Research Journal of Health Sciences



PEER-REVIEWED JOURNAL OF THE COLLEGE OF HEALTH SCIENCES

www.rjhs.uniosun.edu.ng

VOLUME 10(2)

APRIL - JUNE 2022

RESEARCH JOURNAL OF HEALTH SCIENCES

APRIL/JUNE 2022

visit our website @ www.rjhs.uniosun.edu.ng

Editor In-Chief
Prof. Alebiosu C.O. BSc, MBChB, FWACP.
Department of Medicine,
College of Health Sciences, Osun State, University.

Editor
Prof. Akinwusi P.O., BSc, MBChB, FWACP
Department of Medicine,
College of Health Sciences, Osun State, University.

Co-Editors
Africa
Prof. Adesoji Fasanmade, FWACP, PhD (Nigeria).
Department of Physiology, University of Ibadan.
Americas, Canada & Europe
Dr. Ayotunde Dokun, MD, PhD, FACE (USA)
Associate Professor of Medicine & Endocrinology,
Director, Division of Endocrinology Diabetes & Metabolism,
Carver School of Medicine,
University of Iowa, Iowa City, AI 52241
Asia & Australia
Prof. Gajendra Singh MBBS, MS (India)
Emeritus Professor of Anatomy,
Institute of Medical Sciences,
Banaras Hindu University, Varanasi – 221 005.

Assistant Editors
Prof. Asekun-Olarinmoye E.O. BSc, MD, FWACP
Prof. Isawumi M.A. FWACS. FMCOph, MSc, MBBCh, FICS
Prof. Irinoye O.O. RN, RM, RPHN, PhD

Associate Editors
Desk Editors
Desk Editor: Dr. Atere T.G. MSc, MPhil, PhD
Pioneer Desk Editor: Dr. Tijani A.A. MBChB, MSc, PhD
Reference Editors
Dr. Omobuwa O. MBChB, MPH, FWACP
Dr. Abiodun O.M. MBBS, FWACS , FMCOG
Language Editors
Prof. Folorunso A.K., BA., French, MA., PhD Lyon, French.
Dr. Balogun T.A. BA, MA, PhD
Dr. Faniran K. F. NCE, BA.ED., MA., PhD (Translation studies).
Journal Statisticians
Dr. Omisore A. G. MBChB; MPH, FWACP
Dr. Adebimpe W.O. MBBS, MPH, FWACP

Editorial Advisers
Prof. Onyemelukwe G.C. (Nigeria)
Prof. Bakare R.A. (Nigeria)
Prof. D. Famurewa (Nigeria)
Prof. Ahbor Dolly Awani Ighoroje (Nigeria)
Prof. Basden JC Onwubere (Nigeria)
Prof. Ayodele Olugbenga. E. (Nigeria)
Dr. Ilesanmi O.S. (Liberia)
Emeritus Prof. Gajendra Singh (India)
Dr. (Mrs) Madhu Yashpal (India)
Dr. Balogun Rasheed (USA)
Dr. Ayotunde O. Dokun (USA)
Dr. Akinsola Akinbiyi (Australia)
Prof. Dinky (Naomi) Levitt (South Africa)
Prof. Thajasvarie Naicker (Anita) (South Africa)

Contents

Original Article

66 Biological synthesis of silver nanoparticles using *Citrus sinesis* seeds: Effects on hepatic and renal functional integrities and antioxidant activities *by Fatoki J. O., Badmus J. A., Ajilore B. S., Faokunla O., Alabi S. O.*

80 Oral health seeking behaviour among patients attending outpatient clinic in University of Ilorin teaching hospital (UITH) Ilorin *by Ernest, M.A., Adeyemi, M.F., Bolarinwa, O.A., Alabi K.M.*

90 Ascorbic acid modulates prefrontal cortex cellular changes in androgen deprived rats *by Abayomi, T.A., Tokunbo, O.S., Saka, T.O., Abayomi, O.A., Osuntokun, O.S. ,Ajilore, B.S.*

101 Memory, neurogenic protein and oxidative deficits of frontal cortex following chlorpyrifos/dichlorvos exposure in rats *by Kadir R.E., Gegele T.A., Kola-Taiwo I.O., Oyewole A.L., Ibrahim A., Imam A., Chengetanai S., Ajao M.S.*

112 Artemisinin-based antimalarial combination therapy amongst healthcare professionals in a tertiary facility in south-south Nigeria: preferences, tolerability, and cost considerations *by Ayinbuomwan, A.S., Opadeyi, A.O., Isah, A.O.*

121 Male involvement in antenatal care in Agege local government area, Lagos state, Nigeria *by Bamidele, J., Odeyemi K., Sodeinde, K.*

131 Screening for eye diseases in a University community in Southwest Nigeria *by Hassan, M.B., Isawumi, M.A.*

139 Inhibition of lipid peroxidation and free radical scavenging activities of methanolic leaf extract of *Psidium guajava by Fatoki, J.O., Kehinde, S.A., Adegoke, A.A., Faokunla, O., Atere, T.G., Olajide, A.T.*[2]

150 *Invitro* antioxidant capacity, phytochemical screening and Gas chromatography GC-MS analysis of Ethanol root extract of *Sphenocentrum jollyanum* (Pierre) *by Oladokun,O.O.*

Short Communication

162 Benefits, disadvantages and challenges of virtual conferencing in the COVID-19 era: Adjusting to the new normal by Ogunmodede J.A., Ogunmodede A.J., Buhari O. I.N., Dele-Ojo B.F., Omotoso A.B., Agede O.A., Omotoso A.B.O.

I Author's Guidelines

The Research Journal of Health Sciences is published four times a year.

Layout & printing by Eipeks Maillon ENT. (eipeksmaillon@gmail.com)

All letters and articles should be addressed to:

The Editor,
Research Journal of Health Sciences,
Editorial Office, College of Health Sciences,
Osun State University,
P. M.B 4494, Osogbo, Osun State
Or
editor.rjhs@uniosun.edu.ng

Electronic abstracts and full text articles available at:
https://www.ajol.info/index.php/rejhs

ISSN (p) 2360-7793 (print)
ISSN (e) 2467-8252 (electronic/ online)

The views and opinions expressed in the articles and reviews published are those of the authors and do not necessarily reflect those of the editors of the journal or its sponsor. In all clinical instances, medical practitioners are referred to the product insert documentation as approved by the relevant controlling authorities.

RESEARCH JOURNAL OF HEALTH SCIENCES

About the Journal

Research Journal of Health Sciences is a peer-reviewed quarterly Journal of the College of Health Sciences, Osun State University, Nigeria, dedicated to the promotion of research in health and related biological sciences.

Efforts have been made by the Editorial Board and publisher to ensure that no inaccuracies or misleading information, opinions or statements appear in the articles or in advertisements being published in this journal. It is therefore important to note that all such information, statements or opinions appearing in the Research Journal of Health Sciences are those of contributors and/or advertisers who themselves are solely responsible for the correctness of same. The opinions expressed or statements made herein are not necessarily the opinions and views of the Journal Editorial Board , the College of Health Sciences or the Osun State University.

The College, the University or the Editorial Board therefore takes no responsibility or liability whatsoever, for any form of consequence(s) arising from the use of any of the articles published in this Journal. Also, the appearance of advertisements does not constitute a guarantee or endorsement by the Journal Editorial Board of the College of Health Sciences, Osun State University of the quality of, or claims made on any advertised product or service by the advertisers.

Scope of the Journal

The Research Journal of Health Sciences aim to make a substantial contribution towards providing high quality publications in health sciences and related biological sciences. It publishes manuscripts from basic and clinical sciences that have not been submitted for publication/or under consideration for publication elsewhere. The Journal ensures a rigorous review process.

Mission

The Research Journal of Health Sciences is dedicated to promoting high quality research work in the field of health and related biological sciences. It aligns with the mission of the Osun State University which is “to create a unique institution, committed to the pursuit of academic innovation, skills-based training and a tradition of excellence in teaching, research and community service”. The Journal acts as a medium of improving the quality of health care and medical education particularly in the context of developing countries with limited resources.

Short Communication Research Journal of Health Sciences

Benefits, disadvantages and challenges of virtual conferencing in the COVID-19 era: Adjusting to the new normal

***Ogunmodede J.A.[1], Ogunmodede A.J.[2], Buhari O. I.N.[3], Dele-Ojo B.F.[4], Omotoso A.B.[3], Agede O.A.[5], Omotoso A.B.O.[1]**

Abstract

Objective: The COVID-19 pandemic has had tremendous effect on the medical and scientific community. Measures instituted to curb the spread of the disease such as physical distancing and ban on large gatherings have significantly altered conferencing activities of medical professional associations. With no end in sight to the pandemic, it is certain that medical professional associations may have to make do with purely virtual or hybrid conferencing for some time to come. The objective of this paper is to highlight the benefits, disadvantages and challenges of virtual conferencing

Methods: We searched Pubmed, Embase, Scopus, and AJOL databases from January 1, 2021 to December 31, 2021 for publications describing the benefits, disadvantages and challenges of virtual conferencing during the pandemic. This, together with authors' experience formed the resource base for this work.

Conclusion: We propose ways the scientific community in Nigeria can maximize the virtual conferencing while the pandemic lasts. We also advocate increased discussion about how to improve the virtual conferencing culture and the development of guidelines for purely virtual or hybrid scientific conferences.

Key Words: Virtual conferencing, COVID-19 Era, Benefits and limitations

***Corresponding author**
Ogunmodede J.A.
ORCID-NO: http://orcid.org/0000-0003-1677-1232
Email: ayodeleogunmodede@yahoo.com

[1]Department of Medicine, University of Ilorin, Ilorin, Nigeria.
[2] Department of Behavioural sciences, University of Ilorin Teaching Hospital, Ilorin, Nigeria
[3]Department of Behavioural sciences, University of Ilorin, Ilorin, Nigeria.
[4]Department of Medicine, Ekiti state University, Ado-Ekiti, Nigeria
[5]Department of Pharmacology and Therapeutics, University of Ilorin, Ilorin, Nigeria

Received: March 6, 2021 *Accepted: February 17, 2022* *Published: June 30, 2022*

Research Journal of Health Sciences subscribed to terms and conditions of Open Access publication. Articles are distributed under the terms of Creative Commons Licence (CC BY-NC-ND 4.0). (http://creativecommons.org/licences/by-nc-nd/4.0).

http://dx.doi.org/10.4314/rejhs.v10i2.10

Short Communication Research Journal of Health Sciences

Avantages, incovénients et défis de la conférence virtuelle à l'ère du COVID-19: s'adapter à la nouvelle normalité

***Ogunmodede J.A.[1], Ogunmodede A.J.[2], Buhari O. I.N.[3], Dele-Ojo B.F.[4], Omotoso A.B.[3], Agede O.A.[5], Omotoso A.B.O.[1]**

Résumé

Objectif de l'étude: La pandémie de COVID-19 a eu un effet considérable sur la communauté médicale et scientifique. Les mesures instituées pour freiner la propagation de la maladie, telles que l'éloignement physique et l'interdiction des grands rassemblements, ont considérablement modifié les activités de conférence des associations professionnelles médicales. Sans fin en vue de la pandémie, il est certain que les associations professionnelles médicales devront se contenter de conférences purement virtuelles ou hybrides pendant un certain temps encore. L'objectif de cet article est de mettre en évidence les avantages, les inconvénients et les défis de la conférence virtuelle.

Méthodes de l'étude : Nous avons effectué des recherches dans les bases de données Pubmed, Embase, Scopus et AJOL du 1er janvier 2021 au 31 décembre 2021 pour trouver des publications décrivant les avantages, les inconvénients et les défis des conférences virtuelles pendant la pandémie. Ceci, combiné à l'expérience des auteurs, a constitué la base de ressources pour ce travail.

Conclusion : Nous proposons des moyens pour que la communauté scientifique du Nigéria puisse maximiser les conférences virtuelles pendant la durée de la pandémie. Nous préconisons également une discussion accrue sur la manière d'améliorer la culture des conférences virtuelles et l'élaboration de lignes directrices pour les conférences scientifiques purement virtuelles ou hybrides.

Mots-clés : Conférence virtuelle, ère COVID-19, avantages et limites

***Corresponding author**
Ogunmodede J.A.
ORCID-NO: http://orcid.org/0000-0003-1677-1232
Email: ayodeleogunmodede@yahoo.com

[1]Department of Medicine, University of Ilorin, Ilorin, Nigeria.
[2] Department of Behavioural sciences, University of Ilorin Teaching Hospital, Ilorin, Nigeria
[3]Department of Behavioural sciences, University of Ilorin, Ilorin, Nigeria.
[4]Department of Medicine, Ekiti state University, Ado-Ekiti, Nigeria
[5]Department of Pharmacology and Therapeutics, University of Ilorin, Ilorin, Nigeria

Received: June 24, 2021 *Accepted: December 30, 2021* *Published: June 30, 2022*

Research Journal of Health Sciences subscribed to terms and conditions of Open Access publication. Articles are distributed under the terms of Creative Commons Licence (CC BY-NC-ND 4.0). (http://creativecommons.org/licences/by-nc-nd/4.0).

http://dx.doi.org/10.4314/rejhs.v10i2.10

INTRODUCTION

COVID-19 originated from a cluster of acute respiratory infection cases in Wuhan, Hubei Province China in December 2019 with infections with the severe acute respiratory syndrome coronavirus 2 (SARS-CoV-2) (1). It has since grown to a pandemic of monumental proportions with 353,924,758 cases and 5,619,319 deaths as at January 24, 2022 (2) leaving in its wake grave economic and social consequences. The World Health Organization (WHO) designated the infective agent SARS-CoV-2 and gave the name Coronavirus disease-2019 (COVID-19) to the disease on February 11, 2020 (3). The disease was subsequently declared a pandemic on March 11, 2020 as it rapidly escalated.

There is no doubt that the pandemic has had tremendous effect on the medical and scientific community. The measures instituted to curb the spread of the disease such as physical distancing and ban on large gatherings have significantly altered not only the scope and processes of clinical care but they have reduced the usual pace of academic activities both within institutions and as relates to conferencing activities of medical professional associations.

We wish to draw attention to another effect of the COVID-19 pandemic. This is the conversion - especially in the months immediately following the onset of the pandemic- of most scheduled scientific conferences in Nigeria and other parts of the world from physical meetings to fully virtual online or hybrid physical and virtual meetings using various conferencing software.

Despite the easing of the various lockdown measures, the ban on large gatherings still remains in Nigeria. Waves of the COVID-19 infection continue to occur in cycles, Lagos state only recently announced the end of its fourth wave (4). With no end in sight to the pandemic, it is certain that medical professional associations and societies may have to make do with purely virtual or hybrid conferencing for some time to come.

Virtual conferencing is not new. The search for and use of media spaces that can provide real time audio and visual communication between individuals in different physical locations dates back to the 1980's and 1990's(5). Over the past decade, before the advent of the pandemic, it had been the norm for conducting day-to-day business in some organizations in the developed economies (5).

Web conferencing depends primarily on the availability of internet services. In Nigeria, internet penetration in the general population has risen from 2.5% in 2009 to 51.4% in 2021. This is projected to increase to about 60% in 2026 (Figure 1) (6). Nigeria also has an impressive level of mobile phone penetration (Figure 2) (7) which is the principal device through which most citizens access the internet. Hence Nigeria appears to have ready baseline requirements for web conferencing, the COVID-18 pandemic turning out to be a catalyst to explore other uses of mobile telephony and internet infrastructure

Web conferencing software can be divided in two categories (5). One category includes the platforms that provide only one way audio and video broadcast centrally from the meeting's moderator to an audience. The other, in addition to combining audio and video communication, provides features for two-way communication, shared desktop access, document and file sharing, simultaneous editing and other electronic forms of communication that allow data to be mutually shared, edited and copied during the meeting/conference. The features also include note-taking, instant messaging and real-time integration into other broadcast platforms such as YouTube, Twitter, Facebook e.t.c. This category is more commonly used and is available in popular virtual conferencing softwares such as Zoom®, join.me®, Go ToMeeting®, Slack®, uShare® e.t.c.

We highlight below the benefits, limitations and challenges of virtual conferencing and propose ways the scientific community in Nigeria can maximise the technology of virtual conferencing while the pandemic lasts.

METHODOLOGY

We searched Pubmed, Embase, Scopus, and AJOL databases from June 1, 2021 to December 31, 2021 for documents describing the benefits, disadvantages and challenges of virtual conferencing during the pandemic. This, together with the authors' experience formed the resource base for this work.

DISCUSSION

Benefits of virtual conferencing

The benefits of holding conferences virtually are myriad. Probably the prime benefit is cost reduction. Virtual conferences are cheaper to organise and cheaper even to attend because travel and accommodation costs are eliminated. Because registration fees are usually lower or even eliminated, virtual conferencing provides

easier access for certain categories of attendees who ordinarily would not attend. These include people who cannot ordinarily afford the registration fees, individuals who cannot take long periods off work such as junior professionals or trainees or those in private medical practice. Also, virtual conferences, if well planned, can attract greater participation. An example is the report by Vervoort et al of the recent American Association of Thoracic Surgeons Centennial conference which was held virtually and which had over 6000 participants- the highest attendance in its history(8).

In virtual conferences, audience participation is also better. Chat boxes in conferencing software enable comments and questions to be raised easily without fear of intimidation by senior or more experienced attendees. A virtual conference also makes it possible to have a greater number and wider spectrum of expert Faculty. High profile international speakers who will ordinarily be unable to fit the conference into their schedule can easily attend and make their presentations from their remote location without the organisers incurring travel costs, while adding great value to the conference deliberations.

The flexibility of virtual conferencing software is also a high point. Many of them have the capacity to make conference sessions available real time on online electronic media such as YouTube hence leaving in public domain recordings that can be accessed subsequently by those who missed the live presentations. This removes the limitation of difference in participants' time zones and can actually enhance involvement by participants from time zones different from the conference venue.

Disadvantages of virtual conferencing

The disadvantage of not having enough social interaction and professional networking that is a cardinal component of in-person conferences is a veritable drawback of virtual conferencing. Such informal interactions held on the sidelines of major conferences usually birth research collaborations and also present mentorship and training opportunities for younger professionals. Also not everyone is comfortable with technology. Since this is required to benefit maximally from a virtual conference, it may discourage some from participating. Consistent attendance through all the sessions of a conference may also not be guaranteed because participants may simply have added the conference to their usual daily clinical and social schedules and thus move in and out of sessions in between their daily work schedule. Some loss of potential revenue also occurs with virtual conferencing. The absence of product exhibitions or their limitation to virtual exhibition rooms (if available) diminishes revenue from industry support and sponsorship. Other benefits of in-person conferences such as hands-on trainings and workshops may also be lost or reduced in impact by their conversion to virtual sessions devoid of the hands-on component.

Challenges of virtual conferencing

The main challenges of virtual conferencing in Nigeria revolve around high cost of internet data as well as poor speed and quality of internet services. This causes unpleasant disruptions that could terminate hitherto well-prepared presentations. For organisers, programme planning to offer best value to attendees is still a challenge. Some organisers have had to abolish specialised break-out (parallel) sessions sticking only to plenary sessions in their virtual conferences. Those who offered both plenary and parallel sessions had to find creative ways of coordinating people to find their virtual break-out meeting rooms after plenary sessions and to return to plenary sessions from parallel sessions. This causes a loss of valuable time.

CONCLUSION

The disadvantages notwithstanding, the overwhelming advantages of virtual conferencing make it important to consider introducing it as a new standard into the medical and scientific conference culture when COVID-19 restrictions governing mass gatherings are fully lifted. The hybrid mode of conferencing mixing both physical and virtual components will surely help to get the best of these two strategies in the bid to sustain the medical and scientific conferencing culture.

The COVID-19 pandemic has probably changed the culture of scientific conferencing in Nigeria for good. Even after the pandemic when the large physical gatherings become safe, we suggest that virtual conferencing should not be abandoned in its entirety. Its capacity to increase the participation of faculty and attendees without the limitation of cost is an advantage too strong to ignore. We recommend that combined physical and virtual meetings that harness the potentials and benefits of virtual conferencing with that of the traditional in-person attendance should be the

new normal. We therefore advocate increased discussion about how to improve the virtual conferencing culture and the development of guidelines for virtual or hybrid scientific conferences.

Acknowledgement: We acknowledge Mr Joshua Adesola for his assistance with graphics design

Conflicts of interest: None.

REFERENCES

1 Wang D, Hu B, Hu C, Zhu F, Liu X, Zhang J, et al. Clinical Characteristics of 138 Hospitalized Patients With 2019 Novel Coronavirus–Infected Pneumonia in Wuhan, China. JAMA2020; 323(11):1061-1069.
2 Worldometer. Covid-19 Coronavirus Pandemic.2022 Jan 24 [cited 2021 January 24]. Available from: https://www.worldometers.info/coronavirus/
3 WHO Director-General's remarks at the media briefing on 2019-nCov on 11 February 2020. 2020 Feb 11 [cited 2020 August 16]. Available from https://www.who.int/dg/speeches/detail/who-director-general-s-remarks-at-the-media-briefing-on-2019-ncov-on-11-february-2020
4 Kanabe M. COVID-19: Lagos announces end of 4th wave. 2022 Jan 22 [cited 2022 January 24] Available fromhttps://www.premiumtimesng.com/news/headlines/507263-covid-19-lagos-announces-end-of-4th-wave.html
5 Heller R. A Cost-Benefit Analysis of Face-to-Face and Virtual Communication: Overcoming the Challenges. Center for Advanced Human Resource Studies (CAHRS) White Paper 2010:8-20 Cornell University, ILR, Ithaca, NY Available online at .
6 Internet penetration in Africa. 2021 Feb 22 [cited 2022 January 24] Available fromhttps://www.statista.com/statistics/484918/internet-user-reach-nigeria/
7 Adebayo PB, Oluwole OJ and Taiwo FT. COVID-19 and Teleneurology in Sub-Saharan Africa: Leveraging the Current Exigency. Front. Public Health 2021;8:574505
8 Vervoort D, Dearani JA, Starnes VA, Thourani VH, Nguyen TC: Brave New World: Virtual conferencing and surgical education in the Coronavirus Disease 2019 era. The Journal of Thoracic and Cardiovascular surgery 2020.

How to cite this article:
Ogunmodede J.A., Ogunmodede A.J., Buhari O.I.N., Dele-Ojo B.F., Omotoso A.B., Agede O.A., Omotoso A.B.O. Benefits, disadvantages and challenges of virtual conferencing in the COVID-19 era: Adjusting to the new normal. Research Journal of Health Sciences, 2022, 10(1): 162-167

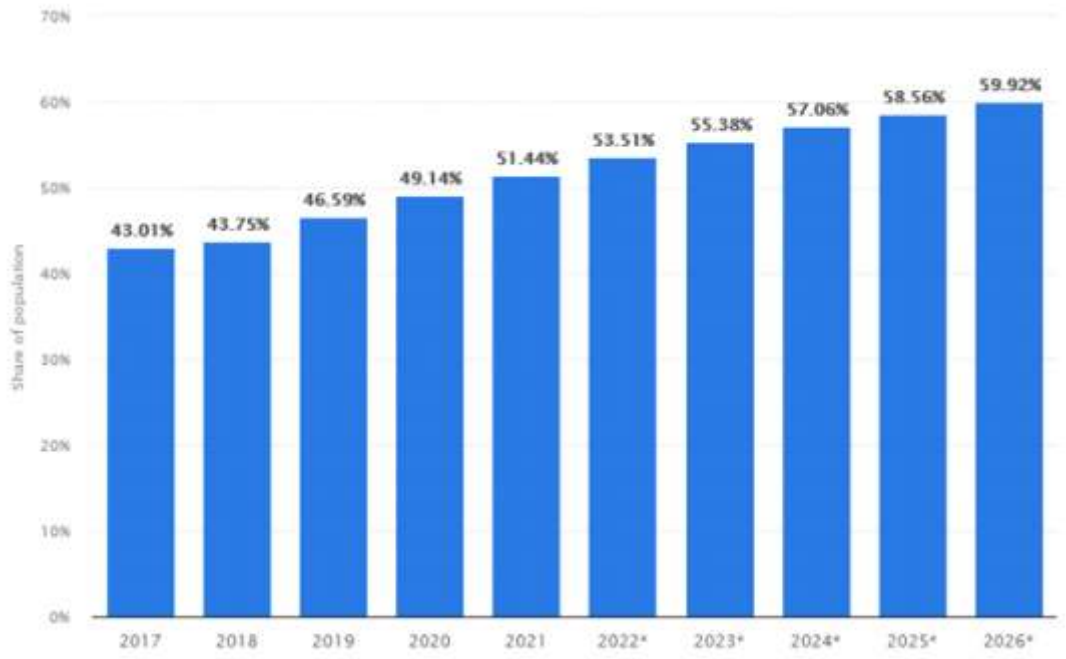

Figure 1: Internet user penetration in Nigeria from 2017 projected to 2026 (Adapted from: Internet penetration in Africa. 2021 Feb 22 [cited 2022 January 24] Available fromhttps://www.statista.com/statistics/484918/internet-user-reach-nigeria/)
*Projections

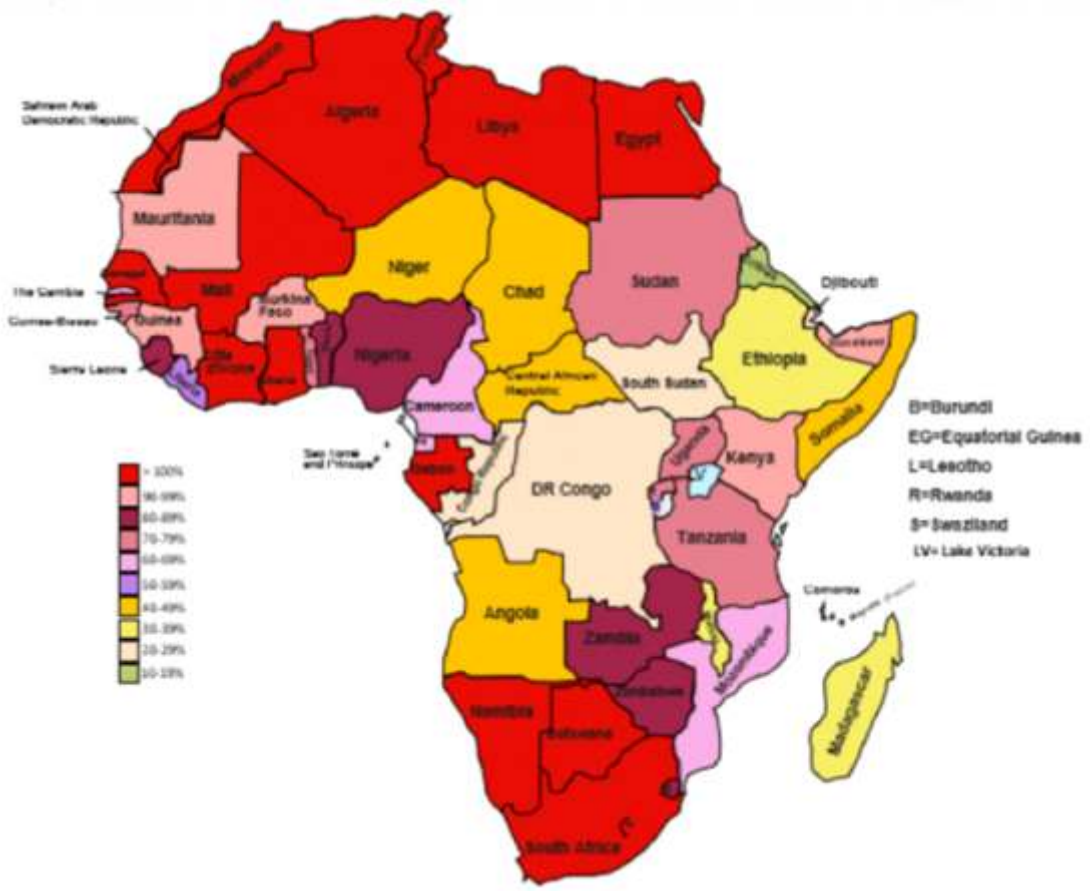

Figure 2: Mobile phone penetration in Africa (Adapted from: Adebayo PB, Oluwole OJ and Taiwo FT. COVID-19 and Teleneurology in Sub-Saharan Africa: Leveraging the Current Exigency. Front. Public Health 2021; 8:574505)

Guidelines for Authors

1. Name of Journal: Research Journal of Health Sciences (RJHS)

2. Authorship

With regard to authorship guidelines, the RJHS subscribes to the recommendations of the International Committee of Medical Journal Editors (ICMJE). Guidelines based on those of the ICMJE are as follows: All persons designated as authors should qualify for authorship, and all those who qualify should be listed. Each author should have participated sufficiently in the work to take responsibility for appropriate portions of the content. One or more authors should take responsibility for the integrity of the work as a whole, from inception to published article.

Authorship credit should be based on 1) substantial contributions to conception and design, or acquisition of data, or analysis and interpretation of data; 2) drafting the article or revising it critically for important intellectual content; and 3) final approval of the version to be published. Conditions 1, 2 and 3 must all be met. Acquisition of funding, the collection of data, or general supervision of the research group, by themselves, do not justify authorship.

In the case of publications arising from research conducted by students, and where the student has done the majority of the work, the student will normally be the first author. Second authorship is appropriate for the supervisor provided the conditions outlined in the preceding paragraph are met. Second authorship is not acceptable if the supervisor only provides encouragement, physical facilities, financial support, critiques or editorial contributions.

Authors should be able to provide a description of what each contributed. All others who contributed to the work who are not authors should be included in the "Acknowledgements section", and what they did should be described.

Authorship of multi-centre studies is attributed to a group. All members of the group who are named as authors should meet the authorship criteria listed above. Group members who do not meet these criteria should be listed, with their permission in the "Acknowledgements section".

The order of authorship should be a joint decision of the co-authors. Authors should be prepared to explain the order in which authors are listed.

3. Article arrangement and style. The text file should be arranged as enumerated below:

Title Page

The title page should contain:

- the full title (bold, lower case, font size 12, Times New Roman), ≤20 words
- details of each author: last name and initials, degrees, and affiliation
- corresponding author's e-mail address
- proposed running title

Abstract

- an abstract of 150-250 words which should summarize the objective(s), methodology, major findings and conclusions
- three to six keywords

Others

- the next pages should contain the text file divided into: Introduction, Materials and Methods, Results, Discussion, Acknowledgements, References, Tables and Figures.

4. Conflict of Interest and Acknowledgments
   Conflict of Interest
   Authors are required to disclose any potential conflict of interest.
   Acknowledgments
   Acknowledgments should list brief statements of assistance, financial support, and prior publication of the study in abstract form, if applicable.

5. Copyright
   All rights reserved. No part of any article published by the Research Journal of Health Sciences (RJHS) may be reproduced, stored in a retrieval system or transmitted in any form or by any means like electronic, mechanical recording or otherwise without written permission from the Publisher through the Journal Editor. On acceptance, the copyright of the paper will be vested in RJHS / Publisher.

6. Ethics
   Authors must indicate ethical conformity with the Helsinki Declaration 1975 (as amended). Studies on human subjects must have been approved by the institution's Ethics Committee. Informed consent of human subjects must be clearly stated in the manuscript. Animal experiments must be in conformity with international norms guided by relevant laws and the guidelines of the Institutional Animal Care and Use Committee (IACUC). The intent to publish in this journal must be supported by all authors and the manuscripts must not have been previously published or being considered for publication by any other journal. The use of trade names is unacceptable for medicinal products.

7. Manuscript Submission process
   It is the policy of the RJHS that authors must conform to standards of good scientific practice and responsible authorship. Authors must accept responsibility for the entire contents of the submitted manuscript, and provide their significant contributions to the work. Submission of a manuscript implies that the work described has not been published previously; that it is not under consideration for publication elsewhere; that its publication has been approved by all co-authors, if any, as well as by the responsible authorities at the institution(s) where the work has been carried out. All statements and opinions expressed in the manuscripts and published in the journal are strictly those of the author(s) and not necessarily those of the Editor(s) or Publisher. The Publisher disclaims any responsibility or liability for such materials. In addition, the Publisher is not liable and do not provide guarantee or endorsement for services or products advertised. The appearance of such advertisements in this journal does not constitute a guarantee or endorsement by the editorial board or the College of Health Sciences, of quality or value of any advertised product or service, or the claims made for them by advertisers.
   Abstracts of Accepted manuscripts shall be published in French language. Finally, in a bid to reach a wider audience as well as relevant stakeholders, summaries of all publications shall be made available in simplified version on our webpage (www.rjhs.uniosun.edu.ng).

   All manuscripts must be submitted in Microsoft Word format preferably electronically as e – mail attachments.

   All manuscripts for the RJHS should be submitted directly to:

The Editor,
Research Journal of Health Sciences,
Editorial Office, College of Health Sciences,
Osun State University, Osogbo, Nigeria
Email: editor.rjhs@uniosun.edu.ng

8. Formatting guidelines:

The word processing program should be Microsoft Word. The text should be typed using the font Times New Roman, size 12 points, and organized on A4 format (21 x 29.5 cm). Italicize common and standard Latin words, abbreviations or phrases such as «et al.», «e.g.» or «in vivo». Italicize the names of genes (e.g. Arpl gene), genera and species.

Tables

Tables must be placed on a separate page, below the list of references. All tables are to be numbered using Arabic numerals. Tables should always be cited in the text in consecutive numerical order. For each table, authors must supply a table caption (title) explaining the components of the table. Footnotes to tables must be placed below the body of the table and should be indicated with superscript lowercase letters. Ensure that the data presented in tables do not duplicate results described elsewhere in the article.

Figures

Figures must be placed in a separate section below tables. Ensure that each figure has a caption. Supply captions in a separate section (not attached to the figure) below the figures. A caption should comprise a brief title (not on the figure itself) and a description of the illustration. Keep text in the illustrations themselves to a minimum however and explain all symbols and abbreviations used.

Colored figures will appear in color on the web regardless of whether or not these illustrations are reproduced in color in the printed version. The author(s) will bear the extra costs involved in producing printed colored figures, if required. For color reproduction in print, author(s) will receive information regarding the costs after manuscripts have been accepted for publication.

Original Articles

Original Articles should be clinical or basic studies. Translational research which adds new information to the aetiology, treatment, and outcomes of health conditions that have not been published previously will be given accelerated editorial processing. Each manuscript should not exceed 3,000 words (excluding tables, figures and references), and not more than 30 references. Not more than 8 figures/tables (in total) are acceptable. Cover letter, title page and abstract are required.

Case Reports/Case Series

Case reports should consist of unusual case(s) and a brief review of the literature pertaining to these case(s) that add new information to the health knowledge. These case reports should not exceed 1,500 words, 15 references, and 4 figures/tables in all. Cover letter, title page and abstract are required.

Review Articles

All submitted review articles shall be subjected to the same peer-review and editorial processes as Original Articles. The Journal shall not publish not more than one review article per edition except the Editorial team decides otherwise. The text of Review Articles must be limited to 3,500 words, with a maximum of 6 figures and tables (total) and up to 60 references. Cover letter, title page and abstract are required.

Referencing in the text

1. References must conform to Vancouver style. Journal title should conform to the abbreviation in index medicus. Journal articles should be cited in this format: Author's name and initials, title of article, abbreviated name of journal, year of publication, volume (issue) and pages.

2. Books: Mbagwu SM. A pictorial self-instruction manual on skin diseases, Lagos: Longman, 2012.
3. Chapters in Books: Remington JS, McLeod R, Desmonts G. Toxoplasmosis. In: Remington JS, Klein OJ, editors. Infectious disease of the fetus and newborn infant. 4th ed. Philadelphia: WB Saunders Co, 1994; p. 141-267.
4. In-text citation is with standard numbers in brackets, e.g., (1,2). Authors are responsible for completeness and accuracy of all citations. A maximum of six authors should be quoted followed by et al. In the list of references, all references in the text are numbered consecutively in the order they appear in the text.

9 Review Process

Peer review process will be in relation to scientific and statistical contents. Manuscripts submitted for publication will be reviewed by at least three referees, active in the relevant field of the submitted manuscript. Authors may be requested to provide names and contact information (e-mail address) of three experts in the field as possible reviewers of their papers. Reviewers should be knowledgeable of the research area and must not have a conflict of interest. Do not list collaborators, colleagues, and researchers at your institution, former advisors or advisees. The editors are however, not bound to use any of the suggested reviewer(s). Only papers with favorable reports will be accepted for publication. The acceptance of manuscripts for publication shall be decided by the Editorial Board. When the article is published the corresponding author will receive the electronic reprint of the article in Adobe's PDF format.

10. Contact Information

Please ensure that contact information such as e-mail addresses and fax numbers, for authors are current to facilitate follow-up regarding manuscripts. The Editor should be promptly notified of any changes in such information.

11. Submission Checklist

- Indicate type of article on title page (e.g. Original Article, Case Report, Review Article, etc)
- Provide complete names, degrees, and contacts / affiliations for all authors
- Designate a corresponding author, with complete mailing and e-mail addresses and telephone + / - fax numbers
- Provide a structured abstract of 150-250 words and 3-6 key words for subject indexing
- Cite references, figures, and tables in recommended formats
- Check all references for completeness and accuracy
- Submit each table / figure on a separate page
- Clearly number figures and indicate orientation. Submit each figure on a separate page
- Identify and provide permission for reuse of any previously published material
- Disclose any potential conflict of interest

12. Processing & Publication charges

a) Evidence of payment of $30 processing fee is to be presented when the manuscript is submitted for publication. Once manuscripts are ACCEPTED for publication, authors are required to immediately pay a non-refundable publication fee of $100 or its equivalent. This fee can be paid via Western Union or by Bank Transfer.
b) However as stated under Formatting Guidelines (under Figures), author(s) will bear the extra cost involved in producing printed colored figures, if required. For color reproduction in print, author(s) will receive information regarding the costs after manuscripts have been accepted for publication.
c) Fees charged are subject to review as may be dictated by inflation and overhead running costs.

Research Journal of Health Sciences

Editor-in-Chief: Prof C.O. Alebiosu
Editor: Prof Akinwusi P.O.

visit our website @ www.ajol.info/index.php/rejhs

Volume 10 Number 2 June 2022

Original Article

Biological synthesis of silver nanoparticles using *Citrus sinesis* seeds: Effects on hepatic and renal functional integrities and antioxidant activities *by Fatoki J. O., Badmus J. A., Ajilore B. S., Faokunla O., Alabi S. O*.....66

Oral health seeking behaviour among patients attending outpatient clinic in University of Ilorin teaching hospital (UITH) Ilorin *by Ernest, M.A., Adeyemi, M.F., Bolarinwa, O.A., Alabi K.M*.....80

Ascorbic acid modulates prefrontal cortex cellular changes in androgen deprived rats *by Abayomi, T.A., Tokunbo, O.S., Saka, T.O., Abayomi, O.A., Osuntokun, O.S. ,Ajilore, B.S*.....90

Memory, neurogenic protein and oxidative deficits of frontal cortex following chlorpyrifos/dichlorvos exposure in rats *by Kadir R.E., Gegele T.A., Kola-Taiwo I.O., Oyewole A.L., Ibrahim A., Imam A., Chengetanai S., Ajao M.S*.....101

Artemisinin-based antimalarial combination therapy amongst healthcare professionals in a tertiary facility in south-south Nigeria: preferences, tolerability, and cost considerations *by Ayinbuomwan, A.S., Opadeyi, A.O., Isah, A.O*.....112

Male involvement in antenatal care in Agege local government area, Lagos state, Nigeria *by Bamidele, J., Odeyemi K., Sodeinde, K*.....121

Screening for eye diseases in a University community in Southwest Nigeria *by Hassan, M.B., Isawumi, M.A*.....131

Inhibition of lipid peroxidation and free radical scavenging activities of methanolic leaf extract of *Psidium guajava by Fatoki, J.O., Kehinde, S.A., Adegoke, A.A., Faokunla, O., Atere, T.G., Olajide, A.T*.....139

Invitro antioxidant capacity, phytochemical screening and Gas chromatography GC-MS analysis of Ethanol root extract of *Sphenocentrum jollyanum* (Pierre) *by Oladokun,O.O*.....150

Short Communication

Benefits, disadvantages and challenges of virtual conferencing in the COVID-19 era: Adjusting to the new normal *by Ogunmodede J.A., Ogunmodede A.J., Buhari O. I.N., Dele-Ojo B.F., Omotoso A.B., Agede O.A., Omotoso A.B.O*.....162

Author's Guidelines