SUPPLEMENT
July 2021

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

OFFICIAL PUBLICATION OF
THE WEST AFRICAN COLLEGE OF PHYSICIANS AND
WEST AFRICAN COLLEGE OF SURGEONS

www.wajmed.org
<table>
<thead>
<tr>
<th>Section</th>
<th>Page</th>
</tr>
</thead>
<tbody>
<tr>
<td>GENERAL INFORMATION</td>
<td>IC</td>
</tr>
<tr>
<td>INFORMATION FOR AUTHORS</td>
<td>IF</td>
</tr>
<tr>
<td>EDITORIAL NOTES</td>
<td>S1</td>
</tr>
<tr>
<td>BOOK OF ABSTRACTS, JULY 2021</td>
<td>S3</td>
</tr>
<tr>
<td>Section</td>
<td>Pages</td>
</tr>
<tr>
<td>---------------------------------</td>
<td>-------</td>
</tr>
<tr>
<td>INFORMATION GÉNÉRALE</td>
<td>IC</td>
</tr>
<tr>
<td>INFORMATION POUR AUTEURS</td>
<td>1F</td>
</tr>
<tr>
<td>NOTES DE RÉDACTION</td>
<td>S1</td>
</tr>
<tr>
<td>RÉSUMES, JULY 2021</td>
<td>S3</td>
</tr>
</tbody>
</table>
The West African Journal of Medicine (ISSN 0189-160X) is owned and published by the West African College of Physicians and the West African College of Surgeons. Volume 37 will consist of seven issues in 2020. The subscription rates to Volume 37, 2020 are as follows:

<table>
<thead>
<tr>
<th>CATEGORY</th>
<th>DESCRIPTION</th>
<th>RATES*</th>
</tr>
</thead>
<tbody>
<tr>
<td>SR1</td>
<td>Fellows of WACP/WACS</td>
<td>$300.00</td>
</tr>
<tr>
<td>SR2</td>
<td>West Africa/Non-Fellows</td>
<td>$350.00</td>
</tr>
<tr>
<td>SR3</td>
<td>Rest of the World</td>
<td>$400.00</td>
</tr>
<tr>
<td>SR4</td>
<td>Individual Resident in training</td>
<td>$150.00</td>
</tr>
<tr>
<td>SR5</td>
<td>Resident Doctor through WACP/WACS</td>
<td>$120.00</td>
</tr>
</tbody>
</table>

Institutional Subscription Rates to Volume 37, 2020

<table>
<thead>
<tr>
<th>CATEGORY</th>
<th>DESCRIPTION</th>
<th>RATES*</th>
</tr>
</thead>
<tbody>
<tr>
<td>SR6</td>
<td>West Africa</td>
<td>$350.00</td>
</tr>
<tr>
<td>SR7</td>
<td>Rest of the World</td>
<td>$600.00</td>
</tr>
</tbody>
</table>

Single copies (inclusive of postage)

<table>
<thead>
<tr>
<th>CATEGORY</th>
<th>DESCRIPTION</th>
<th>RATES*</th>
</tr>
</thead>
<tbody>
<tr>
<td>SR8</td>
<td>West Africa</td>
<td>$70.00</td>
</tr>
<tr>
<td>SR9</td>
<td>Rest of the World</td>
<td>$120.00</td>
</tr>
<tr>
<td>SR10</td>
<td>Electronic Version</td>
<td>$70.00</td>
</tr>
</tbody>
</table>

*All Rates are inclusive of postage except category SR5 for which copies will be delivered through the Secretariat of WACS OR WACP in Lagos. Rates are in US dollars. Subscription within Nigeria may be made in Nigerian Naira at one USD equal to the current CBN rate.

Payment: This can be by cheque or by bank draft made payable to the “West African Journal of Medicine” and mailed to the Editor-in-Chief. Alternatively payment can be made online into a designated account of the Journal or by electronic transfer. Those wishing to use these means should inquire from the Business Manager.

The Editor-in-Chief,  
West African Journal of Medicine, 6, Taylor Drive, Edmund Crescent,  
PMB 2023, Yaba, Lagos. Nigeria. Email: wajmeditorinchief@gmail.com Website: www.wajmed.org

Dear Sir,  
I wish to subscribe to the WAJM as follows (Please tick as appropriate)

Year  Volume  Category of Subscription: (Please circle)
2021  38 (Nos. 1 - 6)  [ ] SR1 [ ] SR2 [ ] SR3 [ ] SR4 [ ] SR5 [ ] SR6 [ ] SR7 [ ] SR8 [ ] SR9 [ ] SR10

Name of Subscriber: ________________________________  Institution: ________________________________
Postal Address: ________________________________  E-mail Address: ________________________________  Telephone: ________________________________

Total Sum: ________________________________

Mode of Payment (Tick):  Cheque [ ] Money Transfer [ ] Cash [ ]

[ ] I enclose a cheque/draft for the sum of ________________________________

[ ] I wish to pay by electronic transfer the sum of ________________________________

NB: One US$ is equal to the current CBN rate.

Signature: ________________________________  Date: ________________________________

Please send completed form by post or email as above.
EDITORIAL LEADERSHIP

Editor-in-Chief
Professor Gregory Erhabor,
Department of Medicine,
College of Health Sciences,
Obafemi Awolowo University Teaching Hospital,
Ile-Ife, Nigeria.
Email: wajeditorinchief@gmail.com

Assistant Editors-In-Chief
Albert Akpalu
Philip M. Mshelbwala

Past Editors
Professor E. O. Olurin 1981 – 1986
Professor A. O. Odejide 1987 – 1991
Professor D. R. Lisk 1998 – 2000
Professor O. G. Ajao 2001 – 2005
Professor A. E Ohwovoriole 2006 – 2011
Professor R. Darko 2012 – 2017

WEST AFRICAN COLLEGE OF SURGEONS LEADERSHIP

<table>
<thead>
<tr>
<th>S/No.</th>
<th>Name</th>
<th>Status</th>
<th>Country</th>
</tr>
</thead>
<tbody>
<tr>
<td>1.</td>
<td>Prof S. M. Gueye</td>
<td>President</td>
<td>Senegal</td>
</tr>
<tr>
<td>2.</td>
<td>Prof Peter Donkor</td>
<td>1st Vice-President</td>
<td>Ghana</td>
</tr>
<tr>
<td>3.</td>
<td>Prof E. R. Ezeome</td>
<td>2nd Vice-President</td>
<td>Nigeria</td>
</tr>
<tr>
<td>4.</td>
<td>Prof P. M. Mshelbwala</td>
<td>Secretary-General</td>
<td>Nigeria</td>
</tr>
<tr>
<td>5.</td>
<td>Prof A. M. Baiyeroju</td>
<td>Honorary Treasurer</td>
<td>Nigeria</td>
</tr>
<tr>
<td>6.</td>
<td>Prof Fred Ugwumbas</td>
<td>Asst. Secretary-General</td>
<td>Nigeria</td>
</tr>
<tr>
<td>7.</td>
<td>Prof Grace Parkins</td>
<td>Asst. Honorary Treasurer</td>
<td>Ghana</td>
</tr>
</tbody>
</table>

WEST AFRICAN COLLEGE OF PHYSICIANS LEADERSHIP (2021)

<table>
<thead>
<tr>
<th>S/No.</th>
<th>Names</th>
<th>Status</th>
</tr>
</thead>
<tbody>
<tr>
<td>1.</td>
<td>Dr. Durodami Lisk</td>
<td>College President</td>
</tr>
<tr>
<td>2.</td>
<td>Dr. Rose Jallah Macauley</td>
<td>President-Elect</td>
</tr>
<tr>
<td>3.</td>
<td>Dr. Albert Akpalu</td>
<td>Secretary-General</td>
</tr>
<tr>
<td>4.</td>
<td>Dr. Enobong E. Ikpeme</td>
<td>College Treasurer</td>
</tr>
<tr>
<td>5.</td>
<td>Dr. Olga Lompo</td>
<td>Vice-President</td>
</tr>
<tr>
<td>6.</td>
<td>Dr. Isidore Diomande</td>
<td>Vice-President</td>
</tr>
<tr>
<td>7.</td>
<td>Dr. Alfred Yawson</td>
<td>Vice-President</td>
</tr>
<tr>
<td>8.</td>
<td>Dr. Beavougui Mariame</td>
<td>Vice-President</td>
</tr>
<tr>
<td>9.</td>
<td>Dr. Angela Benson</td>
<td>Vice-President</td>
</tr>
<tr>
<td>10.</td>
<td>Dr. Seydou Doumbia</td>
<td>Vice-President</td>
</tr>
<tr>
<td>11.</td>
<td>Dr. Eric Adheossi</td>
<td>Vice-President</td>
</tr>
<tr>
<td>12.</td>
<td>Dr. Aboi Jeremiah Madaki</td>
<td>Vice-President</td>
</tr>
<tr>
<td>13.</td>
<td>Dr. Marcel Zannou</td>
<td>Vice-President</td>
</tr>
<tr>
<td>14.</td>
<td>Dr. Abdoul Kane</td>
<td>Vice-President</td>
</tr>
<tr>
<td>15.</td>
<td>Dr. Sahr Gevao</td>
<td>Vice-President</td>
</tr>
<tr>
<td>16.</td>
<td>Dr. U.A Okomo</td>
<td>Vice-President</td>
</tr>
<tr>
<td>17.</td>
<td>Dr. A. Koffi Balogou</td>
<td>Vice-President</td>
</tr>
<tr>
<td>18.</td>
<td>Dr. Prudence Wachinou</td>
<td>Asst. Secretary-General</td>
</tr>
<tr>
<td>19.</td>
<td>Dr Yvonne Dei Adomakoh</td>
<td>Asst. College Treasurer</td>
</tr>
</tbody>
</table>
Editor-in-Chief and Editorial Office
Professor Gregory Erhabor
Department of Medicine,
College of Health Sciences,
Obafemi Awolowo Univ. Teaching Hospital,
Ile-Ife, Nigeria.
Email: wajmeditorinchief@gmail.com
Facebook: https://www.facebook.com/wajmedic
Twitter: https://twitter.com/wajmedic
Blog: https://wajmeditor.blogspot.com
Google Plus: https://plus.google.com/111507556876991931770
Website: www.wajmed.org

Liaison Office
West African Journal of Medicine Office,
University College Hospital,
Ibadan, Nigeria.

THE JOURNAL
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 others.

NOTICE TO SUBSCRIBERS
Annual individual subscription rates in US Dollars inclusive of postage are as follows for 2020:
- West Africa: $300.00
- Rest of the world: $400.00
- West Africa Doctors in Training (direct): $150.00
- West Africa Doctors in Training through the Colleges: $120.00

Annual Institutional Rates inclusive of postage:
- West Africa: $350.00
- Rest of the world: $600.00

Cheques should be made to West African Journal of Medicine and sent to the Editor-in-Chief. Further information about subscription may be obtained from the Business Manager at wajmeditorinchief@gmail.com

NOTICE TO ADVERTISERS
Requests for information on advertisement rates should be addressed to the Business Manager, wajmeditorinchief@gmail.com. Further information may be found at the website of the Journal: www.wajmed.org.

DISCLAIMER
WAJM is not liable for statements or claims made by any contributor or advertiser in the Journal. Statements or opinions of authors reflect their own views and do not represent the policy of the Journal, its owners or its publishers. The publication of an advertisement does not imply endorsement of such a product by the Journal, its owners or publishers.

MISSION
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

AUTHORS

Corresponding authors should ensure that
1. The article is typed in Microsoft Word.
2. All parts of the manuscript are typed double-spaced using Times New Roman with point size 12.
3. Each of the sections is begun on a new page
4. The following sequence is followed:
5. Abstract is structured in no more than 250 words, (include a word count) and if unstructured (vide supra) a maximum of 150 words.
6. Four to ten keywords (from Index Medicus MeSH) are provided.
7. References, figures, and tables are cited consecutively in text.
8. A set of illustrations clearly numbered and labelled for orientation is provided.
9. They have included permission to reproduce previously published materials or permission to use illustration that may identify human subjects.
10. A cover letter stating the following is included:
   i). Originality of work
   ii) type of article (vide supra)
   iii) approval of final copy of manuscript by all authors. If possible, all authors should sign.
   iv) Name, postal and e-mail addresses, telephone and fax numbers of corresponding author.
11. They acknowledge potential conflict of interest and financial support.
12. They keep for their own use a copy of everything being submitted.
13. When finally accepted, they enclose signed transfer of copyright and other forms.
14. They have submitted an electronic copy by email to the wajmeditorinechief@wajmed.org and wajmeditorinchief@gmail.com

REFERENCE

International Committee of Medical Journal Editors uniform requirements for manuscript submitted to Biomedical Journal.
http://www.icmje.org/urm_full
Mission and Scope
The West African Journal of Medicine (WAJM) publishes contributions of professional, scientific and educational interest to medical and dental practitioners and researchers and those in related disciplines, with special focus on medical practice and research in Africa and its people. The aim of the Journal is to provide a medium for international dissemination of research findings in West Africa and elsewhere and to promote cooperation amongst and between medical researchers in Africa and elsewhere. The Journal is published in English and French. Supplements are published upon arrangement with the Editor-in-Chief.

Information about previous publication
Manuscripts are considered on the understanding that they have not been published or are not under consideration for publication by another journal. However, publication of the abstract of the paper elsewhere does not disqualify the paper from consideration. When there is doubt about possible duplicative publication, authors should attach a copy of the published paper to the manuscript on submission.

Submission of Manuscripts
The Journal welcomes papers in the form of original research articles, commentaries, editorials, reviews and educational materials as well as scientific, sociopolitical and economic contributions in matters that impact on medical care, education and research. An electronic copy of the manuscript should also be sent to the email address of the Editor-in-Chief. Professor Gregory Erhabor Professor Gregory Erhabor Department of Medicine, College of Health Sciences, Obafemi Awolowo Univ. Teaching Hospital, Ile-Ife, Nigeria. Email: wajmeditorinchief@gmail.com

Facebook: https://www.facebook.com/wajmedic
Twitter: https://twitter.com/wajmedic
Blog: https://wajmeditor.blogspot.com
Google Plus: https://plus.google.com/111507556876991931770
E-mail: wajmeditorinchief@gmail.com; wajmeditorinchief@wajmed.org

Revised manuscript: When revising a manuscript at the request of the Editor-in-Chief, authors should provide a covering letter detailing the response to each of the points raised by the assessors or the editors. A copy should be sent to the Editor-in-Chief by email. Information about electronic submissions is available from the Editor-in-Chief. An electronic proof of the edited manuscript may be sent to the corresponding author for corrections on request. Such proofs must be returned to the Editor within three days of dispatch by the Editorial office. Typographical corrections only should be effected when correcting galley proofs. Manuscripts should be prepared in accordance with the “Uniform Requirements Submitted to Biomedical Journals” (1). The paper should be typed with 3 cm margins and double spaced throughout, including illustrations and references. Pages should be numbered and word-count provided for the abstract and the complete paper excluding references, tables and legends. Point size 12 using Times New Roman should be used throughout the manuscript, using Microsoft Word application. All contributions are peer reviewed by assessors. Accepted manuscripts may be copy-edited according to the Journal style. The authors are responsible for all statements and claims made in their work and such claims and statements are not necessarily shared by the Editors or the Publishers of Owners of the Journal. Similarly, neither the Editors nor the Publishers guarantee any claims made concerning advertised products or services. The manuscript should be accompanied by a covering letter, which identifies the corresponding author and signed by all co-authors. Only those who have contributed significantly should be included as authors (vide infra). All authors should also sign the declaration and copyright when the contribution is finally accepted. The senior author should provide an explanation for any of the authors unable to sign.

Offprints
Offprints are obtainable from the Editor-in-Chief at advertised rates. These should be paid for at the time of final acceptance of contributions.

TYPES OF CONTRIBUTIONS
Indicate the type of contribution in the covering letter as follows:

Section A: Original Research Articles An original research should concern itself with aetiology, pathogenesis, pathology, diagnosis, management and prevention of medical disorders. Animal research contributions which impact on human health care are equally welcome in this section. This type of manuscript should have a maximum of 4,000 words and a maximum total of eight tables and/or illustrations and no more than thirty references.

Section B: Brief Communications and Case Reports Examples of these include unique case reports, clinical experiences, reports of adverse drug effects, and short reports of original research. The text should not exceed 1,500 words, a total of three figures and/or tables and no more than fifteen references. The format should be as for a standard paper.

Section C: Medical Education Important innovations in medical education for
Information for Contributors

clinicians as well as continuing professional improvement. Text length and other requirements are as for original research publications.

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.

Section E: Conference and Workshop Reports and Supplements
Conference and workshop reports should not exceed 5,000 words, and should be edited before submission. Proceedings of grand rounds are also welcome in this section. The Journal will also publish special issues as supplements upon a proposal having been accepted by the Journal.

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).

MANUSCRIPT FORMAT AND PREPARATION
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 subsections should be started on a new page in the sequence given above.

Title Page
This should contain (i) title of the manuscript, (ii) initial(s) and surname of each author, and his affiliation; (iv) name, postal and e-mail addresses of corresponding author, (v) a running title of not more than 40 characters, (vi) financial support information (e.g. agency, grant number). Avoid use of abbreviations in the title. Provide a word count of both the abstract and the main text at the bottom of the title page.

Abstract Page
The abstract should either be structured (maximum 250 words) or unstructured (150 words or less) depending on the type of article. Articles that need structured abstracts include original research papers, case reports, reviews and meta-analyses and brief reports. Other contributions may be provided only with a 150-word summary in the conventional manner. In any event the abstract should include the purpose, methods, results and conclusions. Editorials, correspondence, commentaries, prose and poetry and similar contributions need not carry abstracts.

Structured abstracts should be provided as follows:

(i) abstract for original contributions, case reports and brief reports should consist of the following sections: (a) Background and objectives, (b) Methods which should include design, subjects, materials, setting and measurements (c) Results and (d), Conclusions.
(ii) A review article abstract (including meta-analysis) should be organised into the following sections: (a) Background/Purpose, (b) Data source (c) Study selection, (d) Data extraction, (e) Results, and (f) Conclusions. Keywords: Provide four – ten keywords or short phrases that can be used for indexing, immediately following the abstract. Use terms from Index Medicus Medical Subject Headings (MeSH).

GUIDELINES ON STYLE
Headings in Text: Use a maximum of the levels of sub-headings. Abbreviations should be sparingly used and only to save space and avoid repeating long names or regimens used more than once. In a figure or table, define the abbreviation in a foot note. List in an alphabetical order all non-standard abbreviations (with definitions) contained in the text after the keywords. Accepted abbreviations can be used without definition. Avoid abbreviations in the title, running title, titles of illustrations, and at the start of a sentence.

Drugs should be indicated by their generic names but not trade names except for drugs showing adverse reaction or those used in comparison of different preparations of the same agent. In the latter case give the generic name followed by the proprietary name and the manufacturer in brackets.

Tables should be submitted one each on a separate page, typed doubled linespaced, and numbered and referred to in the text by Arabic numerals. Their approximate positions in the text should be indicated. A brief title describing the content in the table should be supplied at the top. Tables should be created using the tables function of the word processing software Microsoft Word, not a spreadsheet.

Give each column of the table a short
Information for Contributors

West African Journal of Medicine  July 2021 (Supplement)  11

heading. The units in which results are expressed should be given in brackets at the head of each column. Place explanations in the footnotes but not in the heading. For footnotes, use the following symbols in the given sequence in order from left to right or from top to bottom in the body of the Table *, †, ‡, §, ¶, **, ††, ‡‡, §§ etc. No internal horizontal or vertical rules should be used in the table. If a table must extend beyond a page, repeat the title followed by “cont’d” and repeat the column headings.

Illustrations or photographs should be submitted in triplicates, and should be black and white glossy prints of very high quality. However, professionally made line drawings are acceptable as photographic prints. Original drawings, X-ray films etc. are not acceptable. Illustrations should not be larger than an A4 size. Letters, numbers and symbols should be even and clear throughout and of sufficient size that when reduced for publication each item will still be legible. Illustration title and explanatory notes should be in the respective legend and not in the figures themselves.

Provide photomicrographs with staining techniques, internal scale markers and/or a statement of magnification. Symbols, arrows, or letters used in the photographs should contrast with the background.

Figures should be numbered consecutively in Arabic numerals according to the order in which they have been cited in the text. Patients shown in photographs should have their identity concealed or should have given their written consent for publication. Materials taken from other sources must be accompanied by a written permission for reproduction by the publishers or copyright holder.

Colour figures will only be published at the expense of the authors. Authors should write to inquire from the Editor-in-Chief. On the back of each printed figure or below the electronic figure, authors should write the figure number, the name of the senior author, the running title and an arrow to indicate the top edge.

Footnotes are only allowed on the title page and in tables, but not within the text. Footnote symbols should be used in the following order, horizontally and/or vertically: *, †, ‡, §, ¶, **, ††, ‡‡, §§ etc. Use of numbers or letters is not acceptable.

Legends for Figures. Type each legend for an illustration double-spaced, starting on a separate sheet, with Arabic numerals corresponding to the figure. This should start with a short title, followed by a short, cryptic description of the legend. All abbreviations and symbols should be explained in the legend. Magnification and stain for any microphotograph should be given at the end of the legend for the figure, where appropriate.

UNITS FOR SCIENTIFIC MEASUREMENTS

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.

REFERENCES

The references should be numbered in parentheses in the order in which they appear in the text, tables, or legends. References should be in the Vancouver superscript style, as laid down in the “Uniform Requirements for manuscripts submitted to Biomedical Journals (1)”. 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 of publication, the volume number and the first and last pages. For books, the references should follow the following format: the author, title of book, place of publication, the publisher, the year and the relevant pages. Journals not listed in Index Medicus should be spelt out in full.

Examples of References

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


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

(6) Volume with supplement


(5) Issue with supplement


(4) Volume with supplement

Information for Contributors


(7) Type of article indicated as needed

(8) Personal author(s)

(9) Editor(s), compiler(s) as author

(10) Conference proceedings

(11) Conference paper

(12) Dissertation

(13) Electronic Material

(14) Monograph in electronic format

ETHICAL CONSIDERATION

1. Consent
All manuscripts reporting experiments in human beings must be accompanied by a statement in the method section that the authors have complied with the requirements of the local ethical committee. If investigators have no access to an ethics committee, the principles outlined in the Helsinki Declaration (2) should be followed. Avoid using patient's names, initials or hospital numbers. If full-face photographs are to be used, such photographs must be accompanied by a signed or thumb printed informed consent form. Avoid using patient's names, initials or hospital numbers. If full-face photographs are to be used, such photographs must be accompanied by a signed or thumb printed informed consent form. Animal experimenters must also follow the institution's guidelines on the use of laboratory animals in research.

2. Criteria for Authorship
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”: (a) conception and design, or analysis and interpretation of data; (b) drafting the article or revising it critically for important intellectual content; (c) final revision of the version to be published. Authors should meet conditions a, b, and c. Collecting and assembling data reported in a paper are not, by themselves, qualifications for authorship. The corollary also should not be overlooked i.e. those who meet criteria for authorship should not be excluded.

3. Conflicts of Interest
Authors should list all financial support, including equipment and drugs on the title page. Details of financial interest that might influence the conduct or reporting of the study should be given in the covering letter. Referees (assessors of articles) should also inform the editor of any possible conflict of interest.

4. Previous and Redundant
Publications Manuscripts that overlap substantially with previous publications should not be submitted for consideration. Publication of the abstract arising from a conference does not disqualify the paper. Authors should submit a copy of potential duplicate papers to the editor.

5. Copyright
On acceptance, the copyright of the paper will be vested in the Journal/Publisher. All authors of the manuscript are required to sign the “Statement to be signed by all authors” and the transfer of the copyright.

DOCUMENTS CITED


Submitting Manuscripts: In addition to the information for authors, contributors should note that all submissions should be electronic by email. All manuscripts submitted should be sent to the Editor-in-Chief (EIC) as an email attachment processed in Microsoft Word and saved as Rich Text Format (RTF). For initial processing, figures may be scanned or taken by digital cameras and attached separately from the text. On acceptance we will arrange, if the need arises, to receive quality graphics from authors. On receipt of the electronic version of your manuscripts, it will be mailed unedited to reviewers. Therefore, ensure that the submission follows the guidelines provided for authors. Authors should send two versions of the manuscripts: one with all the details prescribed and a second one without the names and affiliations of the authors.

Review by Electronic Means.
The Journal actively encourages reviewers to complete the peer review process electronically. To this end, the Journal is seeking for reviewers with knowledge of and access to internet procedures to join the team of our regular reviewers. If you would like to review for the Journal using electronic means, please send me a mail to that effect and I would send you a formal invitation and the details of the review process.

Keywords for Indexing
Author and subject indexes are published for each issue and volume of the Journal. To facilitate this, it is important that standard accepted keywords be supplied as indicated in the section for information for authors. As stated therein, all keywords should follow those in the MeSH of Index Medicus and/or as in Medline.

Review Articles in Specialties
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.

POLICY ON PROCESSING OF NEW MANUSCRIPTS

The Board of the Journal has decided that a token amount be charged for processing manuscript without prejudice to the publication fee on final acceptance. To this end, a processing fee of eighty dollars (USD 80.00) is to be paid by authors along with the manuscript at submission. This policy will take effect from 1st January 2021. Solicited contributions are exempted from the payment of processing fees. All payment should be made payable to “West African Journal of Medicine” and with bank commissions borne by drawers. Payments may also be made to the following Journal account by electronically transfer:

Account Name: West African Journal of Medicine
Account Number: 0265229681
Name of Bank: GTBANK.

In case of any difficulty, please do not hesitate to contact us by email: wajmedi@ncherch@gmail.com
Professor Gregory Erhabor
Department of Medicine,
College of Health Sciences,
Obafemi Awolowo Univ. Teaching Hospital,
Ile-Ife, Nigeria.

Facebook: https://www.facebook.com/wajmedic
Twitter: https://twitter.com/wajmedic
Blog: https://wajmeditor.blogspot.com
Google Plus: https://plus.google.com/111507556876991931770
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.
1. Dr. Radcliffe Durodami Lisk  WACP College President
2. Dr Albert Akpalu  Secretary General
3. Dr Enobong Ikpeme  College Treasurer
4. Dr Aboi Madaki  National Chairman/College VP (Nigeria Chapter)
5. Dr Lateef Taiwo Sheikh  National Secretary (Nigeria Chapter)
6. Dr Fidelia Obiageli Emelumadu  National Treasurer (Nigeria Chapter)
7. Dr Akin Moses  44th/45th WACP AGSM LOC Chairman
8. Dr Habibu Galadanci  LOC Secretary
9. Dr Rita Idemudia  LOC Treasurer
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)
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 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 stakeholders. 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
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: Health 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.
SOKOTO STATE, NIGERIA
Inoh EE1, Oche MO1, Awosan KJ1, Ukwuani ZA1, Attahiru Aisha1, Inoh Mi2
1Department of Community Medicine, Usmanu Danfodiyo University Teaching Hospital, Sokoto. 2Department of Ear Nose and Throat, University of Uyo Teaching Hospital, Uyo. Akwa Ibom State.
Correspondence: lizyinoh@gmail.com

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 retraining 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
Rabiu I.1, Abdulnasiru Y.2, Ahmed I. G.3, Abdulrahim A. O.4
1Department of Community Medicine, Gombe State University, Gombe, Nigeria. 2Department of Haematology and Blood Transfusion, Federal Teaching Hospital, Gombe, Nigeria. 3Department of Haematology and Blood Transfusion, Gombe State University, Gombe, Nigeria. 4Department of Medicine, Gastroenterology unit, Federal Medical Centre Keffi, Nasarawa Nigeria.
Correspondence: ibrahimrabiu69@gmail.com

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 be 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
Maizare HI1, Tsiga-Ahmed FI2, Jibo AM1, Adamu AL2, Jalo RI2, Magaji A3, Ibrahim U1, Gajida AU2
1Department of Community Medicine, Aminu Kano Teaching Hospital, Kano. 2Department of Community Medicine, Bayero University/Aminu Kano Teaching Hospital, Kano. 3Hospital Management Board, Ministry of Health Bauchi, Bauchi State. 4Department of Paediatrics, Bayero University/Aminu Kano Teaching Hospital, Kano.
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
Ossai EN,1,2 Eze II,1,2 Izugba CO,1 Obuna VO,1 Nwanga BC1
1 Department of Community Medicine, College of Health Sciences, Ebonyi State University Abakaliki, Nigeria. 2 Department of Community Medicine, Alex Ekwueme Federal University Teaching Hospital Abakaliki, Nigeria.

Correspondence: Ossai Edmund Ndudi, ossai_2@yahoo.co.uk

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 ≥ 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.

Keywords: 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
Ajuba MO,1,2 Nwoga OH,3 Igweagu CP1,2
1 Department of Community Medicine, Enugu State University College of Medicine, Enugu, Nigeria
2 Department of Community Medicine, Enugu State University Teaching Hospital Parklane Enugu, Nigeria

Correspondence: miriam_ajuba@yahoo.com

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 availability of school health services in 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%), Igbo, 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**


1 Department of Community Medicine, Usman Danfodiyo University Teaching Hospital, Sokoto, Nigeria. 2 Department of Community Health, Usman Danfodiyo University, Sokoto, Nigeria. 3 Department of Community Medicine and Primary Care Federal Medical Center Abeokuta, Nigeria. 4 Department of Community Health, College of Health Sciences, University of Ghana Medical School, Accra, Ghana  

**Correspondence:** zainabukwani@gmail.com

**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, disclosure, HIV.

**Conflict of interest:** Nil

---

**WACP/COM9:**

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


1 Department of Community Medicine, Usman Danfodiyo University Teaching Hospital, Sokoto, Nigeria. 2 Department of Community Health, College of Health Sciences, University of Ghana Medical School, Accra, Ghana  

**Correspondence:** zainabukwani@gmail.com

**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.
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). 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.

Methods: We conducted a cross-sectional study in Sabon Gari LGA in Katsina State Primary Health Care Board, Katsina. A community training program, Abuja. Department of Community Medicine, Kaduna State University, Kaduna. 1 Department of Community Medicine, Ahmada Bello University, Zaria. Nigeria Field Epidemiology and Laboratory Training Program, Abuja.

Conflict of interest: Nil

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.

Keywords: knowledge, preventive practices, Lassa fever, rural, Ebonyi state, southeast Nigeria.
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.

Muktar A. Gadanya and Jamila S. Ibrahim

Department of Community Medicine, Bayero University, Kano, Nigeria.

Correspondence: magadanya.cmde@buk.edu.ng

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

Maizare HI,1 Tsiga-Ahmed FI,2 Faruk SL,3 Abdullahi NT,1 Abulfatahi AA,2 Damazai JA,1 Auwalu IA,1 Sanusi SM,1 Usman A.4

1Department of Community Medicine,
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

Ekwueme CN1, Agu IC2, Mbachu Co1,2

1Department of Community Medicine, University of Nigeria Teaching Hospital, Enugu. 2Health Policy Research Group, University of Nigeria, Enugu Campus.

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

Abubakar BG1, Aliyu AA1,2, Oche MO1, Awosan KJ3,4, Ango JT3,4, Abdulaziz MD1 and Ezenwoko AZ1.

1Department of Community Medicine, Usmanu Danfodiyo University Teaching Hospital Sokoto, Nigeria. 2Department of Community Medicine, Ahmadu Bello University Teaching Hospital Zaria, Nigeria. 3Department of Community Medicine, Ahmadu Bello University Zaria, Nigeria. 4Department of Community Health, Usmanu Danfodiyo University Sokoto, Nigeria.

Correspondence: bilqise2@gmail.com

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
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

1,2Akinwemi O. O; 3Popoola O.A., 1Fowotade A., 1Adekanmbi O., 2Cadmus E.O.
1Department of Health Policy and Management, University College Hospital Ibadan and College of Medicine, University of Ibadan, Nigeria. 2Department of Community Medicine, College of Medicine, University of Ibadan
3Clinical Virology Unit, Medical Microbiology and Parasitology Department College of Medicine, University of Ibadan, Ibadan, Nigeria. 5Department of Medicine, College of Medicine University of Ibadan and Infectious Disease Unit, Department of Medicine, University College Hospital, Ibadan, Nigeria.

Correspondence:seunakinyemi@hotmail.com

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**

Mbachu C.O., Okeke C.C., Obayi C., Uzochukwu B.S.C. and Onwujeke W. O.*

1Health Policy Research Group, College of Medicine University of Nigeria, Ituku-Ozalla, Enugu. 2Department of Community Medicine, College of Medicine University of Nigeria, Ituku-Ozalla, Enugu. 3Department of Health Administration and Management, College of Medicine University of Nigeria, Ituku-Ozalla, Enugu.

*Correspondence: chinyere.mbachu@unn.edu.ng

---

WACP/COM21:

**TRAINING NEEDS ASSESSMENT OF TRAINERS IN FACULTY OF COMMUNITY HEALTH: A PREVIEW**

Uchendu O.C. 1, Raji M.O. 1, Olabumuyi O.O. 1, Uzochukwu BSC. 3

1University College Hospital, Ibadan, Oyo State. 2Usman Danfodio University Teaching Hospital, Sokoto, Sokoto State. 3University of Nigeria Teaching Hospital, Enugu, Enugu State.

**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 they would need training on assessing trainees’ examination modalities. Trainers should therefore be trained on the requirements, conduct, and assessment of the WACP examinations.
WACP/FAM1:
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

' Ogunfowokan O., 2Ogunfowokan B.A., 1Nwajel A.I.
1National Hospital Abuja. The Ark Medical Centre Asaba. 2Federal Medical Centre Asaba

Correspondence: thearkmedicalcentre@yahoo.co.uk

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 (r² = 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.

WACP/FAM2:
ACUTE MYOCARDIAL INFARCTION FOLLOWING ELECTIVE CAESAREAN SECTION (CASE REPORT)

Oreh AC1,2, Imagbenikaro EU3, Adelaja AM2, Ezeogu L1
1Department of Family Medicine, Garki Hospital Abuja. 2Department of Hospital Services, Federal Ministry of Health Abuja. 3Department of Internal Medicine, Garki Hospital Abuja. 4Department of Obstetrics and Gynaecology, Garki Hospital Abuja

Correspondence: azoreh@yahoo.com

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

WACP/FAM 3:
HERBAL MEDICINE USE AND RENAL PROFILE OF ADULT PATIENTS ATTENDING THE GENERAL OUTPATIENT UNIT OF THE FAMILY MEDICINE DEPARTMENT OF ABUBAKAR TAFWA BALEWA UNIVERSITY TEACHING HOSPITAL, BAUCHI (ATBUTH), NIGERIA

1Maiyegun AA, 2Akangoziri MD, 3Grema BA, 4Mutalub BY
1Department of Family Medicine, Abubakar Tafawa Balewa University Teaching Hospital, Bauchi. 2Department of Family Medicine, Aminu Kano Teaching Hospital, Kano.
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

Ekwueme O.C.1, Nwokoro U.U.2, Olorukooba A. A.1, Ogungbowo O. O1, Akin Moses L.A.1
1Family Medicine Department, National Hospital, Abuja. 2Department of Community Medicine, University of Nigeria, Nsukka. 3Department of Community Medicine, Ahmadu Bello University, Zaria
Correspondence: obiomaekwume@gmail.com

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 patients had chronic diseases (χ²=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%) (χ²=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(χ²=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

Sule, AG1 Suleiman, AM2 Akorede, NS2 Abubakar, IB1 Dila, HK1
1Department of Family Medicine, Ahmadu Bello University Teaching Hospital, Zaria. 2Department of Human Kinetics and Health Education, Ahmadu Bello University, Zaria.
1School of Health Information Management, Ahmadu Bello University Teaching Hospital, Zaria.
Corresponding Author; gbensule@gmail.com

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
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 Polytechnics (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 awareness, utilization and satisfaction 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 ≤ 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.

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 Stenosis (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.

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.
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 3 years. 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
Arawomo A.O., Erhabor G.E., Awopeju O.F., Adewole O.O., Tanimowo M.O.

1Department of Medicine, UniOsun Teaching Hospital, Osogbo, Nigeria.
2Department of Medicine, Obafemi Awolowo University, Ile-Ife, Nigeria.
3Department of Medicine, Ladoke Akintola University of Technology, Ogbomoso, Nigeria.

Correspondence: nickkydocloy@gmail.com

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-Chek Dial Meter to simulate resistance of DPIs and categorized (suboptimal <60L/min; optimal ≥ 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 dyspnoea and impairment were associated with suboptimal PIFR, as shown by the fact that all (100%) patients who had mMRC stage 4 had 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

Cardiac Care Unit, Department of Medicine, Obafemi Awolowo University Teaching Hospitals Complex (OAUTHC), Ile-Ife, Osun State, Nigeria.

Correspondence: obafemiades@gmail.com

Background: Venous Thromboembolism 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 tachypnoea and had a Wells score of 4.5, 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 tachypnoea 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

Oreh AC1, Akerele IO2, Nnabuchi CV2, Obaze DY2, Onyegbutulem HC2
1Department of Hospital Services, Federal Ministry of Health, Abuja
2Asokoro District Hospital COVID-19 Isolation & Treatment Centre, Abuja

Correspondence: Oreh, AC azoreh@yahoo.com

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

Akerele IO1, Oreh AC2, Kawu MB3, Ahmadu A4, Okechukwu JN5, Mbo DN2, John DJ6, Habib F7, Ashikeni MA2
1Asokoro District Hospital Isolation and Treatment Centre, Abuja Nigeria.
2Department of Hospital Services, Federal Ministry of Health, Nigeria. 3Health and Human Services Secretariat, Federal Capital Territory Administration Abuja Nigeria. 4Public Health Department, Federal Capital Territory Administration Abuja Nigeria. 5Maitama District Hospital, Abuja Nigeria. 6Nisa Premier Hospital Abuja Nigeria.

Correspondence: ifilers0811@gmail.com

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.
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


1Dept of Medicine, Enugu State UniversityTeaching Hospital Parklane, Enugu. 2Department of Medicine University of Nigeria Teaching Hospital Enugu.

Correspondence:
birinusadikaibe@gmail.com

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 serious complication including embolism and arrhythmias. They can 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.

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

Emmanuel Auchi Edafe,1,2 Maclean Rumokere Akpa1

1Bayelsa Specialist Hospital, Yenagoa. 2Cardiocare Hospital, Abuja. 1University of Port Harcourt teaching hospital, Port harcourt.

Correspondence:
dremmanueledafe@gmail.com

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 serious complication including embolism and arrhythmias. They can 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: 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 circumferencemy 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
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%) had mild systolic hypertension (191/244 (78.3%)). Diastolic hypertension was reported in 98 (10.4%). About 1.6% of the population, most of whom had hypertension in 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 (>140 mmHg) 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 (>140 mmHg) 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

Emmanuel Auchi Edafe,1,2 Iseko Iseko1, Akpa Maclean Rumokere2
1 Cardiocrine Hospital, Abuja. 2 University of Port Harcourt Teaching Hospital, Port Harcourt

Correspondence: dremmanueladafe@gmail.com

Introduction: Stress electrocardiography is a non-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 Cardiocrine 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 Cardiocrine 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 important in that those with ST-segment depression of more than 3mm with downward sloping 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.


Anaba El
Department of Medicine, Lagos State University College of Medicine
Medicine/Lagos State University Teaching Hospital, Lagos, Nigeria.
E-mail: chianaba@yahoo.com

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.

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 University Teaching 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 x 10^9/L ± 47, 6 ± 0.3, 45 X 10^9/L ± 8, and 320 ± 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.

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

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


Department of Haematology, Alex Ekwoeme Federal University Teaching Hospital Abakaliki, Ebonyi State.

Correspondence: obotican@gmail.com

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 24 years 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

Oreh AC1*, Bozegha T23,4, Ihimekpen A1, Biyama F3, Irechukwu CC1, Alu S4, Oshiane D1, Nnabuhi A1, Ndanitsa A1, Nnachi O1, Ogbonna A1, Abubakar S1, Olupitan F5, Akinkunmi AY6, Ogunlade CO7, Abayomi TF8, Omokaro UE7, Sylvester C1,3, Igiebor UC1, Wokoma B1, Ebophni SS1, Adewuyi B1, Dachi RA1, Muhammad HB2, Abubakar MA2, Mgbang JA1,2,3,4, Chineke AJ5, Ogbuabor OA6, Fakai GS2,3,7, Hashim B1, Adeluwuye NO1, Olanrewaju DO1,2, Agahiu E2, Etim EA1, Alabi SA4, Akinbola IA3, Anibueze C6, Awogbami OV7, Edowohorhu G1, Adekoya-Benson T1, Bello SA1,2, Ojuade Y1 and Amedu OJ

1National Blood Transfusion Service. 2National Hospital Abuja. 3Federal Medical Centre Asaba.
4Delta State University Teaching Hospital. 5Ebonyi State University Teaching hospital, Abakaliki.
6University of Lagos Teaching Hospital (LUTH). 7Federal Medical Centre, Azare. 8Lagos State University Teaching Hospital (LASUTH). 9National Orthopaedic Hospital Dala, Kano. 10National Orthopaedic Hospital Igbobi, Lagos. 11Federal Medical Centre, Owo. 12University of Benin Teaching Hospital. 13Prof. Kelsey Harrison Hospital Port Harcourt. 14Ighododion University Teaching Hospital, Okada.
15University of Port Harcourt Teaching Hospital. 16Braithwaite Memorial Specialized Hospital, Port Harcourt. 17Olabisi Onabanjo University Teaching Hospital.
18Abubakar Tafawa Balewa University Teaching Hospital. 19University of Maiduguri Teaching Hospital. 20Federal Medical Centre, Birnin Kudu, Jigawa. 21University of Uyo Teaching Hospital.
22University of Calabar Teaching Hospital. 23Federal Medical Centre Yenagoa. 24Emu State University Teaching Hospital, Parklane Enugu. 25Ahmadu Bello University Teaching Hospital. 26Usman Dan Fodio University Teaching Hospital. 27Federal Medical Centre, Birnin Kebbi. 28Bowen University Teaching Hospital. 29Ambrose Alli University, Ekpoma. 30Irrua Specialist Hospital. 31Nisa Premier Hospital Abuja.
32Federal Medical Centre, Yola. 33University of Ilorin Teaching Hospital.
34Ladoke Akintola University of Technology (LAUTECH) Teaching Hospital, Ogbomoso. 35University of Abuja Teaching Hospital, Gwagwalada. 36Ekiti State University Teaching Hospital.

Corresponding author: azoreh@yahoo.com

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/LBM6: HAEMOGLOBIN CHROMATOGRAPHIC PATTERN OF INDIVIDUALS WITH SICKLE CELL ANAEMIA IN COMPARISM TO THOSE WITH SICKLE CELL

TRAIT AT ABAKALIKI, SOUTH EASTERN NIGERIA

Ugwu NI
Department of Haematology & Immunology, Faculty of Basic Clinical Sciences, Ebonyi State University, Abakaliki, Nigeria.

Email: ngoziugwu5@gmail.com

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 \( \pm 9.7 \) and 11.3 years \( \pm 8.9 \) respectively. Mean HbS level among HbSS participants was 80% \( \pm 7.9 \), which was statistically significant compared to that of HbAS, 37.2% \( \pm 13.1 \) \( p = 0.001 \). Mean HbF and HbA2 level of 8.0% \( \pm 6.1 \) and 2.6% \( \pm 1.9 \) respectively among HbSS participants were also higher than the value of 3.8% \( \pm 3.7 \) and 2.5% \( \pm 1.3 \) among HbAS participants, 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

Authors: Abdullahi M., Adamu H.
Department of Chemical Pathology, College of Medical Sciences, Gombe State University/Federal Teaching Hospital, Gombe, Nigeria

E-mail: drgombe@gmail.com

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. \( 7.2 ± 1.3 \) \( \mu g/ml, p < 0.05 \) )
comparing 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.

**Keywords:** Type 2 diabetes mellitus; Adiponectin; Phytochemicals; Dietary; Nigeria.

---

**WACP/PAED1:**

DETERMINANTS OF DEPRESSION IN CHILDREN AND ADOLESCENTS WITH SICKLE CELL ANAEMIA IN ENUGU, SOUTHEAST NIGERIA

Ezenwosu OU, Chukwu BF, Okoli CV, Ezenwosu IL, Emodi LJ, Ikefuna An

1 Department of Paediatrics, University of Nigeria, Ituku-Ozalla Campus, Enugu.
2 Nyanya General Hospital, Federal Capital Territory Administration, Abuja.
3 Department of Community Medicine, University of Nigeria Teaching Hospital, Enugu

**Correspondence:** osita.ezenwosu@unn.edu.ng

**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 ($\chi^2 = 0.531$, $p = 0.466$), socioeconomic status ($\chi^2 = 0.451$, $p = 0.798$) and disease severity ($\chi^2 = 0.422$, $p = 0.810$) 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

West TP, Tahansi PN, Yarhere I, Nkanginieme KEO

1 Niger Delta University Teaching Hospital, Okonobiri, Bayelsa State, Nigeria.
2 University of Port Harcourt Teaching Hospital, Port Harcourt, Rivers State, Nigeria

**Correspondence:** timiperegba@yahoo.com

**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

1 UgegeMO, Yusuf Tahir, Amodu-Sanni M, Ibitoye PK, Adamu A, AbdulRahman MB, Chikani U

1 Department of Paediatrics, Usmanu Danfodiyo University Teaching Hospital (UDUTH), Sokoto

**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.

---
**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%) (X²=20.32, p=0.041). Mortality was higher in hyperglycaemic (22.2%) than non-hyperglycaemic children (9.4%), (X²= 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°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:**

**ECO**

**NOMIC BURDEN OF CHILDHOOD ASTHMA IN CHILDREN ATTENDING A FOLLOW-UP CLINIC IN A RESOURCE-POOR SETTING OF SOUTHEAST NIGERIA**

**Ughasoro MD,1,2 Eze JN,1,2 Ayuk AC,1,2 Ohumene-Anyim I,1,2 Akubuilo U,1 Oguonu T.1,2**

1Department of Paediatrics, College of Medicine, University of Nigeria, Enugu Campus. Enugu. 2Department of Paediatrics, University of Nigeria Teaching Hospital (UNTH), Ituku Ozalla Enugu.

**Correspondence:** kakatitis@yahoo.co.uk

**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 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.
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 thermometry 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
Tabansi PN1 and Onubogu UC2.
1 Department of Paediatrics and child health, University of Portharcourt Teaching Hospital, Portharcourt, Rivers State, Nigeria. 2Department of Paediatrics and child health, Rivers State University Teaching Hospital, Portharcourt, Rivers State, Nigeria.

Correspondence: petronillatabansi@yahoo.com

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=0.006); 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
1Akiniyemi O. O, 2Popoola O.A., 3Fowotade A., 4Adekannbi O., 5Cadmus E.O., 6Adebayo A. A.
1Department of Health Policy and Management, University College Hospital Ibadan and College of Medicine, University of Ibadan. 2Department of Community Medicine, College of Medicine, University of Ibadan. 3Clinical Virology Unit, Medical Microbiology and Parasitology Department College of Medicine, University of Ibadan, Ibadan, Nigeria. 4Department of Medicine, College of Medicine University of Ibadan and Infectious Disease Unit, Department of Medicine, University College Hospital, Ibadan, Nigeria.

Correspondence: seunakinymi@hotmail.com

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
Ojeahere M.I, Piwuna C.G, Uwakwe R.
1Department of Psychiatry, Jos University Teaching Hospital, Jos, Plateau state, Nigeria. 2Faculty of Medicine, Nnamdi Azikiwe University, Awka, Anambra State, Nigeria.
Correspondence: issymeg@yahoo.com

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.
Audu IA, Sheikh TL, Olisah VO
1Department of Psychiatry, Ahmadu Bello University Teaching Hospital, Zaria
Correspondence: audu.veka@gmail.com

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.