \pm 4.3$  years. Mean score on their knowledge of pharmacovigilance activities was  $6.0 \pm 0.18$  which was significant according to gender ( $P=0.0001$ ), students' University ( $P=0.001$ ) and previous exposure to teaching subjects in PV ( $P=0.001$ ). Ninety per cent of the students

did not know the organization that collates adverse drug reactions (ADR) reports. More than 50% of the students could not classify ADR types.

**Conclusions:** Nigerian pharmacy students have inadequate knowledge of PV activities. This knowledge gap may be redressed with due emphasis on courses relevant to PV in the Pharmacy curriculum. Results from this study, may not be generalized because cross-sectional studies are less effective in establishing causal relationships between groups. Also, sampling and confounding bias cannot be completely ruled out.

**Keywords:** Pharmacy students, adverse drug reactions, pharmacovigilance, Nigeria.

#### A033P

### Evaluation of the knowledge and attitude of hospital pharmacists towards HIV/AIDS in Ahmadu Bello University Teaching Hospital, Zaria

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**Methods:** This cross sectional descriptive study was conducted among all the hospital pharmacists working in the teaching hospital pharmacy by the use of self-administered questionnaires. Data was analyzed using Epi-info version 3.5.3 software. Students t-test and ANOVA was used at 95% confidence interval.

**Results:** Pharmacists in the age group (51-60 years) who had risen to the rank of chief pharmacist had the highest mean knowledge score (7.7) and attitude scores (5.9). There was a positive trend between increasing educational qualification and mean knowledge score. Respondents who had the most educational qualification (B.Pharm, Masters and Fellowship) had the highest mean knowledge score of 8. Overall pharmacists had a positive attitude towards HIV/AIDS patients (mean attitude score 5.31/6).

**Conclusion:** The mean knowledge and attitude score of the pharmacists was good and values generally increased with age, educational qualification, rank and number of years of service with males having slightly higher scores.

**Keywords:** HIV/AIDS, knowledge, attitude, hospital pharmacists.

#### A034P

### Perception and Attitude of Nigerian Parents to Community Pharmacist's role in early treatment of Childhood Illnesses in Ibadan, Nigeria

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**Background:** Though pharmacists are not at high occupational risk for contracting HIV/AIDS, their integral role in maintaining the quality of care and treatment in HIV/AIDS patients has evolved over the years. To provide pharmaceutical care, pharmacists need to possess the requisite skills, attitude and knowledge about HIV/AIDS.

**Objectives:** To establish level of knowledge and attitudes of hospital pharmacists regarding HIV/AIDS vis-a-vis sociodemographic variables, level of highest educational qualification achieved and number of years of experience.

**Background:** Nigeria, the world's most populous black nation, has an estimated children population of fifteen million below the age of five years old (0 to 5 years). Nigeria's Child Mortality Rate (CMR) is one of the world's highest (140 deaths/1,000 live births). Major causes of child deaths are treatable and preventable diseases such as pneumonia, malaria, diarrhea, acute respiratory infections, vaccine preventable diseases and HIV/AIDs.

**Objectives:** This study assessed the perception and attitude of Nigerian parents to the Community Pharmacist (CP) in early treatment of childhood illnesses. The study specifically evaluated respondents' awareness of the CP, confidence in the CP, and the perceived impact of the CP in early, effective treatment of childhood illnesses.

**Methods:** 420 Nigerian parents were surveyed using convenience sampling in Ibadan metropolis. Respondents' demographics and perception of the Community Pharmacist was gathered using a 21-item Likert-rated questionnaire. Descriptive statistics were computed on demographics and questionnaire items. Chi test was used for Inferential statistics.

**Results:** There was a positive perception and attitude among parents towards the CP. Awareness of the CP ( $2.18 \pm 1.01$ ), confidence in the CP's ability ( $2.54 \pm 1.01$ ) and perceived impact of the CP ( $2.40 \pm 1.10$ ). Strong association ( $p \leq 0.05$ ) existed between awareness and confidence of the CP and between confidence and impact of the Community Pharmacist.

**Conclusion:** Nigerian parents have a positive perception of the Community Pharmacist's roles in early treatment of childhood illnesses. There is opportunity to strengthen CP impact by increasing awareness and implementation of Pharmaceutical Care.

**Key words:** Perception, Attitude, Community Pharmacist, Nigerian Parents, Childhood Illnesses

#### A035P

#### An assessment of pharmacists' counseling interventions in NNPC hospital, Victoria island, Lagos.

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**Background:** Errors in patient medications have increased over time, due to increased volumes of prescriptions and an inadequate number of pharmacists to attend to them. Pharmacists, already being overburdened with the huge volume of prescriptions, have logistics and administrative duties to perform. Pharmacists often neglect to sufficiently counsel these patients because of their heavy workload, leading to increased number of dispensing errors.

**Objective:** To assess and evaluate the attitudes, perception and behaviors of pharmacists towards the use of counseling as a tool in pharmaceutical care in a hospital in Lagos State, Nigeria.

**Method:** Thirty five (35) pharmacists in the hospital pharmacy were interviewed using a 25- item self-completion standardized questionnaire. A univariate comparison of proportions and percentages using chi-square test was done for relevant variables. All analysis was carried out using statistical packages for social sciences (SPSS), version 20.0.

**Results:** Majority (54.3%) of the respondents were within the age grade (20-25). Some of them (2.9%) did not think that maintenance of patient medication records was necessary. 17.2% of the respondents did not think that counseling could prevent adverse drug reactions while others thought otherwise. 54.3% thought that lack of time was a deterrent. 5.8% believed that counseling did not improve healthcare. 20% were not sure if counseling was to be financially compensated.

**Conclusion:** Lack of time was the major factor deterring pharmacists from counseling as well as pharmacists' lack of understanding of pharmaceutical care.

**Keywords:** Attitude, counseling, pharmacists.