WAJM

WEST AFRICAN JOURNAL OF MEDICINE

ORIGINALITY AND EXCELLENCE IN MEDICINE AND SURGERY

BOOK OF ABSTRACTS OF WEST AFRICAN COLLEGE OF PHYSICIANS (WACP)

NIGERIA CHAPTER

44TH/45TH ANNUAL GENERAL & SCIENTIFIC MEETING

DATE: 12TH - 16TH JULY, 2021.
ABUJA, NIGERIA

WEST AFRICAN JOURNAL OF MEDICINE

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WEST AFRICAN JOURNAL OF MEDICINE

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West African Journal of Medicine, *ISSN 0189-160X* is published by the West African College of Physicians and the West African College of Surgeons. The Journal accepts articles in English and French. WAJM is indexed/abstracted in EMBASE, Excerpta Medica, Medline/Index Medicus, African Journals on Line and African Index Medicus amongst
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The West African Journal of Medicine (WAJM), a joint publication of the West African College of Physicians
and the West African College of Surgeons, is for clinicians, scientists and others interested in the field of medicine and the medical sciences. The Journal which accepts articles in English and French is indexed/ abstracted in EMBASE, Excerpta Medica, Medline/Index Medicus, African Journals on Line and African Index Medicus. The mission of WAJM is to educate clinicians, improve the life and care of patients, stimulate and disseminate findings from

General information

research in medicine and allied biomedical sciences and related areas and provide a

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INFORMATION FOR CONTRIBUTORS

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Section D: Reviews and Meta-Analyses Detailed systematic and critical evaluation and meta-analysis of the literature on clinical practice topics, drug therapy, mechanisms of disease, current concepts on clinical topics, or other topics of scientific or clinical interest. These will normally be submitted on request but the EIC will also entertain unsolicited contributions. Maximum length should be 5,000 words and should contain sub-headings (maximum three sub-sub heads). Maximum number of 60 references and 10 Tables/illustrations.

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Section F: Editorials and Commentaries Editorials and commentaries are normally commissioned. However, unsolicited ones are welcome and subject to routine assessment. The theme should be topical or on papers published in the Journal. The maximum length should be 1,000 words with no more than 20 references.

Section G: Correspondence Letters to the Editor should contain a maximum of 600 words, five references and no more than two illustrations and/or tables. Letters may be on matters concerning clinical observations, other matters of clinical relevance or reactions to articles published in the Journal. Correspondence should be typed double spaced and submitted in duplicate by e-mail. Accepted letters may be edited before publishing.

SECTION H: Miscellaneous These include book reviews, prose (100 words) and poetry (60 lines), socio-political issues related to medical care and personal opinion or issues for debate (maximum 2,000 words).

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Type manuscript in English or French with double spacing all throughout (and for hard copies, white bond paper with 3 cm margins. The paper should be set out as follows: (a) Title page, (b) Abstract, (c) Keywords, (d) Abbreviations (d) Text [Introduction; Subjects, Materials and Methods; Results and Discussion], (e) Acknowledgement, (f) Duality of Interest, (g) References, (h) Tables, (i) Figures, and (j) Legends to figures and Tables. Number the manuscript pages consecutively starting from the title page through the tables. Each of these

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Present units of scientific measurements in the units in which the research was conducted (with the conventional or SI equivalents in parentheses) in the text. In a table or figure, a conversion factor should be provided as a footnote.

ACKNOWLEDGMENTS

Acknowledgement of general, financial and material support or technical and secretarial help etc. should be indicated at the end of the main text. It is the responsibility of the authors to obtain consent of those being acknowledged.

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At the end of the article the full list of references should give the surname and initials of all authors unless there are more than six, when only the first six should be given, followed by et al. The author's name should be followed by the title of the article, the title of the Journal abbreviated as in Index Medicus, the year

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Journals: List all authors when six or fewer; when seven or more, list first six and add et al

1. *Standard article:* Musumuta G, Miakama T, Okoro P. Pneumonia in Lagos Children. West Afr J Med 1997;234:45–49.

2. *Special format:* Letters or abstracts: As for articles with Letter or Abstract Oshare, EO. Tetanus in Lagos (letter) Niger Med J 1988; 1: 301.

3. *Books:* List all authors or editor when six or fewer: when seven or more, list the first six and add et al.

1. *Author of a Book*
Makamer EN. Diabetes mellitus for Medical Students. 6th ed. Nairobi. Princess Publisher; 1990.

2. *Chapter in a Book*
(Note: Previous Vancouver style had a colon rather than a p before pagination). Phillips SI, Whisnant JP. Hypertension and stroke. In: Laragh JH. Brenner BM, editors. Hypertension: pathophysiology, diagnosis and management. 2nd ed. New York. Raven Press; 1995. p. 465 – 78.

(4) *Volume with supplement*
Shen HM, Zhang QF. Risk assessment of nickel carcinogenicity and occupational lung cancer. Environ Health Perspect 1994:102 (Suppl) 1275–82.

(5) *Issue with supplement*
Payne DK, Sullivan MD, Massie MJ. Women's psychological reactions to breast cancer. Semin Oncol 1996; 23(1 Suppl 2):89–97.

(6) *Volume with part*

Ozben T, Nacitarhan S, Tuncer N, Plasma and urine sialic acid in non-insulin dependent diabetes mellitus. Ann Clin Biochem 1995; 32(Pt.3):303–6.

(7) Type of article indicated as needed
Enzensberger W, Fischer PA. Metronome in Parkinson's disease (letter). Lancet 1996; 347:1337.

(8) Personal author(s)
Ringsven MK, Bond D. Gerontology and leadership skills for nurses, 2ⁿᵈ ed. Albany (NY). Delmar Publishers; 1996.

(9) Editor(s), compiler(s) as author
Norman IJ, Redfern SJ, editors. Mental health care for elderly people. New York. Churchill Livingstone; 1996.

(10) Conference proceedings
Kimura J, Shibasaki H, editors. Recent advances in clinical neurophysiology. Proceedings of the 10th International Congress of EMG and Clinical Neurophysiology. 1995 Oct 15-19, Kyoto, Japan. Amsterdam: Elsevier, 1996.

(11) Conference paper
Bengtsson S, Solheim BG. Enforcement of data protection, privacy and security in medical informatics. In: Lun KC, Degoulet P. Piemme TE, Rienhoff O, editors. MEDINFO 92. Proceedings of the 7th World Congress on Medical Informatics 1992 Sep 6-10: Geneva, Switzerland. Amsterdam: North Holland, 1992. p.1561 – 5.

(12) Dissertation
Chaplain SJ. Post-hospital home health care: the elderly's access and utilization (dissertation). St Louis (MO): Washington Univ. 1995. The Holy Bible. King James version. Grand Rapids (MI): Zondervan Publishing House; 1995. Ruth 3:1 – 18. 1973.

(13) Electronic Material
Journal article in electronic format Morse SS. Factors in the emergence of infectious diseases. Emerg Infect Dis (serial online) 1995 Jan-Mar (cited 1996 Jun 5); (1):(24 screens); Available from: URL: http/www.cdc.gov /ncidod/EOD/eid.htm.

(14) Monograph in electronic format
CDI, clinical dermatology illustrated (monograph on CD-ROM), Reeves JRT, Maibach H. CMEA Multimedia Group, producers. 2nd ed. Version 2.0 San Diego. CMEA: 1995. Hemodynamics III the ups and downs of hemodynamics (computer program). Version 22. Orlando (FL). Computerized Educational Systems, 1993. For full reference information see Reference 1 given below. It is the responsibility of authors to ensure the accuracy of cited references.

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The criteria for authorship are as expressed in the Uniform Requirements (1) which state that "authorship credit should be based only on substantial contribution to":
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DOCUMENTS CITED
1. International Committee of Medical Journal Editors. Uniform requirements for manuscript submitted to Biomedical Journals. http:// www.icmjc.org/urm_full

2. 41st World Medical Assembly. Declaration of Helsinki's recommen-dations guiding Physicians in Biomedical Research and involving human subjects. Bulletin Pan-American Health Organisation.1990; 24: 606–9.

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The Journal is increasingly taking on its role in postgraduate medical education. To this end we solicit review articles in specialized areas of medicine, surgery, dentistry, basic medical sciences and medical education including continuing medical education. If you need further information, please contact the EIC. Those wishing to write for us, should contact the EIC to intimate him about the chosen subject before submitting.

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WEST AFRICAN JOURNAL OF MEDICINE

ABSTRACTS

WEST AFRICAN COLLEGE OF PHYSICIANS (WACP)

COLLÈGE OUEST AFRICAIN DES MÉDECINS (COAM)

44TH/45TH ANNUAL GENERAL & SCIENTIFIC MEETING

44E/45E ASSEMBLÉE GÉNÉRALE ET SCIENTIFIQUE ANNUELLE

**THEME: NIGERIAN HEALTH INDICES:
CHALLENGES AND PROSPECTS IN A CONTEMPORARY WORLD**
Indices De Santé Nigériens: Enjeux Et Perspectives Dans Un Monde Contemporain

**Date: 12th - 16th July, 2021.
Venue: NAF Conference Centre, Abuja.**

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WEST AFRICAN JOURNAL OF MEDICINE

FROM THE EDITOR-IN-CHIEF

With great pleasure, we present this book of abstracts from the combined 44th and 45th Annual General and Scientific Meeting of the Nigerian chapter of West African College of Physicians (WACP) which held at Abuja, The Federal Capital Territory.

The health care sector in Nigeria, and indeed globally, has passed through adverse challenges with the COVID-19 pandemic. A number of physicians and other health care providers have lost their lives. In addition, the exodus of health care workers from the country to other climes continue unabated. In spite of these challenges, it is indeed commendable that the Nigerian chapter of the WACP has been able to put up the conference. We congratulate the new Executive of the chapter and also express sincere appreciation to the outgoing executive for maintaining the culture of excellence. We commend the Chairman and Secretary of the Local Organizing Committee (LOC), the Chairman of the Scientific Committee and all the other members of the LOC for their doggedness and proactivity in organizing the conference and facilitating this publication. We welcome this partnership and hope that these abstracts will develop into full peer reviewed articles that can be published in the WAJM and other reputable international journals.

It is also heart-warming that the members of the chapter continue to demonstrate commitment and resilience in contributing their quota towards the provision of qualitative health care and the advancement of the frontiers of knowledge. This is demonstrated by the rich output of abstracts of various studies and reports addressing a wide array of issues across the different medical specialties.

Some of the issues covered include; health policy matters, health care financing, the Covid-19 pandemic, reproductive health issues including family planning, malaria prevention and diagnosis, different cardiovascular, respiratory, gastroenterological and mental health conditions, among others.

The structure and quality of the health system of any nation is a major determinant of her health indices. The COVID pandemic had in a way, brought to the fore, the obvious inadequacies with the Nigerian health systems. This was underscored by the findings from the study by Akinyemi et al., on the Nigerian Health System's response to the COVID-19 pandemic. It was highlighted that adequate response was hampered by a health system already weakened by paucity of three key elements i.e., funding, human resources and infrastructure.

Also worthy of particular note are the studies which elucidated the impact of the COVID-19 pandemic on families and some of its clinical and laboratory manifestations. In a survey, Ezenwoko et al. reported a high prevalence of Intimate partner violence among partners during the pandemic-associated lockdown and restriction of movements. Oreh and co-workers highlighted the presence of abnormal alterations in the liver function of affected patients while the study by Anaba documented the pattern of acute dermatological manifestations of the disease which were uncommon and dependent on the severity of the infection.

We want to once again use this medium to ask for the continuous support of our members towards the sustained growth of the WAJM. In spite of the challenges, we've been able to attain and ensure the monthly publication of the journal, and with your support, we will continue to sustain the momentum. We solicit that all Faculties in the WACP will continue to subscribe to the journal and encourage their various institutional libraries to follow suit. We wish the entire members a very constructive and engaging conference.

Prof. G. E. Erhabor,

Editor-In-Chief

West African Journal of Medicine (WAJM)

GOODWILL MESSAGE FROM THE
CONFERENCE ORGANIZING COMMITTEE

This is indeed a unique conference as it is going to be a joint 44th and 45th AGSM of the College. Abuja was given the hosting rights of the 44th AGSM, which was scheduled to hold in July 2020. However, the meeting had to be postponed because of the outbreak of the Covid -19 pandemic and the resulting restrictions and social distancing measures instituted by the government across the country, which made it impossible for the meeting to hold as planned. Some of these restrictions still persist, making it still necessary to limit the number of delegates attending the meeting physically. As a result, the joint 44th and 45th AGSM would hold as a hybrid meeting, with both physical and virtual attendance, the first of its kind in the college history.

We are there therefore delighted that despite the Covid-19 pandemic challenges, academicians, clinicians and scientists from all over the country have produced presentations of original works and research for our conference, and publication in the highly respected West African Journal of Medicine. I have no doubt that readers would find the articles very enriching and useful to the body of knowledge.

The theme of this year's conference is "Nigeria's Health Indices: Challenges and Prospects in a Contemporary World". Despite being blessed with tremendous human resources, with scores of highly rated experts in all specialties and subspecialties of medicine across the various regions of the country, Nigeria still parades dismal key health sector indicators. The challenges and impediments to improving these indices, the role of the public and private health sector in improving our health indices and the prospects of achieving this are some of the issues to be addressed by eminent personalities and key stake holders. There would also be workshops, panel discussions and lectures to address the various sub-themes, which include Work life balance for physicians, Covid-19 challenges and safety health practices and Health care financing opportunities in Nigeria.

The AGSM promises to be an exciting, engaging and exhilarating one and all have been encouraged to participate fully so as to optimize their presence in the beautiful city of Abuja.

Dr Akin Moses
*Chairman, Conference Organizing
Committee, Abuja 2021*

WACP/COM1: DETERMINANTS OF CATASTROPHIC OUT-OF-POCKET HEALTH EXPENDITURE AMONG HOUSEHOLDS IN MISAU LOCAL GOVERNMENT AREA, BAUCHI STATE

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Introduction: Out-of-Pocket (OOP) is the most common means of healthcare financing in Nigeria. Evidence shows that OOP is the most inefficient, inequitable and regressive form of healthcare financing. Consequences of OOP are of great concern to all policy makers worldwide.

Objectives: This study sought to assess the prevalence and identify determinants of catastrophic out-of-pocket health expenditure among households of Misau Local Government Area in Bauchi state.

Materials and Method: Using a mixed-methods design, pre-tested interviewer-administered structured questionnaires were administered to a cross-section of households in Misau Local Government Area(n=348), complemented with 8 sessions of focus group discussions with household heads. Information on source of income, household spending on non-food and purchase of healthcare services were obtained.

Results: Almost a fifth (16.7%, n=58) of the households faced catastrophic OOP health expenditure. Risk of catastrophic OOP expenditure was higher among households whose heads were not formally educated compared to those who had formal education (aOR:3.80, 95% CI: 1.76-8.32), and among unemployed household heads compared to their employed counterparts (aOR:2.1 95% CI: 1.20-3.60). Focus group discussion themes revealed presence of chronic illness among household members, children less five years and pregnancy related health care to be significant contributors of household catastrophic OOP health expenditure.

Conclusion: Heath care financing in Misau like other part of Nigeria is mainly through OOP and a significant number of households faced catastrophic OOP expenditure. Increasing health insurance coverage through community health insurance scheme will likely reduce OOP.

Keywords: Catastrophic, out-of-pocket, Health expenditure, Household.

Conflict of Interest: All authors declare no conflict of interest

WACP/COM2: COVID-19 PANDEMIC LOCKDOWN: PREVALENCE OF INTIMATE PARTNER VIOLENCE AGAINST MEN AND WOMEN IN NIGERIA

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Introduction: The control of COVID-19 pandemic necessitated the use of stringent control measures such as lockdowns by many countries of the world. This potentially predisposed people in relationships to intimate partner violence (IPV).

Objectives: To assess the prevalence and forms of intimate partner violence against both men and women in Nigeria during the COVID-19 pandemic lockdown.

Materials and Methods: we conducted a cross sectional study among 537 respondents using an online electronic questionnaire which was circulated across the 36 states in Nigeria using social media platforms - Facebook, WhatsApp, and twitter. Data were collected over 9 weeks (May 22nd- July 27 2020). Data were analyzed using IBM SPSS version 23.

Results: The mean age of respondents was 37.16±7.972 years. There was preponderance of females 346 (64.4%). The overall prevalence of IPV was 40.2%. Eighty-six men, (45.0%) reported experiencing IPV with sexual violence, 54(28.3%) being the most reported form of violence followed by emotional, 49 (25.7), physical, 18(9.4%) and financial, 14(7.3%). One hundred and thirty (37.6%) women experienced IPV during the lockdown period. The commonest form of violence experienced by women was emotional, 100(28.9%) followed by sexual, 66(19.1%), physical 31(9.0%) and financial, 20(5.8%).

Conclusion: The prevalence of IPV was higher in men than women. The most reported form of violence in men was sexual while women reported emotional violence more.

Keywords: COVID-19, intimate partner, violence, men, women, pandemic, lockdown,

Conflict of interest: Nil

WACP/COM3: KNOWLEDGE AND PRACTICE OF BASIC EMERGENCY OBSTETRIC AND NEWBORN CARE AMONG HEALTH WORKERS IN PRIMARY HEALTH FACILITIES IN SELECTED LOCAL GOVERNMENT AREAS OF

SOKOTO STATE, NIGERIA
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Introduction: World Health Organization states that about 15% of anticipated births worldwide will result in threatening complications during pregnancy, delivery, or the postpartum period. Because of the erratic nature of childbirth emergency obstetric care has been called the bedrock in the arch of safe motherhood. Health workers are expected to possess good knowledge and appropriate practices to offer the signal functions that are the interventions for treating major causes of maternal complications and resuscitation of the newborn after delivery.

Objectives: To determine the level of knowledge and practices of health workers and factors affecting the knowledge and practice of basic emergency obstetric and newborn care (BEmONC) among the study participants.

Materials and methods: A cross sectional study design was used to investigate 216 health workers. The respondents were selected by a multistage sampling technique from 80 primary health facilities in eight local government areas of the state. A structured, self-administered questionnaire was used in obtaining data.

Results: The proportion of respondents with good knowledge were 46.3% and the proportion with good practices were 49.3%. Cadre was found to be a predictor of knowledge and adequate practices p<0.001.

Conclusion: The study showed less than half of the respondents had good knowledge and practices of BEmONC.

In conjunction with the Sokoto State Ministry of Health the State Primary Health Care Development Agency Sokoto should ensure training and re-training of health workers through continuing education programs.

Keywords: Basic Emergency obstetric and newborn care, knowledge, practice, health workers.

Conflict of Interest: We do not have any conflict of interest to declare.

WACP/COM4:

COVID-19 KNOWLEDGE AMONG HEALTHCARE PROFESSIONALS IN GOMBE, NORTHEAST, NIGERIA: A QUICK ONLINE CROSS-SECTIONAL SURVEY

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Introduction: Adherence to COVID-19 control measures by healthcare workers depend on their knowledge.

Objective: The study aimed to determine the knowledge of COVID-19 and related infection control practices among healthcare professionals in Gombe State.

Materials and methods: A cross sectional study was conducted among 500 healthcare professionals in Gombe selected by simple random sampling method. The data were collected using online questionnaire and analyzed using SPSS version 23 at uni-variate and bivariate levels with p value at < 0.05.

Results: Mean age of respondents was 32±9.39years. Those who are aged 31 - 45 years constituted more than half (56.8%) of the study population. Of the total studied participates, about two-third (66.7) were male and 33.8% were nurses. About half (50.2%) of the respondents worked with a tertiary health facility. The overall knowledge was found to adequate for all subgroups with 72.1% reporting correct answers. The doctors reported the highest percentage of correct responses (78.9%). Less than half (43.7%) of the participants could correctly define "close contact." Greater proportion (76%) of the participants knew the various infection control measures like rapid triage, respiratory hygiene, and cough etiquette and having a separate, well ventilated waiting area for suspected COVID-19 patients. However, less than half (47.8) of the participants were aware of the correct sequence for the application of a mask/respirator, and 62.2% of them knew the preferred hand hygiene method for visibly soiled hands.

Conclusion: In conclusion, regular health educational programs aimed at improving COVID-19 knowledge are needed in order to control the disease.

Keywords: Knowledge, Control, Practice, COVID-19.

WACP/COM5:

PREVALENCE AND PATTERNS OF ADVERSE EVENTS FOLLOWING IMMUNISATION AMONG CHILDREN LESS THAN 24 MONTHS ATTENDING IMMUNISATION CLINICS IN KANO, NIGERIA

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Background: Adverse events following immunisation (AEFI) contribute to child morbidity and mortality as they often lead to low uptake of vaccines with consequent persistence of vaccine preventable diseases. A high prevalence of AEFI has been reported in Nigeria.

Objectives: The study assessed the prevalence and pattern of AEFI among children less than 24 months attending immunisation clinics in Kano, Nigeria.

Materials and Method: Using a descriptive cross-sectional study design, 384 mother-baby dyads were studied. A three-stage sampling technique was employed to select the pair who presented to the immunisation clinics of selected primary healthcare centres. Data was collected via pretested structured interviewer-administered questionnaires.

Results: The prevalence of AEFI was 43.5%, most (n=165, 72.4%) were mild and fever was the most common type of AEFI reported (n=109, 66.5%). AEFI was also higher among infants less than 3 months (19.4%) and odds of AEFI reduced in children aged 4 to 6 months compared to those younger (OR=0.18, 95% CI: 0.10-0.35).

Conclusion: AEFI was found to be common among children less than 24 months old in Kano. Efforts should be made to improve training of immunisation service providers, sensitisation and health education of caregivers on AEFI.

Keywords: Adverse events, Immunisation, Prevalence, Pattern, Children.

Conflict of Interest: All authors declare no conflict of interest.

WACP/COM6:
KNOWLEDGE OF BREAST CANCER AND SCREENING PRACTICES AMONG FEMALE UNDERGRADUATES OF EBONYI STATE UNIVERSITY

ABAKALIKI, NIGERIA
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Background: Breast cancer is of public health concern and a major cause of cancer mortality among women.

Objectives: To determine the knowledge of breast cancer and screening practices among female undergraduates of Ebonyi State University, Abakaliki, Nigeria.

Materials and methods: A cross-sectional study design was adopted. A three-stage sampling technique was used to select 407 female students of the university who have completed at least one year of academic studies. Good knowledge of breast cancer was determined by the proportion of respondents who correctly answered $\geq$ 50% of thirty variables. Good breast cancer screening practice was determined by proportion of respondents who have ever practiced any two of three-breast cancer screening practice of breast self-examination, clinical breast examination and mammography.

Results: The mean age of respondents was 21.6±2.7 years. Majority, 67.8% were in age group 20-24 years. A minor proportion, 3.9% had a history of breast disease. Majority, 84.4% had interest in matters related to breast cancer. Less than half, 45.2% had good knowledge of breast cancer while 13.0% had good breast cancer screening practice. Predictor of good knowledge of breast cancer was having interest in matters related to breast cancer, AOR=4.0, (95%CI: 2.1-7.5). Predictor of good preventive practice against breast cancer included having a relative diagnosed with breast cancer, AOR=3.2, (95%CI: 1.4-7.7).

Conclusions: Minor proportions of respondents had good knowledge of breast cancer and good breast cancer screening practice. Efforts should be made to stimulate the interest of the students in matters related to breast cancer. They should also be encouraged to practice breast self-examination.

Key words: Knowledge, breast cancer, screening practice, undergraduates, Nigeria.

Conflict of interest: Nil
Presentation preferred: Oral

WACP/COM7:
AVAILABILITY OF SCHOOL HEALTH SERVICES IN PUBLIC SECONDARY SCHOOLS IN ENUGU STATE, SOUTH EAST NIGERIA

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Introduction: School health services are procedures used by physicians, dentists, nurses, teachers etc. that are designed to appraise, protect and promote optimum health of students and school personnel through planned programs. The overall objective of school health services is to ensure that every child is as healthy as possible so that he/she can obtain the full benefit from his/her education.

Objectives: To determine the availability of school health services in public secondary schools in Enugu State, South East Nigeria.

Materials and methods: A descriptive cross-sectional study that involved the public secondary schools in Enugu State. A multi-stage sampling technique

was used to select four secondary schools for the study. A check list was used to collect data on available school health services and data was analysed using SPSS version 25. Variables were presented as frequencies, percentages.

Results: Majority of the students were aged 15-19 years, 271(74.5%), Igbos, 349(95.9%) and lived with both parents, 294(80.8%). About 184(50.5%) of them were females. All the school health services were sub optimal. The most available service was ascertaining the student's medical needs 177(48.6%) followed by physical history, 174(47.8%). The least available services were therapeutic, 39(10.7%) and transportation needs, 63(17.3%).

Conclusion: There is poor availability of school health services in public secondary schools in Enugu State Nigeria.

Keywords: Availability, Enugu State, Nigeria, School Health Service, Secondary Schools

WACP/COM8:

HIV DISCLOSURE TO CHILDREN ATTENDING ANTIRETROVIRAL THERAPY CLINICS IN SOKOTO STATE, NIGERIA

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Introduction: Following advances in Antiretroviral Therapy (ART) care, children living with HIV are becoming healthier and living longer. As they grow up, the need to reveal their HIV status becomes obvious because they start asking questions about why they are taking medication or visiting ART clinics.

Objectives: To assess the prevalence, patterns and predictors of HIV disclosure to children attending ART Clinics in Sokoto State, Nigeria.

Materials and Methods: we conducted a cross sectional study with mixed methods of data collection among 287 child- caregiver pairs using structured questionnaire, IDI and FGD guides. Quantitative data were analyzed using IBM SPSS version 23 while content analysis was done for qualitative data along thematic lines.

Results: Mean age of children was 12.8 ± 3.73 years; mean age of caregivers was 36.7 ± 7.36 years. Prevalence of HIV disclosure to children was 19.5% (child report) and 38.7% (caregiver report). HIV disclosure was done by caregivers in slightly more than half of the children who knew their status 47 (59.5%). Predictors of HIV disclosure were age of the child (aOR= 14.2, 95% C. I= 1.833-109.980) and educational status of caregiver (aOR= 2.798, 95% C. I= 1.207- 6.484).

Conclusion and recommendations: HIV disclosure was low by both child and caregiver reports. Health care workers should continue to counsel caregivers on the need for disclosure.

Keywords: antiretroviral therapy, children, clinics, disclosure, HIV.

Conflict of interest: Nil

WACP/COM9:

MENSTRUAL HYGIENE MANAGEMENT AMONG GIRLS ATTENDING SCHOOLS IN RURAL SETTINGS OF SOKOTO STATE, NIGERIA

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Introduction: Menstrual hygiene remains a challenge for girls in Sub-Saharan Africa. This is even worse for those who reside in Rural areas where there is poor access to menstrual absorbents, water and other sanitation materials.

Objectives: To assess the menstrual hygiene knowledge, practices and health seeking behaviour of girls attending schools in Rural Settings of Sokoto State, Nigeria

Materials and Methods: we conducted a cross sectional study among 367 girls using multi stage sampling technique. Data were analysed using IBM SPSS version 23.

Results: The Mean age was 16.44 ± 1.73 years. Mean age at menarche was 13.51± 1.51 years.

Majority of the respondents 328(89.4%) had poor knowledge of menstruation, main source of information on menstruation was friends (40.5%). The preferred source of information on menstruation was mother/ grandmother (68.7%). Most of the respondents, 335(91.3%) had good menstrual hygiene practices, 305(83.1) experienced symptoms during menstruation and 99 (30.4%) had poor health seeking behaviour. The only predictor of menstrual hygiene practice was level of study (aOR= 0.283, 95%C. I= 0.123- 0.650).

Conclusion and recommendations: Knowledge of menstruation was poor, menstrual hygiene practice was good and there was good health seeking behaviour. Education on menstruation should be strengthened in secondary schools. There is also a need to educate mothers and ensure that they are comfortable discussing sexual and reproductive health issues with their children.

WACP/COM10:
COMPARATATIVE ASSESSMENT OF HEALTH OUTCOMES BETWEEN BENEFICIARIES AND NON-BENEFICIARIES OF THE NATIONAL HEALTH INSURANCE SCHEME IN SABON GARI LOCAL GOVERNMENT AREA, KADUNA STATE

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Background: Globally, millions of people experience poor health outcomes due to lack of appropriate healthcare services. These outcomes can be mitigated with proper health insurance. We carried out this study with the purpose of comparing the health outcomes between beneficiaries and non-beneficiaries of the National Health Insurance Scheme (NHIS).

Methods: We conducted a cross-sectional study in Sabon Gari LGA in February to May 2020. We selected 604 households (309 were beneficiaries and 295 were Non-beneficiaries of the NHIS) using a multistage sampling technique. Using a pre-tested semi-structured, interviewer-administered questionnaire, we collected data from household heads. Univariate, bivariate and multivariate binomial logistics regression analyses were conducted.

Results: Modal age group was 30-39 years. Knowledge of the NHIS was significantly higher in the Insured group ($P=0.008$). Household deaths were found to be higher in Non-insured group 39 (12.6%), compared to 13 (4.4%) in the Insured group. Hypertension was the commonest chronic disease condition among both groups. A higher incidence of disability was also found among the Non-insured, 86 (28.5%) compared to 78 (26.4%) in the Insured. Insurance was found to a have a protective effect on mortality ($P <0.001$) and disability ($P< 0.023$).

Conclusion: Health outcomes were poorer among Non-beneficiaries of the NHIS. There is a need for the Federal Government, to expand the coverage of health insurance services so as to mitigate the poor health outcomes as well as the risk of financial hardships caused by OOP health expenditure on Non-beneficiaries.

WACP/COM11:
PREDICTORS OF GOOD PREVENTIVE PRACTICES AGAINST LASSA FEVER AMONG HEADS OF HOUSEHOLDS IN RURAL COMMUNITIES OF EBONYI STATE, NIGERIA: A CROSS-SECTIONAL STUDY

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Background: Lassa fever is a viral hemorrhagic fever found predominantly in West Africa.

Objectives: To determine knowledge and preventive practices against Lassa fever among heads of households in rural communities of Ebonyi state, southeast Nigeria.

Materials and methods: A community based cross-sectional study design was employed. A two-stage cluster sampling technique was used to select 399 heads of households. Good knowledge of Lassa fever was determined by proportion of respondents who correctly answered ≥ 70% of 14 variables. Good preventive practice was determined by proportion of respondents that obtained a score of ≥ 70% of 13 variables.

Results: Mean age of the respondents was 41.1±9.9 years. Majority, 92.0% were aware of Lassa fever. Major sources of information on Lassa fever included radio, 68.7% and television, 47.4%. A minor proportion, 7.3% consume rats as food. Majority of respondents, 81.5% had good knowledge of Lassa fever and good preventive practices, 87.0%. Predictors of good knowledge included being <43 years, AOR=0.3, (95%CI: 0.2-0.6), being male, AOR=1.9, (95%CI:1.1-3.5), being unemployed, AOR=0.1-3.5) and those who consume rats as food, AOR=0.1, (95%CI:0.01-0.3). Predictors of good preventive practices included having primary education and less, AOR=0.3, (95%CI: 0.1-0.8) and having good knowledge of Lassa fever, AOR=16.0, (95%CI: 7.0-36.1).

Conclusions: Majority of respondents had good knowledge and good preventive practices against Lassa fever. There is need to sustain the on-going public enlightenment of Lassa fever among the people in the state. Good knowledge of Lassa fever is associated with good preventive practices. Efforts should be made to continually improve knowledge of Lassa fever among the people.

WACP/COM12:
KNOWLEDGE OF MALARIA AND PREVENTIVE MEASURES AMONG MOTHERS OF UNDER-FIVE CHILDREN IN ABAKALIKI METROPOLIS, NIGERIA

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Background: Malaria is a preventable disease however, about 3.4 billion people are at the risk of the disease globally.

Objectives: To determine knowledge of malaria and preventive practices among mothers of under five children in Abakaliki metropolis, Nigeria.

Materials and methods: This was a community-based cross-sectional study. A three-stage sampling design was used to select 466 mothers of under five children. Good knowledge of malaria was determined by the proportion of respondents who correctly answered ⩾ 50% of nineteen variables. Good preventive practice was determined by proportion of respondents who correctly applied ⩾ 50% of fifteen preventive measures.

Results: Mean age of respondents was 31.0±4.7 years. Majority, 98.4% were aware of malaria. Major sources of information included television, 69.9%; radio, 67.3% and antenatal care, 62.4%. Less than half of respondents, 48.7% had good knowledge of malaria while 69.7% demonstrated good preventive practices against. Predictors of good knowledge of malaria included being married, AOR= 0.6, (95%CI: 0.3-0.9), having attained tertiary education, AOR=2.0, (95%CI: 1.3-3.0) and having received antenatal care from formal health facility, AOR=1.5, (95%CI: 1.1-2.3). Predictors of good preventive practices against malaria included having one child, AOR=0.4, (95%CI: 0.2-0.9), being unemployed, AOR=3.1, (AOR=1.1-9.0) and having good knowledge of malaria, AOR=2.3, (95%CI: 1.5-3.5).

Conclusions: Minor proportion of respondents had good knowledge of malaria. However, majority demonstrated good preventive practices. Good knowledge of malaria was associated with good preventive practices. There is need for increased public health education on malaria. Efforts should be made to encourage women to use health facilities for antenatal care.

Keywords: Knowledge, preventive practices, malaria, mothers, Abakaliki metropolis, Nigeria.

Conflict of interest: Nil

Presentation preferred: Oral

WACP/COM: 13

PREDICTORS OF UMBILICAL STUMP CARE PRACTICES AMONG CAREGIVERS IN KANO MUNICIPAL, KANO, NIGERIA.

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Introduction: Each year, over 3 million neonates die worldwide with severe cord sepsis accounting for 13% of all neonatal deaths. Most of these deaths occur in developing countries, including Nigeria.

Methods: The purpose of this study was to determine the predictors of umbilical stump care practice among caregivers in Kano Municipal LGA.

A descriptive cross-sectional study was employed using a mixed method of data collection. An interviewer-administered questionnaire was used to obtain information from 285 randomly selected caregivers, while qualitative data was obtained using Key Informant Interviews and Focus Group Discussion. Data was analysed using the Statistical Package for Social Sciences, version 20.0.

Results: The results showed that almost half of the respondents (49.1%) had poor knowledge of standard umbilical cord care. Over three-quarters 227 (79.6%) of caregivers used harmful and unhygienic materials for cord care. Technique for cord care was also poor as only 41 (14.4%) of caregivers practiced appropriate cord care methods. The management outcome was poor as 124 (43.5%) of respondents reported signs of umbilical infection in their neonates. Independent predictors of good umbilical stump care technique were higher maternal education and employment (p= 0.004, 0.009 OR = 0.09, 2.22 respectively). Independent predictors of standard knowledge of umbilical stump care were higher maternal education, occupation and health worker advice of umbilical stump care (p=0.003,0.009, 0.008 OR=0.26,1.81,2.10 respectively). Health system predictor of standard umbilical care technique was health facility delivery (p=0.001, OR=0.08). From the FGDs, it was reported that following most home deliveries, non-sterile cord cutting tools were often used and hand washing was not practiced before substance application to the umbilical cord.

Conclusion: There is need for increased home visits and continuous education of the mothers on cord care management by community health workers and TBAs.

Keywords: Umbilical cord care, Knowledge, technique, predictors, content analysis

WACP/COM14:

AGE APPROPRIATE VACCINATION AND ITS DETERMINANTS AMONG CHILDREN LESS THAN 24 MONTHS IN KANO, NIGERIA

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Background: Administration of vaccines at recommended ages and in accordance with recommended intervals between doses of multi-dose antigens provides optimal protection, ultimately reducing possibility of propagating the transmission of the diseases in society. Studies have shown a large discrepancy in the median age at vaccination for some vaccines in Nigeria.

Objectives: Age appropriate vaccination and related factors among children aged 0–23 months attending immunisation clinics in Kano metropolis were studied.

Materials and Methods: An adapted and pre-tested semi-structured interviewer administered questionnaire was used to obtain information from a cross-section of 384 pairs of mothers/babies (less than 24 months) who presented to the immunisation clinics of selected Primary Health Centres within Kano metropolis.

Results: The median ages at vaccination were 13, 49, 91, 122 and 282 days for BCG, Pentavalent 1, Pentavalent 2, Pentavalent 3 and measles respectively. Proportions of children who had received age appropriate vaccines were 88.3%, 80.5%, 64.2%, 57.2% and 41.1%, for BCG, Pentavalent1, Pentavalent 2, Pentavalent 3 and measles vaccination respectively. Regarding being timely for the index vaccine, 83.8% were timely for BCG, 81.6% for Pentavalent 1, 64.9% for Pentavalent 2, 60.4% for Pentavalent 3 and 23% for measles. Children with a previous experience of an adverse event following immunisation were 50% less likely to be age appropriate for the index vaccination (aOR: 0.5 95% CI: 0.3-0.9).

Conclusion: Measles vaccine had the least proportion of children who were age appropriate and timely. Sensitization and health education of caregivers on age appropriate vaccination cannot be over emphasized.

Conflict of Interest: All authors declare no conflict of interest.

WACP/COM15:
ANALYSING THE TREND OF FAMILY PLANNING INDICATORS AND IMPLICATIONS OF FUNDING CUTS IN NIGERIA

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Introduction: Family planning (FP) is an important public health intervention as it has been proven to help in reducing unsafe abortions and maternal mortality. Investments in family planning not only saves lives but also saves pregnancy-related health-care costs. Nigeria has set a target of achieving 27% modern contraceptive prevalence rate (mCPR) among all women by 2024 according to the *National Family Planning Blueprint (2020-2024)*.

Objectives: To estimate the trends of FP indicators in Nigeria and national family planning budget allocation

Methods: We reviewed all available cross-sectional survey data from Nigeria including Demographic Health Surveys, Multiple Indicator Cluster Surveys from 1990 to date and national budgets.

Results: The total fertility rate (TFR) in Nigeria in 2018 is 5.3; a gradual decline from 6.0 in 1990. The wanted fertility rate has decreased from 5.8 in 1990 to 4.8 in 2018 which increased the gap between wanted fertility and actual fertility from 0.3 to 0.5. The mCPR among all women decreased marginally from 11.1% in 2013 to 10.5% in 2018. The unmet need for family planning increased by 2.5% in 2018. Nigeria's family planning budget has been on the decline from 2.9 billion Naira in 2018 to 36.9 million in 2021.

Conclusion: With an average Nigerian woman having 0.5 more children than she actually wants to have, an increasing unmet-need for contraceptives and reduced funding, there is need to identify innovative financing options for contraceptives.

Conflict of Interest: No conflict of interest to disclose

WACP/COM16:
MALE INVOLVEMENT IN FAMILY PLANNING IN SOKOTO STATE: A COMPARATIVE STUDY AMONG MEN IN URBAN AND RURAL COMMUNITIES

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Introduction: Sokoto State has a high fertility rate and a low contraceptive prevalence rate. One of the factors responsible for this is a lack of male involvement (MI) in family planning (FP). MI in FP has been found to improve the utilisation of contraceptive methods.

Objectives: To explore the married men's involvement in FP, barriers and facilitating factors to their involvement in FP in urban and rural communities of Sokoto State.

Materials and methods: A qualitative

study was done in urban and rural communities in Sokoto State among married men in May 2019. Eight focus group discussions, each comprising 6-12 participants, were carried out among men selected purposively and grouped based on educational status and age. Data were transcribed verbatim, and content analysis was done along thematic lines.

Results: Almost all the participants in the two groups thought that men should be involved in issues regarding FP. They mentioned the activities that constitute their involvement as discussing with the wife about the FP method to adopt, giving money to the wife for transport to the FP clinic and accompanying her to the FP clinic. Religion and ignorance were the barriers to MI in FP mentioned. Increasing awareness on FP, religious leaders and traditional rulers to champion FP were the facilitating factors mentioned.

Conclusion: Almost all the respondents in the two areas said that men should be involved in FP. It is recommended that traditional and religious leaders champion the issue of FP by preaching and talking about the importance of FP.

Keywords: Male, Involvement, Family Planning.

WACP/COM17:
HEALTHCARE FINANCING OPTIONS AMONG PRIMARY HEALTH CARE WORKERS: CAN THIS HELP TO IMPROVE ENROLMENT?
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Background: Timely health service is of paramount importance in attaining health for all. This will not be available to most of the populace in the absence of a highly efficient healthcare financing option which will not expose individuals to financial hardship and still access the needed healthcare. We conducted this study to identify the factors associated with knowledge and preference of healthcare financing options among Primary Healthcare (PHC) workers in Zaria LGA.

Materials and methods: We conducted a cross-sectional study in April, 2021 using a multi-staged sampling method to select 107 primary healthcare workers from primary healthcare centres in Zaria LGA. Data was collected using Open Data Kit software on android devices. Frequencies and summary statistics were used at univariate level analysis. Chi-square test, likelihood ratios and binary logistic regression was used to assess the associations between categorical variables with level of significance set at 5%

Result: Awareness of PHC workers on Out-of-pocket (OOP), National Health insurance scheme (NHIS) and Community based Health Insurance Scheme (CBHI) was found to be 100%, 77.6 and 43% respectively. Majority 70(65.4%) had good knowledge of the options. Majority 58(54.2%) preferred OOP to the insurance option. Knowledge of healthcare financing was a significant predictor of preference on binary logistic regression (Odds ratio= $3.4, 95\%\ CI = 0.880 - 0.970$).

Conclusion: Majority of our respondents preferred OOP compared to insurance. The Kaduna state health authority should carry out a more extensive study to identify the reasons for this anomaly so as to correct this among PHC workers

Keywords: Health Insurance, Healthcare financing, Community-based insurance

WACP/COM18:
NIGERIAN HEALTH SYSTEM RESPONSE TO THE COVID-19 PANDEMIC: APPLICATION OF THE WHO HEALTH SYSTEMS FRAMEWORK
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Introduction: Health systems have an important role in a multi-sector response to pandemics. There are already concerns that COVID-19 will severely divert limited health care resources.

Objective: This study appraised the readiness and how the Nigerian health system is coping with the COVID-19 pandemic.

Methods: This study was a cross-sectional qualitative study involving key informant and in-depth interviews. Purposive sampling was used to recruit participants who were members of the Task Force on COVID-19 in Oyo State, southwest Nigeria and Emergency Operations Centres' (EOC) members (physicians, nurses, laboratory scientists, "contact tracers", logistic managers) and other partners. The state's health system response to COVID 19 was assessed using the WHO health systems framework. Audio recordings of the interviews done in English were transcribed and thematic analysis of these transcripts was carried out using

NVIVO software.

Results: The state government responded promptly by putting in place measures to address the COVID-19 Pandemic. However, the response was not adequate owing to the fact that the health system has already been weakened by various challenges like poor funding of the health system, shortage of human resources and inadequate infrastructure. These contributed to a less than expected response of the health system to the pandemic.

Conclusion: In order to equip the health system to be able to respond adequately and appropriately during major health disasters like pandemics, fundamental pillars of the health system: finance, human resources, information and technology, medical equipment and leadership need to be addressed to have a resilient health system.

Keywords: COVID-19, Health systems analysis, Pandemic, Resilience

WACP/COM19:
SUPPORTING STRATEGIC HEALTH PURCHASING: A CASE STUDY OF ANNUAL HEALTH BUDGETS FROM GENERAL TAX REVENUE AND SOCIAL HEALTH INSURANCE IN ABIA STATE, NIGERIA

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Background and objective: This study examined prospects of using strategic health purchasing within annual health budgets from general tax-revenue and a social health insurance scheme financing mechanism to improve purchase of health services in Abia state, southeast Nigeria.

Method: Desk review of policy documents, plans and operational guidelines was done. In-depth interviews were conducted with seven key personnel of the State Ministry of Health and State Health Insurance Agency. Narrative synthesis of data from document review and in-depth interviews was done.

Results: Whereas the State budgetary allocation to health is based on a historical budgeting system the State social health insurance scheme proposes to use a purchasing system that is predominantly based on a defined benefit package that ensures value-for-money. There are no data systems for monitoring provider performance in the budget-funded system, unlike the social health insurance scheme. Likewise, provider payment is not linked to performance or adherence to established standards in the budget-funded system, whereas provider payment will be linked to performance in the social health insurance scheme.

Conclusion: Unlike the state budgetary allocation where purchasing is passive, the purchasing functions of the State social health insurance scheme is largely strategic and designed to support strategic health purchasing. However, institutionalization of strategic health purchasing will require strengthening the capacity of purchasing agencies and raising awareness of its benefits amongst decision makers in the Ministry of Finance and various departments, agencies and programmes at the Ministries of Health at the federal and state levels.

WACP/COM21:
TRAINING NEEDS ASSESSMENT OF TRAINERS IN FACULTY OF COMMUNITY HEALTH: A PREVIEW

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Introduction: Quality training determines human resource capacity in any system, hence the need for periodic assessment of trainers. This assessment was conducted to identify the training needs of trainers of resident doctors in the Faculty of Community Health.

Methods: A cross-sectional survey was conducted among all trainers of the Faculty of Community Health in accredited training institutions. A semi-structured questionnaire was developed based on the faculty training curriculum and residents training logbook. Information was obtained using an online data collection tool. Data were analysed using SPSS version 23 and presented in tables and charts

Result: About two-thirds 27, 65.9%) of the trainers were males, 23 (56.1%) of the trainers qualified as fellows of the WACP five to ten years ago, and 16 (39.1%) were examiners of the WACP. Majority 34 (82.9%) reported having more than one subspecialty (48.8%) and 48.8% were sub-specialists in epidemiology and biostatistics. About three-quarters (73.2%) of trainers had sub-specialty training in the last 2 years while 41.5% had ever attended the WACP "Doctors as Educators" training and grant writing training was the most reported training needs. Non-examining trainers reported they would need training on assessing trainees' dissertation and preparing trainees for examinations.

Conclusion: This needs assessment revealed that most trainers received recent training in their areas of sub-specialization concentrated in a few specialties and need to be trained on the examination modalities. Trainers should therefore be trained on the requirements, conduct, and assessment of the WACP examinations.

SENSITIVITY AND SPECIFICITY OF MALARIA RAPID DIAGNOSTIC TEST (MRDT CARESTAT™) COMPARED WITH MICROSCOPY AMONG UNDER FIVE CHILDREN ATTENDING A PRIMARY CARE CLINIC IN SOUTHERN NIGERIA

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Background: Malaria diagnosis using microscopy is currently the gold standard. However, malaria rapid diagnostic tests (mRDTs) were developed to simplify the diagnosis in regions without access to functional microscopy.

Objectives: The objective of this study was to compare the diagnostic accuracy of mRDT CareStat™ with microscopy.

Materials and Methods: After obtaining ethical approval and informed consent, a cross-sectional study for diagnostic accuracy was conducted from May 2016 to October 2016. Ninety-eight participants were required for a precision of 5%, sensitivity of mRDT CareStat™ of 95% from published work and 95% level of confidence after adjusting for 20% non-response rate or missing data. Consecutive participants were tested using both microscopy and mRDT. The study was done in compliance with ICH GCP and Declaration of Helsinki. The results were analysed using Epi Info Version 7.

Result: A total of 98 children aged 3 to 59 months were enrolled. Malaria prevalence was found to be 53% (95% CI = 46% - 60%) while sensitivity and specificity were 29% (95% CI = 20% - 38%) and 89% (95% CI = 83% - 95%) respectively. The positive and negative predictive values were 75% (95% CI = 66.4% - 83.6%) and 53% (95% CI = 46% - 60%) respectively. The natural logarithm of the parasite density increased by 0.84 ($r^2 = 0.84$, $p < 0.001$).

Conclusion: Agreement between malaria parasitaemia using microscopy and mRDT positivity increased with increase in the parasite density. mRDT may be negative when malaria parasite density is low when using microscopy.

Competing Interests: The authors declare that they have no financial or personal relationship(s) that may have inappropriately influenced them in writing this article.

ACUTE MYOCARDIAL INFARCTION FOLLOWING ELECTIVE CAESAREAN SECTION (CASE REPORT)

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Acute myocardial infarction (AMI) is a clinical or pathological event caused by myocardial injury or necrosis. Maternal deaths due to AMI have been increasingly reported, however, little data on pregnancy-related cardiovascular disease in Nigeria and other low- and middle-income countries exists. Considering a vast majority of births occur in rural and semi-urban areas with little access to skilled obstetric care and efficient referral services, this may significantly contribute to maternal mortality and foetal compromise. While relatively rare in obstetric patients (incidence 3 to 10 per 100,000 deliveries), pregnant women have a three- to four-fold higher relative risk of AMI with mortality rates between 5.1% and 38%. Coronary atherosclerosis is the commonest cause and risk factors include higher parity (>3), increasing maternal age (>35 years), pre-existing hypertension, diabetes or ischaemic heart disease; smoking, obesity, strong family history, dyslipidaemia, pre-eclampsia/eclampsia, thrombophilia, migraines, postpartum infections and blood transfusions.

This is a case report of a 39-year-old woman, gravida 4, para 2+1 (2 alive) for elective second repeat caesarean delivery on account of two previous caesarean sections and one myomectomy. Immediately following the caesarean section, she developed sudden cardiac failure. She was transferred to the ICU for mechanical ventilation support. Congestive cardiac failure secondary to Non-ST segment elevation myocardial infarction (NSTEMI) was subsequently diagnosed following an ECG and echocardiography.

The presented case demonstrates the importance of skilled delivery and efficient referral services in developing countries to minimise poor maternal and foetal outcomes in pregnancy-related heart disease.

Keywords: Pregnancy, Congestive cardiac failure, Myocardial infarction, NSTEMI

Conflicts of interest: None

HERBAL MEDICINE USE AND RENAL PROFILE OF ADULT PATIENTS ATTENDING THE GENERAL OUTPATIENT UNIT OF THE FAMILY MEDICINE DEPARTMENT OF ABUBAKAR TAFAWA BALEWA UNIVERSITY TEACHING HOSPITAL, BAUCHI (ATBUTH), NIGERIA

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patients had chronic diseases ($\chi^2=1.537, P=0.215$). Many participants 136(57.0%) had moderately inadequate family resources. More insured patients 76(58.0%) had moderately inadequate resources compared with uninsured participants 60 (56%) ($\chi^2=0.091, P=0.763$). Eighty-two insured(62.6%) and 80(74.8%) uninsured patients visited the hospital 1-2 times prior to the current hospital visit($\chi^2=0.567, P=0.087$).

Conclusion: It is expected that health insurance should improve health insurance utilisation. However, our study found that there was no significant difference in all indicators of healthcare utilisation pattern between the insured and uninsured patients. There is need for the hospital management to carry out further investigations to find out the reasons for the findings from this study.

Keywords: Healthcare utilisation, Health insurance, Family resources, Clinical characteristics, National Hospital, Abuja.

WACP/FAM6:

THE IMPACT OF TERTIARY INSTITUTION SOCIAL HEALTH INSURANCE PROGRAMME (TISHIP) AMONG STUDENTS OF TERTIARY INSTITUTIONS IN KADUNA STATE, NIGERIA

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Introduction: Healthy students and indeed youths are indispensable tools for rapid socio-economic and sustainable development in any country. Therefore, Tertiary Institution Social Health Insurance Programme (TISHIP) was

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Introduction/Background: Africans commonly use herbal medicines. Yet, very few studies have investigated the clinical effects of these herbs in the population especially on the kidneys and other vital organs. Such data are crucial to guide clinical practice.

Objectives: To determine the prevalence of herbal medicine use in the study population. To determine the types of herbs commonly used by the study population. To assess the renal status of the study population

Methods: Using a semi-structured interviewer-administered questionnaire, data was collected from 341 adults attending the Family Medicine Department of ATBUTH. The renal status of the respondents was assessed by measuring participants' urine microalbumin and protein, and their serum electrolytes, urea, creatinine and estimated glomerular filtration rate. Participants were selected using systematic random sampling. Using the chi square, the values of these renal parameters were compared between those who had used herbs and those who had not.

Results: The lifetime prevalence of herbal medicine use was 85.34%, and the prevalence of combined herb and orthodox medicine use was 23.02%. The commonest herbs reported were moringa (59.8%), Nigella sativa (36.8%), olive oil (34.4%), garlic (33.0%), Boswellia dalzielli (32.6%), and fenugreek (22.3%). Between herb users and non-users, there was no statistically significant difference in the renal parameters.

Conclusion: Herbal medicine may not always be associated with adverse renal outcome. More research should focus on the clinical effects of the specific herbs used in different communities.

Conflict of Interest: No author has any conflict of interest to declare regarding this study.

WACP/FAM5:

COMPARATIVE ASSESSMENT OF HEALTHCARE UTILISATION BETWEEN INSURED AND UNINSURED ADULTS ATTENDING THE GENERAL OUTPATIENT CLINIC OF NATIONAL HOSPITAL, ABUJA NIGERIA

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Introduction: Healthcare utilisation is an important determinant of health outcomes. Health insurance was implemented in Nigeria to improve poor healthcare utilisation resulting from out-of-pocket payment. Little is known about the healthcare utilisation patterns of patients in Nigeria. We determined the differences between the clinical characteristics, family resources and healthcare utilisation patterns of insured and uninsured participants.

Methods: We conducted a comparative cross-sectional study from February to May 2020 using a sample of 238 adults obtained by systematic sampling technique. We collected data using a semi-structured, interviewer-administered questionnaire. We entered the data using IBMSPSS version23, then cleaned, sorted, coded and described the data using tables, charts, means and proportions. Chi-square test was used to compare the results of family resources assessment, clinical characteristics and health utilization patterns between insured and uninsured patients.

Results: The mean age (±SD) of insured and uninsured participants were 43.0±10.5years and 40.0±12.8years respectively. Eighty-seven (74.0%) insured and 79(66.0%) uninsured

introduced to provide affordable, accessible and quality healthcare services for all students in tertiary institutions in Nigeria.

Objectives: To assess the level of awareness, utilization and satisfaction with TISHIP among students of tertiary institutions in Kaduna State.

Materials And Methods: A cross-sectional study was conducted in August 2019 among students of tertiary institutions practicing TISHIP in Kaduna State; Ahmadu Bello University (ABU) Zaria, Federal College of Education (FCE) Zaria and Kaduna Polytecnics (KADPOLY), Kaduna. Purposive sampling of four hundred (400) full-time on-campus and off-campus students were carried out in the three institutions for interview. Five-point likert scale questionnaire was adapted from TISHIP guideline for utilization and awareness while Patient Satisfaction Questionnaire Short-Form (PSQ 18) was used for assessing satisfaction. Descriptive statistics and T-tests using (SPSS version 23.0) were used to analyse the data. Confidence level of 95% and P-value$\leq$ 0.05 were set.

Results: The level of awareness in this study was (47.2%) and utilization (45.2%) while satisfaction was (57.0%). There is no significant differences in the levels of awareness (F = 0.061; p=0.941), utilization (F = 0.078; p=0.925) and satisfaction (F = 0.063; p=0.939) among students of different tertiary institutions in Kaduna State.

Conclusions: There is an average level of satisfaction but low levels of awareness and utilization of TISHIP among students of tertiary institutions in Kaduna State.

Conflict of Interest: None.

WACP/INT1:
LUTEMBACHER SYNDROME PRESENTING AS HEART FAILURE IN A YOUNG NIGERIAN AT OAUTHC, ILE-IFE: A CASE REPORT

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Background: Lutembacher syndrome (LS) is a rare syndrome comprising a combination of atrial septal defect (ASD) and mitral stenosis (MS). To the best of our knowledge, this is the first reported case of Lutembacher syndrome in our centre and South Western Nigeria.

Objective: To highlight the first case of Lutembacher syndrome in our centre which presented late and discuss the clinical presentation and complications.

Patient and Methods: A 28-year-old man, who presented with progressively worsening dyspnea of 2 months associated with orthopnea, paroxysmal nocturnal dyspnea, bilateral leg swelling and productive cough with frothy sputum.

Results: Chest X-ray revealed plethoric lung fields with prominent pulmonary conus and cardiomegaly. A twelve-lead electrocardiogram showed left atrial enlargement, right ventricular hypertension and incomplete RBBB. Transthoracic echocardiography revealed a large ostium secundum (ASD) with left to right shunt, mild Mitral Stensis (MS), severe mitral and tricuspid regurgitations, moderate pulmonary regurgitation and pulmonary hypertension. Mitral valve leaflets and subvalvular structures were thickened and partly calcified with uniformly restricted movements of the mitral valve and bi-commissural calcification. Biventricular diastolic dysfunction and right ventricular systolic dysfunction were also observed. A diagnosis of Lutembacher syndrome in heart failure with pulmonary hypertension was made. Patient was managed conservatively but declined surgery primarily because of financial reasons.

Conclusion: We have reported a rare case of (LS) presenting with heart failure and complicated by pulmonary hypertension. Inability of the patient to afford cost of definitive care was a major challenge in the management of this patient.

WACP/INT2:
ATRIAL SEPTAL ANEURYSM IN SUB-SAHARAN AFRICA: FROM AN ASYMPTOMATIC INCIDENTAL ECHOCARDIOGRAPHIC FINDING TO A POTENTIAL CAUSE OF CARDIO EMBOLIC STROKE

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Background: Atrial septal aneurysm (ASA) is an abnormality of the interatrial septum that has continued to generate interest because of its rarity, association with other cardiac abnormalities, asymptomatic presentation and possibility to cause cardioembolic stroke. Published cases of ASA are rare in sub-Saharan Africa and we ask why this is so.

Case Presentation: The first case is a 48 year- old female patient with ASA presented as an incidental finding during echocardiographic investigative procedures for other cardiac diagnosis. The septal movement is type 1R as the septum bulges by 18 mm into the right atrium only. He was managed for hypertension and placed on aspirin 75mg daily.

The second case is a 58-year-old female who presented with transient loss of consciousness lasting for 5 minutes. This repeated twice in the previous 6 months. Transthoracic

echocardiography revealed a type 2L ASA but no shunt demonstrable. ECG showed atrial fibrillation. Patient was placed on Metoprolol XL 50mg daily and aspirin 75mg daily.

The third case is a 25-year-old male who presented with exertional dyspnoea for 3years. Echocardiographic report showed atrial septal aneurysm type 5 with Atrial Septal Defect measuring about 31mm with left to right shunt across the septum. He had an ASD repair with Tricuspid valve annuloplasty and stabilization of the atrial septum. He is on dual antiplatelet therapy.

Conclusion: A high index of suspicion is required to make the diagnosis during routine trans thoracic echocardiography and the availability of transesophageal echocardiography will definitely improve diagnosis and management of cases in sub-Saharan Africa.

WACP/INT3:
DISEASE SEVERITY ASSESSMENT AND RELATIONSHIP WITH PEAK INSPIRATORY FLOW MEASUREMENTS IN PATIENTS WITH CHRONIC OBSTRUCTIVE PULMONARY DISEASE IN SOUTH-WESTERN NIGERIA

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Background: COPD is a progressive disease with high burden of symptoms and significant health status impairment. Suboptimal peak inspiratory flow rate (PIFR) against the resistance in dry powder inhalers may impact COPD management. Little is known about relationship between the severity of COPD and PIFR.

Objectives: This study assessed the relationship between measures of disease severity (using CAT and mMRC) and PIFR among different stages of COPD patients.

Methods: A descriptive cross-sectional study was done among 30 stable COPD patients. PIFR was measured using In-Check Dial Meter to simulate resistance of DPIs and categorized (suboptimal $<60L/min$; optimal $\geq 60L/min$). Spirometry and GOLD Staging (I-IV) was done. Severity of dyspnoea was assessed using mMRC dyspnoea scale while health status impairment was assessed using CAT scale.

Results: Mean age was 67.8±10.3 years; mean FEV1% was 47.6±19.2%. A significant proportion of COPD patients had suboptimal PIFR, in Clickhaler and Turbuhaler (70% vs 80%; p<0.001) compared to Accuhaler (36.7%, p<0.001). 3.3%, 40%, 33.4% and 23.3% had GOLD COPD Stages I to IV respectively. Suboptimal PIFR worsened from Stage II (50%) to Stage IV (100%). Worsening dyspnea and impairment were associated with suboptimal PIFR, as shown by the fact that all (100%) patients who had mMRC stage 4 and 'very high COPD impact' CAT Score had PIFR <60L/min (p=0.037; p<0.001, respectively).

Conclusion: Suboptimal PIFR is associated with worsening dyspnoea, disease severity and high disease impact in COPD. Patients with severe disease should be properly assessed for suitable DPIs to ensure better outcomes.

The authors declare no conflict of interest.

WACP/INT4:
MANAGEMENT OF DEEP VENOUS THROMBOSIS AND PULMONARY EMBOLISM IN OAUTHC ILE-IFE USING TRADITIONAL ANTICOAGULANTS AND NOACS: A CASE SERIES

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Background: Venous Thrombo-embolism which comprises mainly of Deep Vein Thrombosis (DVT) and Pulmonary Embolism (PE) is a major cause of morbidity and pose a major health problem worldwide due to its high recurrence rate and mortality. A high index of suspicion is needed to improve the ante-mortem diagnosis of this fatal condition because most cases present with sudden death. We decided to highlight the management of DVT and PE using both traditional anticoagulants and NOACs in our centre.

Methods and Results: We present 4 cases of VTE (3 DVTs and 1 PE) which were successfully managed in our center. The patients with DVT had symptoms of leg pain and swelling, identifiable risk factors were hypertension, diabetes mellitus, long distance travel, prolonged hospitalisation, immobilisation, and malignancy. They all had elevated D-dimer and their Wells score ranged from 2.5 – 4. Doppler ultrasonography were positive. The patient with PE was a 65 year old male hypertensive admitted with sudden onset dyspnoea. He was tachypnoec and had a Wells score of 4.5, elevated D-dimer and chronic right leg DVT. Resting Electrocardiogram (ECG) revealed sinus tachycardia. Diagnosis was confirmed with Computed tomography pulmonary angiography (CTPA) done at a peripheral centre. Other investigations included Chest X–Ray and Echocardiography. Treatment were with low molecular weight heparin, thrombolytic, warfarin, dabigatran and rivaroxaban.

Conclusion: VTE is still common in our setting and a high index of suspicion is

necessary to prevent mortality. It can be successfully investigated with available tools and treated with drugs including traditional anticoagulants and NOACs in our environment.

WACP/INT5:
ALTERATIONS IN LIVER FUNCTION IN A STUDY OF 201 COVID-19 PATIENTS IN ABUJA, NIGERIA'S FEDERAL CAPITAL TERRITORY

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Background: Several studies reveal abnormalities in liver function of COVID-19 patients. However, not much data has been presented on African patients.

Objective: This study aimed to evaluate liver function tests (LFT) in SARS-CoV-2 infected patients admitted in Asokoro COVID-19 Isolation and Treatment Centre in Abuja, Nigeria.

Materials and methods: This was a retrospective study of 201 laboratory-confirmed SARS-CoV-2 infected patients hospitalised in Asokoro District Hospital COVID-19 Isolation and Treatment Centre between April 10th and July 31st, 2020. Demographic, clinical and laboratory data were obtained, and the outcome measure was LFT abnormalities at presentation. Statistical analysis was done using IBM SPSS Version 24, with $p < 0.05$ considered statistically significant.

Results: Patients median age was 39.3 years (IQR: 26–52); 65.7% were males and 33.8% were health workers. Approximately 49.2% of patients were overweight or obese. Hypertension (22.9%) and diabetes mellitus (7.5%) were the most common comorbidities and only 1% had a known history of liver disease. Abnormal LFTs were observed in 53% of patients (n=106); most frequently elevated direct bilirubin (78.3%) and alanine aminotransferase (38.7%). Comorbidities were not found to be significantly associated with LFT abnormalities. Females (OR= 0.367 p=0.004 C.I 0.186-0.724) and patients aged 20-29 years (OR= 0.067 p=0.043 C.I 0.005-0.916) were found less likely to have abnormal LFTs.

Conclusion: Regardless of clinical status at presentation, majority of SARS-Cov-2 patients admitted at the Asokoro Isolation and Treatment Centre in Abuja had abnormal LFT results. It is therefore recommended that LFT is included as part of baseline investigations during the management of COVID-19 for improved outcomes.

Keywords: SARS-CoV-2, Liver Function Tests, Laboratories, COVID-19, Liver Diseases

Conflict of interest: The authors declare no conflict of interest.

WACP/INT6:
CLINICAL PRESENTATION AND DURATION OF HOSPITALISATION IN 201 COVID-19 PATIENTS IN ABUJA, NIGERIA'S FEDERAL CAPITAL TERRITORY

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Introduction: Adequate implementation of a successful response to coronavirus disease 2019 (COVID-19) requires a clear understanding of profiles of the disease in various environments.

Objective: This study aimed to describe patient demographic and clinical characteristics associated with symptomatic presentation and duration of hospitalisation in COVID-19 patients managed in Abuja Federal Capital Territory, Nigeria.

Materials and Methods: This was a retrospective study of 201 laboratory-confirmed SARS-CoV-2 patients hospitalised with COVID-19 in the Asokoro District Hospital COVID-19 Isolation and Treatment Centre between April 10th and July 31st, 2020. Demographic and clinical data were obtained, and outcome measures were presence of symptoms and duration of hospitalisation. Statistical analysis was done using IBM SPSS Version 24, with P < 0.05 considered statistically significant.

Results: The median age was 39.3 years (IQR: 26–52); male patients accounted for 65.7% and 33.8% were health workers. Up to 49.2% of patients were overweight or obese, 68.2% had a mild form of the disease at presentation, and the most common symptoms were cough (38.3%) and fever (33.8%). Hypertension (22.9%) and diabetes mellitus (7.5%) were the most common comorbidities. The median duration of hospitalisation was 14.4 days (IQR: 9.5–19). Individuals with secondary and tertiary education had higher odds of presenting with symptoms of COVID-19 (P = 0.001 and P = 0.021 respectively). History of regular alcohol intake revealed greater likelihood of hospitalisation for more than 14 days compared to no history of regular alcohol use.

Conclusion: Public education on COVID-19 and lifestyle education are therefore critical to presentation and outcomes of the disease.

Keywords: coronavirus disease 2019, COVID-19, presentation, duration of hospitalisation

Conflict of interests: The authors declare no conflict of interest.

WACP/INT8:
ELECTROCARDIOGRAPHY DIAGNOSTIC PERFORMANCE IN THE ASSESSMENT OF SIGNIFICANT CORONARY ARTERY DISEASE AND ITS ANATOMICAL SITE IN COMPARISON WITH CORONARY ANGIOGRAPHY AMONG NIGERIANS: A PILOT STUDY

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Introduction: Early diagnosis of coronary artery disease is mainly based on some risk stratification approaches. This includes medical history, physical examination, electrocardiogram (ECG) and serum cardiac marker measurements. Catheter-based invasive coronary angiography is the gold standard in diagnosing patients with suspected coronary artery disease (CAD), especially in high risk patients. The use of noninvasive assessment tools like ECG for predicting CAD is preferred, as it is safe, fast and convenient. The aim of the study was to address the predictive value of 12-lead ECG in patients with suspected CAD.

Materials and Methods: Fifty-nine consecutive patients with ages between 40 and 98 years, who presented at the cardiac catherization laboratory at the Bayelsa Specialist Hospital, Yenagoa between October 2017 and November, 2018 and had new onset chest pain, were recruited. Ethical approval was obtained from the hospital. Informed consents were also obtained from all participants. At presentation, a standard resting 12-lead ECG was recorded and the ECG changes were interpreted by the cardiologist. The ECG was recorded as normal or abnormal depending on regional changes in ST segment.

Results: Electrocardiographic changes were significant in 46 out of the 59 patients. Coronary angiography detected significant stenosis in 28 of the 59 patients. ECG correctly detected significant stenosis in 20 out of 59 patients with an overall sensitivity of 71.1% and specificity of 16.1%. Regarding the individual coronary vessels, the sensitivity of ECG was 66% in the left anterior descending artery, 63.6% in right coronary artery and 60% in left circumference artery.

Conclusions: ECG is useful in risk stratification of patients with CAD. It may also be valuable in the diagnosis of CAD especially in resource poor settings.

Keywords: Electrocardiogram, Angiography, Coronary Artery Disease, Sensitivity, Specificity

WACP/INT9:
FOREIGN BODIES IN THE HEART AND VESSEL. A 3-YEAR REVIEW

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Introduction: Foreign bodies in the heart and vessels are rare. They are usually iatrogenic. They get to the heart through different ways. They may cause serous complication including embolism and arrhythmias. They can could be diagnosed with X-ray, computerized tomography, and echocardiography. They are removed by endovascular percutaneous, surgical or conservative methods of therapy. In this four-year review, we analyzed, identified and analyzed the treatment of foreign body referred to the Bayelsa Specialist Hospital and the Cardiocare hospital.

Materials and Methods: We searched the cardiac catheterization records of the hospitals and identified 11 foreign bodies referred between the period of 1st January 2018 and 30st April 2021. The site, etiology, clinical presentation, symptoms, complications and management modalities, and outcomes were noted.

Results: The patients mean age was 57 years. There were more women than men; 8 versus 4 [P < 0.002]. The most common foreign bodies were parts of inferior vena cava filters and devices. Foreign bodies in the heart were symptomatic in 76% of patients. Right atrial chamber, inferior and superior venacava were occupied more often. A total of 78% presented within the first 24 hours. A majority of foreign bodies reached the heart by migration. There was no mortality among those treated with endovascular percutaneous therapy. All those treated in our center were by endovascular percutaneous and conservative therapy.

Conclusions: Foreign bodies in the heart and vessels may be asymptomatic or present with a wide variety of symptoms. Health care providers should be aware of this rare event and act fast in dealing with it.

Keywords: foreign body, heart, vessels.

WACP/INT10:
THE PREVALENCE OF HYPERTENSION IN A RURAL COMMUNITY IN ENUGU STATE

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Introduction: The prevalence of hypertension in Nigeria is high and increasing with urban-rural differences. Factors that may affect the burden of hypertension in rural areas may include lower rates of literacy, lack of access to care and cultural beliefs.

Objectives: To determine the prevalence of hypertension in a rural settlement in Enugu state.

Materials and methods: This study was carried out in Ugwuomu Village in Enugu South Local Government area of Enugu State using a three-phase cross-sectional descriptive study. Data management and statistical analyses were done using SPSS version 20.

Results: *Characteristics of the participants -* A total of 976 participants completed the full survey; their blood pressures were measured and their data analysed. Females were 629(64.4%) and males 347(35.6%). The mean age of the participants was 42.9±15.7 years. The prevalence of hypertension in the study was 25.8% (252/976); most of them detected for the first time. 232 (23.8%). The peak age of occurrence of hypertension was 40-49 years followed by 50-59 years. Systolic hypertension ($\geqslant$ 140mmHg) was found in 244 (25%) of the population, most of whom had mild systolic hypertension (191/244 (78.3%)). Diastolic hypertension was reported in 98(10.4%). About 1.6% (16/976) and 0.7% (7/976) had severe systolic and diastolic hypertension respectively at the time of the study.

Conclusion: Estimates of hypertension in a rural village in Enugu state was 25.8% most of which were newly detected (92.1%. Systolic hypertension ($\geqslant$ 140mmHg) was found in 244 (25%) of the population and diastolic hypertension was reported in 98(10.4%).

Keywords: Hypertension, Prevalence, rural area, Enugu, Nigeria.

WACP/INT11:
STRESS ELECTROCARDIOGRAPHY DIAGNOSTIC PERFORMANCE IN THE ASSESSMENT OF SIGNIFICANT CORONARY ARTERY DISEASE IN COMPARISON WITH CORONARY ANGIOGRAPHY AMONG NIGERIANS: A PILOT STUDY

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Introduction: Stress electro-cardiography is a mon-invasive investigation that can be used for evaluation of patients suspected with Coronary artery disease. Patients with coronary artery disease are risk stratified into low, intermediate and high risk. Patients with high risk of coronary artery disease require catheter coronary angiography. Those with intermediate risks are further evaluated using non-invasive investigations such as stress ECG, stress, stress Echocardiography, Computed Tomography coronary angiogram or Magnetic Resonance Imaging. In this study, our objective was to evaluate Stress Electrocardiography Diagnostic performance in the assessment of significant coronary artery disease in comparison with coronary angiography among Nigerians at the Cardiocare Hospital, Abuja.

Materials and Methods: Twenty-one consecutive patients with new onset of chest pain were studied. The study lasted commenced from 1st August 2020 to 31st January 2021. These patients were referred to the Cardiocare Specialist hospital for suspected coronary artery disease. These patients had normal resting ECG and negative troponin I. Those excluded included patients with past history of coronary artery disease, abnormal resting ECG, positive troponin I, history of sudden cardiac events and ventricular arrhythmias. Ethical approval was sought and approval given before the study was done.

Results: There were 13 males and 8 females included in the study. Stress ECG correctly detected significant stenosis in 6 out of 21 patients with an overall sensitivity per patient of 71.4% and specificity per patient of 33.3%. the accuracy of stress ECG in detecting significant stenosis is 47.4%. the degree of positivity is very importance in that those with ST-segment depression of more than 3mm with downward slopping or horizontal sloping were more significant.

Conclusion: Stress ECG is important in evaluation of coronary artery disease among intermediate risk group. The degree of ST-segment depression and direction of slopping are important in significant coronary artery stenosis.

Keywords: Stress Electrocardiography, Diagnosis of coronary artery disease, coronary angiography, Nigerians. Limitations: 1) small sample size. 2) pilot study.

WACP/INT12:
PREVALENCE AND PATTERN OF ACUTE DERMATOLOGICAL MANIFESTATIONS OF THE NOVEL COVID-19 INFECTION AT A COVID-19 TREATMENT CENTER IN SUB-SAHARAN AFRICA

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Background: COVID-19 is associated with diverse manifestations including dermatological disease. Reports of cutaneous manifestations from Africa are few despite observances of these cutaneous manifestations during treatment of COVID-19 patients. The aim of this study is to document the prevalence and pattern of cutaneous manifestation of COVID-19 disease,

Methods: This was a prospective cross-sectional study of 161 adult in-patients

with PCR confirmed COVID-19 disease at a treatment center for moderate and severe COVID-19 disease. Sociodemographic (age, gender, duration of COVID symptoms) and clinical data (severity of COVID-19, cutaneous manifestation) were documented using a questionnaire. All the patients were clinically evaluated for new onset skin disease. Data was analyzed using SPSS 22.0. Simple statistics such as means and frequencies are presented.

Results: The group was made up of 54.7% males and 45.3 % females with a mean age of 54.4 ± 14.4 years. Seven patients had cutaneous manifestation of COVID-19 disease giving a prevalence of 4.2%. These cutaneous manifestations were urticaria, morbiliform rash, purpura blister and scaly patches. In 2 patients, the cutaneous manifestation started at the same time with the COVID-19 symptoms while in 5 patients, it started after the symptoms. The severity of COVID-19 disease was severe in 5 of these patients. Only one patient reported itching with COVID-19 disease.

Conclusion: The novel COVID-19 virus does have cutaneous manifestations but these are uncommon and dependent on the severity of the COVID-19 disease.

WACP/LBM1:
PLATELET YIELD AND SOME DONOR RELATED PREDICTORS IN A SINGLE-DONOR-APHERESIS: REPORT FROM A NIGERIAN TERTIARY HOSPITAL

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Background: Single donor (SD) platelet transfusion is the preferred therapeutic option for patients with platelet insufficiency and its effectiveness is partly dependent on the yield.

Aim: To determine the predictors of platelet yield in SD apheresis.

Materials and Methods: This was a five-year review of the data on SD apheresis using the Haemonetics Apheresis machine MCS$^+$ in Alex Ekwueme Federal UniversityTeaching Hospital, Abakaliki, Ebonyi state. Platelet donor related variable of interest include the pre-donation platelet count and donor's blood group. Data on number of sessions and yield volume were also collected.

Results: A total of 153 platelapheresis were studied. The mean values for pre-donation platelet count, number of sessions, platelet yield and volume of platelet concentrate are $279 \times 10^9/L \pm 47$, 6 ± 0.3, $45 \times 10^9/L \pm 8$, and $320 \pm 78mL$ respectively. In this study, volume of platelet concentrate predicts 61% of platelet yield while platelet count of donor predicts 41 %. Neither ABO nor Rh blood groups was a determinant of platelet yield.

Conclusion: Pre-donation platelet count and volume of platelet concentrate are important predictors of platelet yield. There is need for proper platelet donor selection.

WACP/LBM2:
ASSESSING THE ADEQUACY OF BLOOD DONATION PRACTICE TO MEET TRANSFUSION REQUIREMENTS IN EBONYI STATE NIGERIA

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Introduction: Blood donation is the only source of blood hence the practice of blood donation is critical to meeting the blood transfusion needs in healthcare delivery.

Objective: The objective of this study was to assess the adequacy and challenges of blood donation practices in selected communities in South East Nigeria.

Methods/materials: This was a descriptive cross-sectional study of 636 respondents from seven local government areas, selected by stratified random sampling technique. The research tool was a structured interviewer administered questionnaire.

Results: Majority of respondents (218, 31.3%) were 26 – 35 years while males (322,50.6%) were more than females (314, 49.4%) and most (328,51.7%) had obtained a tertiary/post graduate degree. Respondents with knowledge of blood donation and good attitude towards donation accounted for 71.2% and 62.9% of the total sample respectively. Only 32.5% had good practice of blood donation. The commonest reasons for not donating were that no one asked for it (24.7%) and they did not think of it (42.3%). There were statistically significant relationships between age, sex, marital status, location and occupation of respondents and practice of blood donation.

Conclusion: Blood donation practice is still poor in Nigeria. Good knowledge and attitude may not translate to good blood donation practice due to blunted

or poor altruism. Sustained regular education and awareness to arouse blood donation practice and establishment of a system that reminds potential donors to keep blood donation appointments or invitation could be impactful in improving blood donation exercises.

Keywords: Blood donation, practice, Nigeria, challenges.

WACP/LBM3:

THE IMPLICATION OF WEAK DRUG REGULATION AND CONTROL IN NIGERIA: A STUDY OF PENTAZOCINE MISUSE AMONG SICKLE CELL DISEASE PATIENTS IN A TERTIARY HOSPITAL IN NIGERIA

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Introduction: Sickle cell disease (SCD) is a chronic disease characterized by debilitating bone pains which commonly necessitates the use of analgesic drugs including opioids and psychotropic substances like pentazocine which are controlled medicines in Nigeria. A disturbing aspect of Self-medication and pentazocine addiction is a growing menace among patients with SCD with adverse effects on social, economic and physical well-being.

Objective: The primary objective of this study was to establish the factors that have contributed to the preponderance of self-medication and increasing dependence on pentazocine among patients with SCD in Nigeria despite the laws.

Materials and methods: The study was conducted using a 29-item pre-tested and pre-validated questionnaire self-administered to 20 SCD patients with established history of pentazocine misuse and addiction. Five frequently indicted pharmacies were approached to ascertain their knowledge of controlled medicines and modus operandi in dispensing opioid injectable.

Results: The median age of the study subjects was 24years and most were undergraduates. All cases (100%) acquired pentazocine injection from local pharmacies and patent medicine shops without prescription while 20% get home deliveries and 14% purchase on credit to pay when buoyant. Most of the local pharmacies/ drug shops owners are aware of drug laws guiding controlled medicines in Nigeria.

Conclusion: The results suggest that drug laws were adequate falling short only in their implementation. The regulatory bodies were rated as ineffective arising from corruption, communication gaps, and poor monitoring.

Keywords: Sickle cell disease, Pentazocine, misuse, addiction, prescription, Nigeria laws

Conflict of interest: None to Declare

WACP/LBM4:

MANAGEMENT OF HOSPITAL BLOOD DEMAND AND SUPPLY IN NIGERIA DURING THE COVID-19 PANDEMIC – A MULTI-FACILITY STUDY OF 34 TERTIARY HOSPITALS

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Background: The COVID-19 pandemic affected blood supplies globally. Mobile blood drive campaigns halted, and voluntary blood donations reduced, challenging available blood supplies. Furthermore, fears of virus transmission led to deferrals of elective surgeries and non-urgent clinical

procedures with noticeable declines in blood donations and transfusions.

Objectives: We aimed to assess the effect of the COVID-19 pandemic on the number of blood donations and transfusions across the country by blood product type across various hospital departments.

Methods: A retrospective descriptive study was conducted to determine the impact of the COVID-19 pandemic on blood services in thirty-four (34) tertiary hospitals in Nigeria, comparing January to July 2019 (pre-COVID-19) to January to July 2020 (peri-COVID-19). Data was collected from the country's web-based software District Health Information System, Version 2 (DHIS2).

Results: A 17.1% decline in numbers of blood donations was observed over the study period, especially in April 2020 (44.3%), a 21.7% decline in numbers of blood transfusions, especially in April 2020 (44.3%). The largest declines in transfusion were noted in surgery department for fresh frozen plasma (80.1%) [p = 0.012] and accident and emergency department transfusion of platelets (78.3%) [p = 0.005]. The least decline of statistical significance was observed in internal medicine transfusions of whole blood (19.6%) [p = 0.011].

Conclusions: The COVID-19 pandemic significantly affected the numbers of blood donations and transfusions in Nigeria. Strengthening blood services to provide various blood components and secure safe blood supplies during public health emergencies is therefore critical.

Keywords: Donors, Blood collection, Transfusion medicine (in general), Blood components, Nigeria

Conflict of interest: The authors declare no conflict of interest.

WACP/LBM5:
HAEMOGLOBIN CHROMATOGRAPHIC PATTERN OF INDIVIDUALS WITH SICKLE CELL ANAEMIA IN COMPARISM TO THOSE WITH SICKLE CELL TRAIT AT ABAKALIKI, SOUTH EASTERN NIGERIA
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Background: High performance liquid Chromatography (HPLC) has been shown to be reliable in evaluating the different haemoglobin types.

Objective: This study aimed to determine the mean level of haemoglobin types (HbS, HbA2 and HbF) among individuals with HbSS and HbAS phenotype and also to compare Hb types with gender.

Materials and Methods: This was a cross-sectional comparative study during which the levels of HbS, HbA2 and HbF of participants with HbSS and HbAS were assayed using HPLC. Data was analyzed using SPSS software, Version 20.

Results: Eighty-three subjects, made up of 60 HbSS and 23 HbAS individuals participated in the study, with mean age of 12.9 years ±9.7 and 11.3 years ±8.9 respectively. Mean HbS level among HbSS participants was 80% ±7.9, which was statistically significant compared to that of HbAS, 37.2% ±13.1 (p= 0.001). Mean HbF and HbA2 level of 8.0% ±6.1 and 2.6% ±1.9 respectively among HbSS participants were also higher than the value of 3.8% ±3.7 and 2.5% ±1.3 among HbAS participantss, though not statistically significant (p>0.05). Among HbSS and HbAS participants, males have higher HbS values of 80.4% and 37.8% respectively which was higher than that of the females, 79.7% and 36.9% though not significant. Conversely, males (HbSS and HbAS) have lower HbA2 and HbF levels compared to females, though not significant (p >0.05).

Conclusions: Individuals with HbSS have significantly higher HbS level compared to those with HbAS phenotype. HbF and HbA2 level were also higher among HbSS participants, though not significant. Males have higher HbS but lower HbA2 and HbF compared to females among the two groups.

WACP/LBM6:
IMPACT OF DIET INDUCED ACIDOSIS ON ADIPONECTIN CIRCULATING LEVEL IN TYPE 2 DIABETIC NIGERIANS
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Background: Reports from previous studies have shown that type 2 diabetic individuals with lower circulating adiponectin levels are associated with higher therapeutic failure rate than those with higher circulating adiponectin levels. This has prompted studies on the potential of different strategies to modulate adiponectin levels; and restricting diets with high acid forming potential has been considered as one of the possible effective strategies. However, findings from studies across different ethnic groups are inconsistent. The inconsistencies in the findings might be due to differences in intake quality and quantities in different settings.

Objectives: To investigate the impact of diet-induced acidosis on the plasma level of adiponectin among a group of patients with type 2 diabetes mellitus in a specialist hospital in Gombe, Nigeria.

Materials and Methods: Dietary intake was assessed using a food frequency questionnaire and the Nigerian Food Composition Table. Acid forming potential of our local diets were estimated as Potential Renal Acid Load (PRAL) scores. Plasma fasting glucose and total adiponectin were analysed.

Results: Subjects in the lowest quartile of the PRAL scores have a significantly higher circulating adiponectin level (8.4 ± 0.9 vs. 7.2 ± 1.3 µg/ml, $p < 0.05$)

compared with those in the highest quartile.

Conclusion: Among subjects with type 2 diabetes mellitus in this study, consumption of diets with high acid forming potential is associated with decreased adiponectin level.

WACP/PAED1:
DETERMINANTS OF DEPRESSION IN CHILDREN AND ADOLESCENTS WITH SICKLE CELL ANAEMIA IN ENUGU, SOUTHEAST NIGERIA

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Background: Sickle cell anaemia (SCA) is the commonest monogenic haematologic disorder resulting from the inheritance of homozygous mutant haemoglobin genes from both parents. Some factors have been identified as important in explaining the variability in depression in sickle cell anaemia (SCA). Information on this is limited in Nigeria.

Objective: To determine factors which influence depression in children and adolescents with sickle cell anaemia attending the University of Nigeria Teaching Hospital (UNTH), Ituku-Ozalla, Enugu.

Materials and Methods: Systematic random sampling technique was used in this cross-sectional study to select children and adolescents aged 7-17 years at the weekly sickle cell clinic of the University of Nigeria Teaching hospital (UNTH) Enugu, Nigeria.

Pretested, validated, structured questionnaires were used to collect sociodemographic and disease severity data while depression was assessed using the Children's Depression Inventory.

Results: Age and educational level had significant positive linear relationships with depression ($r = 0.253$, $p = 0.02$; $r = 0.225$, $p = 0.04$ respectively) while gender ($\chi2 = 0.531$, $p = 0.466$), socioeconomic status ($\chi2 = 0.451$, $p = 0.798$) and disease severity ($\chi2 = 0.422$, $p = 0.810$) had no relationship with depression in children and adolescents with SCA.

Conclusion: Depression in children and adolescents with SCA increased with increasing age and educational level. Psychological evaluation and input may be required during regular follow up as they get older and progress in class.

Keywords: Determinants, Depression, Children, Adolescents, Sickle cell

WACP/PAED2:
MEDICAL ETHICS EDUCATION; DOCTORS' EXPERIENCE AND PERCEPTION OF ITS IMPACT IN CHILD HEALTHCARE IN A NIGERIAN TEACHING HOSPITAL

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Introduction: Medical schools and postgraduate colleges are realising the importance of the study of medical ethics. There is an increasing awareness of the benefits of medical ethics in Paediatrics, due to children's lack of autonomy, and balancing this lack of autonomy with upholding the rights of the child. **Objectives:** To determine doctors' experience and perception of medical ethics education and its impact

in child healthcare at the University of Port Harcourt Teaching Hospital (UPTH).

Methods: This was a questionnaire-based study. Socio-demographics, doctors' exposure to medical ethics education, limitations to its application and measures to improve their practice of medical ethics in child healthcare were sought. Data were analyzed using descriptive statistics.

Results: 294 doctors participated. Two hundred and thirty-nine (81.3%) doctors had medical ethics lectures as undergraduates while 156 (53.1%) doctors had same after graduation. Two hundred and twenty-three (75.9%) agreed that the knowledge they had acquired had been useful to them in child care. Most (77.2%) cited a strong influence of local socio-cultural beliefs and practices by parents as a major limitation in their practice while 53.4% cited a lack of institutional support. Majority [223 (75.9%)] wanted more practical sessions/workshops on medical ethics, while others wanted more undergraduate and postgraduate courses on medical ethics.

Conclusion: Medical ethics in undergraduate and postgraduate education as it concerns child healthcare is important and contributes to improved healthcare. Further improvements in ethics education and curriculum, adaptation to positive socio-cultural beliefs and customs and institutional support is required.

WACP/PAED3:
PREVALENCE AND OUTCOME OF HYPERGLYCAEMIA IN ACUTELY ILL CHILDREN ADMITTED TO THE EMERGENCY PAEDIATRIC UNIT OF USMANU DANFODIYO UNIVERSITY TEACHING HOSPITAL (UDUTH), SOKOTO

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Background: Hyperglycaemia occurs frequently among acutely ill children, and is associated with adverse outcome.

Objectives: To determine the prevalence of hyperglycaemia, the associated clinical features, disease conditions and outcome among acutely ill children admitted to the Emergency paediatric Unit (EPU).

Materials and Method: A prospective study conducted in UDUTH, Sokoto from March to August 2018, involving consecutive children aged 1 month to 13years, with acute illness, admitted in EPU. Blood glucose testing was done using Accu-Chek Active glucometer, and clinical information obtained. Hyperglycaemia was defined as blood glucose >8.3mmol/l. Outcome measures were retrieved from the case folders after discharge or death. Statistical analysis was done using SPSS 23.0.

Results: Of the 410 subjects recruited, 218 were males with M: F ratio of 1.1:1. The median age was 24 months (range 1-156). Forty children (9.8%) had hyperglycaemia. Of these, fever was present in 38(95%), diarrhoea 22(55%), vomiting 16(40%), and convulsion 14(35%). Only fever severity (Temp >38.5°C) was significantly associated with hyperglycaemia (OR=2.5 95% CI=1.28-4.98, p=0.008). Children with severe malaria had the highest frequency of hyperglycaemia (3%), followed by sepsis (2%) (X^2=20.32, p=0.041). Mortality was higher in hyperglycaemic (22.2%) than non-hyperglycaemic children (9.4%), (X^2= 5.62 p= 0.018), and the former were 2.7 times less likely to survive than the latter. (OR 2.75, 95% CI=1.16-6.54, p=0.022).

Conclusions: Hyperglycaemia is common in acutely ill children particularly those with fever >38.5^{0}C and associated with increased mortality. We recommend routine blood glucose testing in acutely ill children and close monitoring of hyperglycaemic children.

Keywords: Hyperglycaemia, Prevalence, Acutely ill, Blood-glucose, Outcome.

WACP/PAED4:
ECONOMIC BURDEN OF CHILDHOOD ASTHMA IN CHILDREN ATTENDING A FOLLOW-UP CLINIC IN A RESOURCE-POOR SETTING OF SOUTHEAST NIGERIA

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Background: Beyond its chronicity, childhood asthma carries an economic burden for households. Optimal asthma care requires universal access to medications, and a recognized barrier to accessing to healthcare in low-middle income countries is the cost of treatment.

Objectives: To evaluate the cost of care of childhood asthma in Nigerian households.

Materials and Methods: A cross-sectional hospital-based study. Relevant information was obtained through an interviewer-administered questionnaire. The cost of asthma treatment was estimated using direct medical costs and loss in productivity. Data analysis was done with SPSS version 22. A significant value of $p < 0.05$ was used.

Results: The average direct cost was USD10.35, with the cost of drug USD5.8 accounting for 56% of the direct cost. The loss in productivity was USD16.73. The mean cost per clinic visit was USD27.08. This cost was catastrophic in 12 (18.2%) households. The calculated annual cost of asthma treatment was USD162.49, with a cumulative national cost of USD 0.16 billion, which makes up 0.002% of the national GDP.

Conclusion: The cost burden of asthma treatment may be low on the households but carries a huge national cost impact. We recommend the inclusion of asthma care in the Nigerian social health insurance as this may help reduce the financial burden due to asthma.

Keywords: Childhood asthma; Economic cost; Nigeria.

Conflict of interest: Authors declare no conflict of interest.

WACP/PAED5:
NON-CONTACT THERMOMETRY: A COVID ERA SCREENING TOOL, HOW DOES IT COMPARE TO CONTACT THERMOMETRY READINGS

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Background: Body temperature is a vital sign in clinical practice which can be measured via electronic contact thermometers and infrared non-contact thermometers.

Objective: To compare temperature readings taken by non-contact infrared thermometer with contact axillary, rectal, and oral thermometry. Evaluate the influence of environmental temperature on noncontact infrared thermometer readings.

Materials and Methods: A prospective study carried out in the Paediatric outpatient clinic of the Rivers State University Teaching Hospital, Nigeria. Infrared non-contact forehead and jugular temperatures with contact axillary, oral, and rectal temperatures at a recorded atmospheric temperature and pressure were measured.

Results: 247 children aged 1month to 16years were enrolled, the mean differences of the contact and non-

contact thermometry readings ranged from 0.45 to -0.77°C (1.64, -1.81°C) 95% LoA. The highest mean difference was found between infrared forehead and axillary [MD; 0.45(1.64,-0.73°C)95%LoA] temperatures. There was a significant positive correlation between the mean difference of infrared forehead/rectal temperature and atmospheric temperature (r = 0 .211 p = 0.029). Linear regression showed that infrared forehead temperature of 37.1°C was equivalent to rectal temperature of 38°C and axillary of 37.4°C which is the standard cut-off for fever. Infrared jugular of 37.2°C was equivalent to rectal of 38°C and axillary temperature of 37.4°C was equivalent to infrared jugular of 37.03°C all at a mean atmospheric temperature of 28.3±1.8°C.

Conclusion: Infrared non-contact forehead thermometer reading of 37.1°C could be considered as the fever cut-off for non-contact forehead thermometry in Nigeria in regions where the mean atmospheric temperature is 28.3±1.8°C.

WACP/PAED6:
BLOOD OXYGEN SATURATION AND PROLONG FACE MASK USE IN HEALTHCARE WORKERS IN PORT HARCOURT NIGERIA, IN THE COVID 19 PANDEMIC ERA

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Background: The use of face masks has been advocated as a key strategy in the disease control of the COVID 19 viral pandemic especially among frontline health care workers. However, the use of face masks for prolonged periods has raised concerns on possible adverse effects on blood oxygenation, potentially affecting compliance. Objectives: To monitor the blood oxygen saturation (SPO2) of healthcare workers wearing facemasks for 8-hours in the course of their duties, in a tertiary institution in Port Harcourt, Nigeria.

Materials and methods: A cross-sectional study of healthcare workers wearing face masks while working. Baseline pre-face mask use SPO2 was done at Zero hours. Subsequently, serial hourly SPO2 was recorded until completion at the eighth-hour. The respiratory and pulse rates were recorded at zero and eight hours. The results were analyzed and presented as Means, Medians, Graphs, and Tables.

Results: There were 220 participants with more females 147(66.8%). Doctors constituted 133(60.5%). The baseline pre-facemask Mean SPO2 was 97.9% ±0.75. The Median SPO2 was 98%. The overall SPO2 trend across 8 hours was maintained above 97.7% for all participants. Age was significantly associated with differences in SPO2 trend (P=0.032) (P=006); while Type of Facemask use had no significant effect on the mean SPO2 trend (p=1.00). There was no significant difference in respiratory and pulse rates pre and post 8-hours face mask use.

Conclusion: Healthcare workers using facemasks continuously over eight hours maintained normal SPO2 levels, with a physiologic adaptation of respiratory and pulse rates.

The authors declare no conflict of interest.

WACP/PAED7:
NIGERIAN HEALTH SYSTEM RESPONSE TO THE COVID-19 PANDEMIC: APPLICATION OF THE WHO HEALTH SYSTEMS FRAMEWORK

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Introduction: Health systems have an important role in a multi-sector response to pandemics. There are already concerns that COVID-19 will severely divert limited health care resources.

Objective: This study appraised the readiness and how the Nigerian health system is coping with the COVID-19 pandemic.

Methods: This study was a cross-sectional qualitative study involving key informant and in-depth interviews. Purposive sampling was used to recruit participants who were members of the Task Force on COVID-19 in Oyo State, southwest Nigeria and Emergency Operations Centres' (EOC) members (physicians, nurses, laboratory scientists, "contact tracers", logistic managers) and other partners. The state's health system response to COVID 19 was assessed using the WHO health systems framework. Audio recordings of the interviews done in English were transcribed and thematic analysis of these transcripts was carried out using NVIVO software.

Results: The state government responded promptly by putting in place measures to address the COVID-19 Pandemic. However, the response was not adequate owing to the fact that the health system has already been weakened by various challenges like poor funding of the health system, shortage of human resources and inadequate infrastructure. These contributed to a less than expected response of the health system to the pandemic.

Conclusion: In order to equip the health system to be able to respond adequately and appropriately during major health disasters like pandemics, fundamental pillars of the health system: finance, human resources, information and technology, medical equipment and leadership need to be addressed to have a resilient health system.

Keywords: COVID-19, Health systems analysis, Pandemic, Resilience.

WACP/PSY1:
CHANGING AGE DYNAMICS AND EXPOSURE TO TRAUMATIC EVENTS: AN ASSESSMENT OF PTSD AND QUALITY OF LIFE OF OLDER ADULTS IN A RURAL COMMUNITY IN NIGERIA

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Introduction/ Background: Changing demographic patterns and increasing turmoil ensure that more older adults are exposed to traumatic events. PTSD is a known psychological aftermath of trauma which can impact negatively on individual's quality of life (QoL).

Objectives: To assess the lifetime prevalence of full and subsyndromal PTSD using the DSM-IV and DSM-5 diagnostic criteria, and association with putative risk factors, and QoL of traumatised older adults in a rural community in Nigeria.

Materials and Methods: A cross sectional study using multistage sampling technique to recruit 200 traumatised older adults in Riyom, a rural community in north central Nigeria. Lifetime DSM-IV PTSD diagnosis was made using the CIDI, and

DSM-5 was approximated. The WHOQOL-BREF was used to assess QoL. Associations between lifetime PTSD and putative factors were analysed using logistic regression with significant value set at <0 .05 and confidence interval of 95%.

Results: Participants' ages ranged between 60 to 104 years with a mean age of 69.4±10.1 years. Lifetime prevalence was 61.5% and 59.0% for full PTSD, and an additional lifetime prevalence of subsyndromal PTSD of 21.5% and 35.5% using DSM-IV and DSM-5, respectively. Average monthly income was significantly associated with increased odds of having PTSD across both diagnostic criteria. Low monthly income and substantial impairment in QoL were associated with full and subsyndromal PTSD among participants.

Conclusion: This study demonstrates increased prevalence of full and subsyndromal PTSD among traumatised older adults. Low socio-economic status had significant association with PTSD. Furthermore, full and subsyndromal PTSD have substantial impact on QoL and PTSD.

Conflict of interests: Authors declare no conflict of interest.

WACP/PSY2:
PREVALENCE AND RISK FACTORS OF ANXIETY DISORDERS IN PREGNANCY AMONG ADOLESCENTS ATTENDING ANTENATAL CARE AT AHMADU BELLO UNIVERSITY TEACHING HOSPITAL, ZARIA.

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Background: Adolescent pregnancy is a common occurrence world-wide. In the predominantly Muslim society of

Northern Nigeria, early marriage and the resultant teenage motherhood abound. Studies assessing the anxiety disorders in pregnancy were mostly done among adult women. Few studies have been done to assess anxiety disorders among adolescents in pregnancy.

Objective: The objective of this study was to determine the prevalence and risk factors of anxiety disorders among adolescents in pregnancy attending antenatal care of Ahmadu Bello University Teaching Hospital, Zaria.

Materials and Methods: It was a cross-sectional study in which one hundred and fifty adolescents in the third trimester of pregnancy were randomly selected. All the subjects completed socio-demographic, clinical, social support and GHQ-12 questionnaires. Those that screened positive for emotional disorder at cut-off point of three and few of those that screened negative were interviewed with anxiety module of Structured Clinical Interview for DSM-IV Disorders.

Results: The prevalence of anxiety disorders among the adolescents was 11.3%. Primigravida (OR = 1.32. 95% CI 0.21 – 8.20), Still birth (OR = 6.06, 95% CI 1.33 – 27.53), and Poor social support (OR = 3.15, 95% CI 0.12 – 81.50) were associated with anxiety among the subjects.

Conclusions: In conclusion, anxiety disorders are common in late pregnancy among adolescents. Routine screening for anxiety disorders during the antenatal care will help in early detection and management, thereby limiting the potential harmful effect on the women and their newborns.