

WEST AFRICAN JOURNAL OF PHARMACY

EDITOR-IN-CHIEF

Dr. Ibrahim Oreagba

EDITOR

Dr. Olufunsho Awodele

EDITORIAL ADVISERS

Prof Kwame Sarpong (Ghana)
Prof (Mrs) MN Femi-Oyewo (Nigeria)
Prof JSK Ayim (Ghana)
Prof UE Mendie (Nigeria)
Prof (Mrs) CI Igwilo (Nigeria)
Prof 'Fola Tayo (Nigeria)
Mr Wiltshire Johnson (Sierra Leone)
Mr Jimmy Olu Coker (The Gambia)
Prof Mahama Duwiejua (Ghana)

Prof Wilson Erhun (Nigeria)
Prof Amara Chukwu (Nigeria)
Prof ND Ifudu (Nigeria)
Prof CO Usifoh (Nigeria)
Prof Joshua Eniojukan (Nigeria)
Associate Prof P. Tarpowah Kear Jr (Liberia)
Prof Azuka Oparah (Nigeria)
Dr Suleiman Ismail (Nigeria)

OFFICERS OF THE WEST AFRICAN POSTGRADUATE COLLEGE OF PHARMACISTS

President

1st Vice President

2nd Vice President

Secretary-General

Deputy Secretary-General

Editor-In-Chief

Immediate Past President

Chief Examiner

Chairman, Joint Faculty Board

Treasurer

- Rev. T. T. Tye, Sr, FPCPharm (Liberia)
- Mr. Harrison K. Abutiate, FPCPharm (Accra, Ghana)
- Prof (Mrs) Cecilia I Igwilo (Nigeria)
- Prof. Wilson Erhun, FPCPharm (Nigeria)
- Mrs. Markieu Janneh-Kaira, FPCPharm (The Gambia)
- Dr. Ibrahim Oreagba, FPCPharm (Nigeria)
- Mr. Wiltshire Johnson, FPCPharm (Freetown, Sierra Leone)
- Prof. J. S. K. Ayim, FPCPharm (Kumasi, Ghana)
- Professor MN Femi Oyewo, FPCPharm (Lagos, Nigeria)
- Major Thomas W. Tucker, FPCPharm (Sierra Leone)

ANNUAL SUBSCRIPTION

Nigeria	-	NGN 3000
West Africa	-	USD 20
Africa	-	USD 30
United Kingdom	-	£ 70
United States	-	USD 100
Other Countries	-	USD 150

© All rights reserved.

West African Postgraduate College of Pharmacists

6, Taylor Drive, PMB 2023, Yaba,

Lagos, Nigeria

E-mail: wajpeditor@gmail.com

Tel: +234 802 351 9433, +234 807 724 6145

ISSN 1116-9096 Electronic ISSN: 2384-6674

West African Journal of Pharmacy Author Guidelines

Disclaimer

All expressions of opinions, data and statements appearing in articles or advertisements in this journal are published on the authority of the writer concerned. They are not to be regarded as necessarily expressing the views of the publishers or product endorsement by the publishers. Nonetheless, the Editorial Committee will do its utmost to ensure that incorrect data, misleading data, opinions or statements do not appear in the journal. However, the publishers cannot be held responsible for inadvertent errors or omissions, and have no liability to any person or institution regarding claims, loss, or damage, caused or alleged to be caused, directly or indirectly by the use of information or data contained in the Journal.

Aims

- To foster multi-disciplinary research and collaboration among pharmaceutical scientists, practicing pharmacists, pharmaceutical industries and the healthcare sector, as well as provide an international forum for the communication and evaluation of data, methods and opinions in pharmacy practice and related disciplines.
- To promote pharmacy practice research for the advancement of pharmacy profession.
- To enhance the competencies of practicing pharmacists.

Editorial Policy

The West African Journal of Pharmacy is a quarterly publication of the West African Postgraduate College of Pharmacists. West African Journal of Pharmacy considers all manuscripts on the strict condition that they have not been previously published, nor are they submitted for consideration for publication or in press elsewhere.

West African Journal of Pharmacy publishes original research papers, critical reviews, personal views and short communications in the following areas:

- Pharmaceutical Sciences: Pharmaceutics and Pharmaceutical Technology, Pharmacology and Toxicology, Pharmaceutical/Medicinal Chemistry and Analysis, Pharmacognosy, and Pharmaceutical Microbiology.
- Clinical Pharmacy, Pharmaceutical Care, Medicines Management, Pharmacoeconomics, Pharmacy Management, and Public Health Pharmacy.
- Other aspects of Pharmacy Practice such as Hospital, Community, Industrial, Social and Administrative Pharmacy
- Biomedical and related disciplines

Contributions to West African Journal of Pharmacy will be subjected to review at the discretion of the Editorial Office and papers accepted may be subject to editorial revision. Decisions regarding acceptability will be made on the basis of the quality of science, the contribution of the work to the field, the suitability of the work for the Journal and the presentation of the manuscript. Contributions submitted by the Journal's Editors and Editorial Board members are subject to the same peer review standards as papers submitted by all other authors.

Manuscript Submission

To submit a manuscript to the journal you will need to go to the WAPCP site (www.wapharm.org) and follow the links West African Journal of Pharmacy (WAJP) and instructions to our online submission system. Step-by-step instructions are available on the website. If you are unable to submit through the journal site, send the manuscript as an e-mail attachment to us: wajpeditor@gmail.com and include the journal name and "Article Submission" in the subject line.

Correspondence should be directed to:

The Editor-in-Chief
West African Journal of Pharmacy
West African Postgraduate College of Pharmacists
6, Taylor Drive, PMB 2023, Yaba, Lagos
Nigeria
E-mail: wajpeditor@gmail.com
Tel: +234 8077246145, +234 8023519433
ISSN 1116-9096 Electronic ISSN: 2384-6674

Manuscript Preparation

The maximum length of manuscripts should be 6000 words (24 double-spaced typewritten pages) for review, 3000 words (18 pages) for research articles, 1,500 (6 pages) for technical notes, commentaries and short communications

Manuscript Format

The preferred format of all manuscript is MS Word (Font type: Calibri, Font size: 11). Illustrations (figures) and images must be inserted in the manuscript at the position they should appear when published.

Manuscript Style

The Language of the journal is English. Each manuscript should be typed double-spaced on A4 (8.5" × 11") paper size with 1 inch margins. It should be arranged in the following order: Title, Running title (Maximum of 5 words), Abstract, Key words (3 to 5), Introduction, Materials and Methods (Methods for Operational Research), Results, Discussion, Conclusion, Acknowledgement, and References.

First page of manuscript

This should include the title of the article, authors' names (First name, middle initial and then the last name of each author) and their affiliations. The corresponding author must provide the full corresponding address (including telephone and e-mail address) at the bottom of the page.

Second page of manuscript

The Abstract (no more than 250 words) should be presented in the second page along with title, running title of the article and keywords. The abstract should be structured into: Background, Objectives, Methods, Results, and Conclusion.

INTRODUCTION

An introduction should provide a background to the study (appropriate for an international audience). Related literature based on the objectives of the study should be indicated, and clearly state the specific objectives of the study at the end of this section. Please ensure that any abbreviations and all symbols used in equations are fully defined. Approximate length: 500-1000 words.

METHODS

This section should describe the materials and methods used in sufficient detail to allow the study to be replicated. Please include details of ethical approval in this section. Methods of data analysis including the appropriate statistical analysis performed should be provided. Approximate length: 500-1000 words.

RESULTS

This section should first summarize all the results in text before referring to tables and figures for details. Please limit the number of tables and figures. It is essential to include statistical analyses or other indicators to enable assessment of the variance of replicates of the experiments. Data should not be repeated in figures and tables. Approximate length: 1000-1500 words.

DISCUSSION

The discussion section should summarize the main findings, interpret the findings and compare with previous studies, as well as the contribution made to the field. Indicate unanswered questions/ provide direction for future research. This should be followed by a critique of the strengths and limitations of the research including any policy limitations. Approximate length: 1000 words.

CONCLUSION

A brief conclusion section should summarize the salient findings of the study based on the study objectives. Authors are strongly advised to emphasize the contribution made to the field by their study in this section. Approximate length: 200 words.

ACKNOWLEDGEMENTS

This section must include details of the following: (i) any funding provided for conduct of the study and/or preparation of the paper; (ii) relevant conflicts of interest for all authors; and (iii) all persons who made substantial contributions to the work, but who do not meet the criteria for authorship.

REFERENCES

References should be typed single-spaced and numbered consecutively in the order in which they are cited in the text.

Full names of all the authors should be indicated. Arabic numerals (superscript), e.g., (¹, ^{1,3,5} or ¹⁻⁴) should be used in citing references in the text. and placed

after the full stop. Journal names must be written in full and must be italicised. Unpublished work should not be included in the list of references.

Examples

Articles

1. Oparah AC, Adje DU, Enato EFO (2006). Outcomes of pharmaceutical care intervention to hypertensive patients in a Nigerian community pharmacy. *International Journal of Pharmacy Practice* 14: 115-122.
2. Dada OO, Odukoya OA, Taylor OO, Asoro I, Coker HAB, Ologun JT (2003). Toxicological Studies on Jubi Formular. A Nigerian Herbal Preparation, *West African Journal of Pharmacy* 17(1): 39-44.

Books

1. Cole MD, Caddy B. (1995). *The Analysis of Drugs of Abuse: An instruction manual*, 2nd edn. New York: Ellis Horwood.
2. Sanders PA. (1979). Aerosol packaging of pharmaceuticals. In: Banker GS, Rhodes CT, (Eds.), *Modern Pharmaceutics*. New York: Marcel Dekker, pp. 591-626.

Online references should include the website and the date material was accessed:

1. Consumers' Association. Patient information: what is the prognosis? Policy report 2003. Available at: www.whichnet/campaigns/health/patient information/index.html. Accessed December 18, 2005.

Tables

These should be numbered with Arabic numerals. Each table should be typed using a table format (i.e., each variable must be typed into a separate cell in the table) with only horizontal lines above and below the table column headers and at the bottom of the table (using 1 pt for the top and bottom lines and ½ pt for any middle line). No vertical lines should be included in any table. Each table MUST not exceed 6.5 x 7 inches (16.5 x 17.8 cm, width x height) and MUST be inserted at the appropriate position in the text just below where it was referred to the first time. The title should be typed at the top of the table in the sentence case format, i.e., only the first name should be in capital

letters; names should also be in capital letters, as appropriate. Any legend should be typed at the top and bottom of the table in italics.

Illustrations

Figures should be professionally drawn electronically and inserted in the appropriate position where it was first cited within the text. If photographs of patients are used, either the subjects are not identifiable or their pictures must be accompanied by a written permission to use the images. Photographs must be clear and sharp. Labels of tables MUST be in text form and MUST not form part of the image.

Manuscript charges

Once a manuscript is accepted for publication, the author(s) will be required to pay a publication charge of USD 100.00 before the accepted paper is published. All payments must be effected immediately on receipt of letter of acceptance.

Copyright

It is a condition of publication that authors grant the West African Postgraduate College of Pharmacists the exclusive license to publish all articles, including abstracts. Authors retain copyright of their work, which means they may re-use their work for non-commercial purposes without asking permission of the publisher. Authors are themselves responsible for obtaining permission to reproduce copyright material from other sources.

Ethical Matters

Authors using experimental animals and human subjects in their investigation must seek approval from the appropriate Ethical Committee in accordance with "Principles of Laboratory Animal Care" (NIH publication no. 85-23, revised 1985) and/or the Declaration of Helsinki promulgated in 1964 as amended in 1996. The methods section must include a statement to prove that the investigation was approved and that informed consent was obtained.

Galley Proofs

Unless indicated otherwise, galley proofs are sent to the address given for correspondence. It is the responsibility of the corresponding author to ensure that the galley proofs are thoroughly reviewed and returned without delay.

CONTENT

EDITORIAL	vi
Medication use, adherence and asthma control in ambulatory patients attending the chest clinic of a tertiary facility in southwestern Nigeria Rasaq Adisa, Ibukunoluwa O. Akanji and Titilayo O. Fakeye.....	1-14
The disposal pattern of domestic medical and pharmaceutical waste in Uyo metropolis, Southern Nigeria Emmanuel O. Olorunsola and David U. Adje.....	15-22
Management of skin diseases among community pharmacists in Lagos, Nigeria Arinola E. Joda, Oluwatosin A. Osundosumu and Olusola O. Ayanlowo.....	23-34
<i>Garcinia kola</i> prevents scopolamine-induced memory impairment in mice: Role of oxidative and nitrosative stress Ismail O. Ishola, Wahab O. Okunowo, Gbenga O. Afolayan, Azeezat A. Awoyemi.....	35-51
The effect of formulation variables on the physicochemical and antimicrobial properties of cream formulations of <i>Phyllanthus amarus</i> whole plant extract Tolulope O. Ajala, Mbang N. Femi-Oyewo, Oluwatoyin A. Odeku.....	52-60
A comparative evaluation of the pharmaceutical quality of different brands of metformin hydrochloride tablets available in Abuja, Nigeria Sylvester O. Eraga, Matthew I. Arhewoh, Enifome P. Oruh and Magnus A. Iwuagwu.....	61-70
Community pharmacists' assessment of the factors that influence the recommendation of complementary medicines in Lagos State, Nigeria: a pilot study Kosisochi Chinwendu Amorha, Arinola Eniola Joda, Ebere Emilia Ayogu, Chukwuemeka Michael Ubaka.....	71-84
Clients' perception of community pharmacists' services in Owerri, Imo State, Nigeria Roseline Iberi Aderemi-Williams Chioma Nneoma Igwe Rebecca Oritsemaje Soremekun.....	85-97
Antibiotic use in food animals: determination of enrofloxacin residue in chicken tissue Kennedy I. Amagon, Sunday O. Olayemi, Moshood Akinleye, Olufunsho Awodele and Bola O. Silva.....	98-106
Egg shell powder as a potential direct compression excipient in tablet formulation Uduma Eke Osonwa, Chidozie Solomon Okoye, Sunday Okorie Abali, Onyinye J Uwaezuoke and Michael Umale Adikwu.....	107-118
Assessment of continuing professional development activities among pharmacists in Nigeria Ene O. Daniel-Ebune and Arinola E. Joda.....	119-128
Availability of antiretroviral and non-antiretroviral medicines in the management of HIV/AIDS patients in public hospitals in a North-Central State of Nigeria Felicia E. Williams, Ademola O. Awoyemi, Dauda B. Parakoyi, Emmanuel T. Jolayemi, Tanimola M. Akande.....	129-140
Heavy metal content of commonly consumed herbal bitters in Ilorin, Nigeria Rashidat O. Ayanniyi, Samson O. Folami, Hidayah A. Olumoh-Abdul, Soliu A. Atunwa and Ibrahim A. Oreagba.....	141-148
CONFERENCE ABSTRACTS, WA001	149-169
WA001P	169-187
Subscription form	188
WJJP Fellowship Examination	189-201
APPRECIATION TO WJJP REVIEWERS	202-203

EDITORIAL

The West African Journal of Pharmacy (WAJP) has come a long way, blazing the trail in all aspects of pharmacy practice, pharmaceutical sciences and health research in the West African Region. This is in line with the goal of the journal : to foster multi-disciplinary research and collaboration among pharmaceutical scientists, practising pharmacists, pharmaceutical industries and the healthcare sector, as well as provide an international forum for the communication and evaluation of data, communication and opinions in pharmacy practice and related disciplines. The benefits of a well thought out research will no doubt impact positively on the academic community and the society at large.

Despite the need to carry out good research and disseminate research findings, limited resources is a strong draw back. This may be due to lack of political will and commitment on the part of the government. The question then arises: how do you carry out cutting edge research in a region with developing economies and weak government commitment to research?

It is disheartening that in the healthcare institutions, medication errors often occur, but there is little or no data to support this assertion. Sometimes they result in fatalities, yet many of these errors are preventable. Do we as drug experts then sit down and continue to watch people die from preventable adverse events, when a well thought out research proposal can lead to significant interventions and forestall these events? It is time to change our attitude to research and see it as a golden opportunity to impact positively on humanity.

Research must be done to address a pressing need, or fill a gap and this must be driven by passion. Pharmacy practitioners and pharmaceutical scientists must make effort to engage in robust research that will result in remarkable outputs. These, I believe, will ultimately attract the much needed funding.

As I round up my tenure as Editor-in-Chief of WAJP, it is instructive to highlight some achievements of the journal and the hurdles to cross towards elevating it to the world class status that we all desire.

The Journal is currently published twice a year (our goal is quarterly publication) and this has been consistent for the past six years and all published editions have been uploaded to the journal website. Abstracts of old editions have also been uploaded while their full text manuscripts can be accessed upon request.

The journal electronic ISSN has been obtained and is thus being processed for indexing in some major databases, including Index Copernicus International, African Journals Online, Index Medicus, Chemical Abstracts and Scopus. Furthermore, the Journal website is currently being upgraded to allow continuous indexing by Google scholar and to automate the online submission process.

I hereby acknowledge the contributions of my current editor, all editorial board advisers and our excellent team of reviewers (see back page) towards assuring the quality of WAJP papers. Authors are also well acknowledged for submitting valuable manuscripts which keeps the journal going. Finally, I acknowledge the Almighty for the strength.

Thank you for this great and exciting opportunity to serve

Ibrahim Oreagba PhD FPCPharm FAAE

Editor-in-Chief