

# Thomas Adewumi University Journal of Innovation, Science and Technology (TAU-JIST)



ISSN: 3043-503X

### RESEARCH ARTICLE

### INVESTIGATING THE EFFECTIVENESS OF RADIO FOR MENSTRUAL HEALTH CAMPAIGNS AMONG MARRIED WOMEN IN THE RURAL AREAS OF OYO STATE

Adebayo John JAMES PhD, Abari Ijuo OGAH, PhD & Ndidi Christiana IBENYENWA

Department of Mass Communication, Faculty of Communication and Media Studies, Federal University, Oye-Ekiti, Ekiti State, Nigeria

Corresponding author's e-mail: adebayo.james@fuoye.edu.ng

This is an open access article distributed under the Creative Commons Attribution License, which permits unrestricted use, distribution, and reproduction in any medium, provided the original work is properly cited.

### **ARTICLE DETAILS**

### Article History: Received 02 July 2024 Accepted 05 October 2024 Available online 10 December 2024

### **ABSTRACT**

Despite United Nations' efforts at making nations of the world to realise that menstrual health management is a global public health issue and human rights concern, studies have shown that there are no policies that border on women's menstrual health in most developing nations. This study is designed to investigate the  $effectiveness\ of\ radio\ for\ menstrual\ health\ campaigns\ among\ married\ women\ in\ rural\ areas\ of\ Oyo\ State.$ Survey method is adopted for this study. The objectives of the study are to understand the effectiveness of radio for menstrual health campaigns among illiterate women in the rural areas of Oyo State and to know what methods of menstrual health campaigns adopted by radio medium in educating women in the rural areas about menstrual health management in Oyo State. Survey Method is one of the frequently used research designs in communication studies to test opinions, attitudes, thoughts, views and beliefs of a group of individuals. It is descriptive, analytical and could also be used to test associations. Findings showed that woman-to-woman (Peers) channel is the most effective medium of enlightenment campaigns about menstrual health practices. Findings also showed that poor information-seeking habit of women is the barrier to radio menstrual health campaigns in the rural areas of Oyo State. Therefore, it is recommended that inclusion of reproductive health management and menstrual health literacy has become urgent in the curricular of primary, secondary and tertiary institutions. Government policies at federal, state and local government levels in Nigeria must also prioritise women reproductive and menstrual health management for sustainable development in Oyo State and Nigeria at large. A unit that must be christened as Reproductive and Menstrual Health Unit must be established in the Ministry of Health of Oyo State and at each of the Local Government Areas of Oyo State to oversee the menstrual health management and practices of illiterate women in the rural areas of Oyo State.

### KEYWORDS

Investigation, Effectiveness, Menstruation, Health Campaigns, Married Women.

### Introduction

Menstrual practices are forbidden from open discussions in many African societies, and are always misunderstood by women and their husbands (Zipp and Hyde, 2024). A healthy woman is a healthy family, and a healthy family is a healthy nation. The foregoing underscores the importance of women in the

attainment of sustainable development goal policies of the government of developing nations (Priyanka et al., 2024). The quest for all-round healthcare for the rural areas of Nigeria continues to re-echo in spite of huge budgetary allocations to health sector in Nigeria. Radio is a vital component of development process in most developing societies of Africa. Radio complements house-to-house health campaigns. While radio

## Quick Response Code

Access this article online

https://journals.tau.edu.ng/index.php/tau

Website:

DOI: https://doi.org/10.5281/zenodo.15022001

medium reaches a larger number of people with less effectiveness, house-tohouse health campaigns reach fewer people with more effectiveness. Radio medium is the most accessible medium of mass awareness, education and enlightenment campaigns in developing nations, where a larger percentage of the people are entangled by illiteracy, poverty and misery. Knowledge of sexual and menstrual health empowers women to take sound decision with regard to their health management generally (Sserwanja et al., 2022). Radio medium's use of local languages endear the medium to millions of uneducated people in the grassroots of developing world. Radio is beginning to emerge as a popular medium of development and health communication. However, little or nothing is known about effectiveness of radio for menstrual health campaigns among women in the rural areas of Nigeria (Enoch et al., 2022). Talabi et al., (2024) conducted a study on influence of radio messages on the awareness and adoption of malaria preventive messages among rural dwellers in the South-West, Nigeria and found that radio has been a popular medium for enhancing and sustaining public enlightenments about important health behaviour in the rural areas. Challenges exist in the adoption of radio medium to target the women for menstrual health campaigns in the rural areas, due to the nature of occupations of women in the rural areas of Oyo State. Exposure to radio healthrelated messages has contributed to behavioural change with regard to menstrual health (Karlyn, 2001). There is a general lack of knowledge and selfcare during menstruation among illiterate women in the rural areas (Dessi et al., 2024).

A stark lack of awareness about menstrual health management has killed many women in the rural areas of Oyo State through deadly infections. Menstruation is a global public health issue among women, especially the illiterate ones living in the rural areas of developing nations. Shame, disgust and embarrassment accompany public discussion of menstrual health management among women in Africa where many people are predominantly unschooled about menstrual health and needs (Thomas and Melendez-Torres, 2024). Provision of facilities and enlightenment needs for menstruating women in most health centres and hospitals in the rural areas of Oyo State is conspicuously lacking. Menstruation remains an underreported health issues globally as a result of social class, level of education, level of income, and other undisclosed influences (Gaire et al., 2024). Destitute females and poor women are often neglected in the health information dissemination system. Radio, by structure and operation, is targeted at the educated and the elite in society (Sharma et al., 2024). Menstruation is a significant social and psychological change that women experience. Incomplete and erroneous information about safe menstrual practices and menstrual management is a serious barrier to menstrual health among illiterate women (Kanameet et al., 2024). Illiterate women require information before, during and after their menstrual process (Oktavia et al., 2024).

Aziz et al., (2024) conducted a study on knowledge and practices related to menstrual hygiene among adolescent girls in urban and rural areas and found that 71% of women in the urban areas practice good menstrual health management compared to women in the rural areas. At some point in their lives, many women experience menstrual disorders. Menstrual issues lower the productivity of most women in rural areas of Oyo State (Okamoto et al.,). Menstruation concerns sexual maturity, growth, fertility, and the modifications in various parts of the body (Dhiya and Wittiarika, 2024). Menstrual health is

crucial to the attainment of sustainable development goals, but government in Nigeria has paid lip services to the issues that border on menstrual health among women, especially those residing in the rural areas of the country (Aziz et al., 2024). Quality menstrual management concerns the health of women, equal quality education, gender equality, job opportunities, and good sanitation practices (Aziz et al., 2024).

Good menstrual health practice is an indication of women's good reproductive health management. However, illiteracy, lack of self-care, poor hygienic practices, socio-cultural issues, poor access to relevant supplies and poor disposal of menstrual pads have serious health consequences on the well-being of women in the rural areas of Nigeria and other developing nations of Africa (Panda et al., 2024). Prioritising menstrual health management must be an important idea among individual women in developing societies (DeMaria et al., 2024). Uneducated women are entangled by poverty and abysmal lack of knowledge about menstrual health management. Most women in the rural areas re-use the already soaked and used sanitary pads or a piece of cloth during their menstrual periods (Shanmugham et al., 2024). In some parts of African societies, socio-cultural and religious beliefs affect good menstrual health practices among illiterate women in the rural areas. Poverty and illiteracy place a restriction to access of sanitary pads by women in the rural areas. Menstrual health management practices are limited by poverty, inadequate health information and illiteracy, with adverse health effects on women's menstrual hygienic practices (Czura et al., 2024). Menstruation is a major psychological and physiological modifications in the life of women. Menstrual research and policies reecho more than ever before in Nigeria. Menstrual health practices require clean water, adequate toilet facilities, privacy safety and used-pads disposal (Sambo et al., 2024). Despite its importance to women's reproductive health, good menstrual health practices remain poorly understood among illiterate women in the rural areas of Oyo State. Women's menstrual health management is given less importance in most developing nations of Africa and Asia due to gender inequality that is still a prevailing circumstance in those nations (Aziz et al., 2024). In spite of rising cases of menstrual health issues among female, unmet menstrual health needs have become a threat to the well-being of illiterate women living in the rural areas of Oyo State (Gambadauro et al., 2024).

Despite United Nations' efforts at making nations of the world to realise that menstrual health management as a global public health issue and human rights concern, studies have shown that there are no policies that border on women's menstrual health in most developing nations (Aziz et al., 2024). Consequently, this study is aimed at investigating the effectiveness of radio for menstrual health campaigns among married women in the rural areas of Oyo State. The objectives of the study were to: understand the effectiveness of radio for menstrual health campaigns among illiterate women in the rural areas of Oyo State, to know what methods of menstrual health campaigns adopted by radio medium in educating women in the rural areas about menstrual health management in Oyo State, and to ascertain the barriers to effectiveness of radio medium on the campaigns for menstrual health practices among illiterate women in the rural areas of Oyo State.

Health belief model is adopted to explain this research work. Health belief model is very crucial in explaining health risk factors and behavioural modifications and HBM is one of the earliest health-related theories used to explain human health related behaviours and health-related decision-making (Sala Eldin e t al., 2024). Several factors influence people's acceptance or rejection of health measures in rural areas of Oyo State. Poor knowledge of menstrual health practices, illiteracy, poor access to enlightenment campaigns on menstrual health practices, socio-cultural issues, socio-religious influences are factors that determine women's menstrual health practices in rural areas of Oyo State (Wongrith et al., 2024). Health belief model is a psycho-social model used by researchers to explain people's health-related behaviour (Omranian et al., 2024). Health belief theory assumes that illiterate women in the rural areas of Oyo State adopt or decline certain health measures based on women's perceived risks of contracting menstrual infectious diseases, the fear of severity of infectious diseases arising from menstrual poor health practices, women's challenge of taking actions to prevent diseases arising from poor menstrual health practices such as cultural barriers, taboos, shame and stigma of discussing about menstrual health practices in the open. Women's perceived benefits of taking up the regular menstrual health practices also trigger the adoption of safety measures aimed at preventing the infectious diseases arising from poor menstrual health practices. Women's views about implementing recommended health behaviour represent another issue that triggers adoption or declining of recommended menstrual health management practices among illiterate women in rural areas of Oyo State (Omranian et al., 2024).

### Materials and Methods

Quantitative method of research is adopted for this study. Quantitative method of research obtains numerical data and analyses such data using any of the statistical methods (Mcleod, 2023). Survey Method is one of the frequently used research designs in communication studies to test opinions, attitudes, thoughts, views and beliefs of a group of individuals. It is descriptive, analytical and could also be used to test associations (Safdar et al., 2016). Survey method is adopted for this study because a large number of respondents are involved in this study. Questionnaire was used to harvest the opinions, thoughts, beliefs and views of illiterate women about the effectiveness of radio on menstrual health campaigns in the rural areas of Oyo State.

The study used multi-stage sampling method to access the respondents in rural areas of Oyo State. Multi-stage sampling method is adopted in household survey designs when a large number of respondents are involved in a study, when data collection design involves face-to-face interviews as well as cost considerations (Chen et al., 2022). Oyo State is divided into three senatorial districts. Each of the three senatorial districts is further dived into local government areas. Local government areas in Nigeria can be classified into rural-rural, urban-rural and urban-urban local government areas. Each of the three local government areas were purposively selected on the basis of their rural-rural nature. Purposive sampling represents the samples whose characteristics are relevant to the study under investigation (Andrade, 2021). Purposive sampling is used to collect relevant data from homogenous groups (Lopez, 2023). Purposive sampling is adopted when the study focuses on special characteristics, features, behaviour, attributes and personalities. Thus, local government areas that have rural-rural hallmarks were purposively selected for the study. The local government areas

selected in Oyo State include Iseyin Local Government Area from the Oyo North Senatorial District, Ibarapa East Local Government from the Oyo South Senatorial District and the Afijio Local Government Area from the Oyo Central Senatorial district. 400 respondents filled the copies of the questionnaire. The population size of each local government determines the number of respondents selected for the study. In Iseyin Local Government areas, 150 respondents were selected to fill the questionnaire, in Afijio Local Government Area, 150 respondents were selected to fill the questionnaire, while in the Ibarapa East Local Government Area, 100 respondents were selected to fill the questionnaire. In simple random sample, each member of the subset of the population has an equal chance of being selected. A simple random sample is most convenient and effective when the members or subjects of the population of research interest have similar, homogeneous and uniform characteristics. Thus, illiterate women in the rural-rural local government areas of Oyo State were selected for this study based on their knowledge of radio medium's effectiveness on the campaigns about menstrual health in the rural areas of Oyo State.

It is simply not possible to access all the respondents in their various location, thus convenience sampling is adopted. Convenience sampling is a convenient method adopted by researchers to access their various respondents at shopping malls, schools, house, clubs and markets. Convenience sampling means reaching those elements or subjects that are readily available (Leiner, 2016). Researchers also turn to online convenience samples as sources of survey responses that are practically easy and cost-effective to obtain (Coppock and McClellan, 2019). Therefore, the convenience sample is used to reach the respondents or samples for the study based on their closeness and availability to the researchers. However, 395 copies of the questionnaire were returned and found useful to this study. Thus, respondents who were seen on the streets, markets, schools and malls in the selected local government areas were given copies of questionnaire to fill. Data were gathered and analysed through the use of frequency and percentage. Statistical package for social science version 16 was used to analyse the data that were gathered

### Results

Table 1: Effectiveness of radio for menstrual health campaigns among illiterate women

Options	Frequency	Percentage
Woman-to-Woman (Peers) Channel	155	38.2%
of enlightenment about Menstrual		
Health Practices is most effective		
Women's Health Practices are	116	29.4%
Seldom Reported on Radio		
Health issues about male get better	67	17%
Coverage on radio than female		
health-		
Related issues		
Most Radio Health Programmes are	57	15.4%
aired		

in English that Illiterate Women Do		
Not		
understand		
Total	395	100

Source: Field work, 2024

Table one shows that 155 respondents representing 38.2% stated that woman-to-woman (Peers) channel is the most effective medium of enlightenment campaigns about menstrual health practices, 116 respondents representing 29.4% affirmed that women's health practices are seldom reported on radio, 67 respondents representing 17% affirmed that health issues about male get better coverage on radio than female health-related issues, while 57 respondents representing 25.4% posited that most radio health programmes are aired in English that illiterate women do not understand.

Table 2: Enlightenment Campaigns Methods of radio menstrual health among illiterate women

Options	Frequency	Percentage
Drama	68	17.2%
Interviews	134	33.9%
News	152	38.5%
Programme Sponsorships	41	10.4%
Total	395	100

Source: Fieldwork, 2024

Table 2 shows that 68 respondents representing 17.2% posited that drama is the enlightenment campaign method employed by radio for menstrual health among illiterate women, 134 respondents representing 33.9% maintained that interview is the enlightenment campaign method adopted by radio for menstrual health among illiterate women in the rural area, 152 respondents representing 38.5% posited that news is the enlightenment campaign method is used by radio for menstrual health among illiterate women in the rural area, 41 respondents representing 10.4% maintained that programme sponsorship is the enlightenment campaign method is used by radio for menstrual health among illiterate women in rural area of Oyo State.

Table 3: Barriers to effectiveness of radio for menstrual health campaigns among illiterate women

Options	Frequency	Percentage
Cultural Barriers	52	13.2%
Stigma	124	31.3%
Religious Beliefs	67	17%
Poor Information-Seeking Habit of	152	38.5%
Women in the Rural Areas		
Total	395	100

Source: Field work, 2024

Table 3 shows that 52 respondents representing 13.2% stated that cultural practices are the barrier to radio for menstrual health campaigns among illiterate women, 124 respondents representing 31.3% maintained that stigma is the barrier to radio for menstrual health campaigns among illiterate women, 67 respondents representing 17% stated that religious belief is the barrier to

radio for menstrual health campaigns among illiterate women, while 152 respondents representing 38.5% stated that poor information-seeking habit of women is the barrier to radio menstrual health campaigns in the rural areas of Ovo State.

### **Discussions**

Most respondents (38.2%) stated that woman-to-woman (Peers) channel is the most effective medium of enlightenment campaigns about menstrual health practices. Face-to-face health campaigns about menstrual hygienic practices have been found to be more effective than radio menstrual health campaigns. The findings align with that of Oktavia et al., (2024) who found that safe menstrual practices and menstrual management are more effective on interpersonal platforms such as house-to-house campaigns, face-to-face interactions and peer-to-peer means of menstruation-related health information system in the rural areas of developing nations. However, women prefer peer information system about menstrual health practices because they hardly understand the elitist messages of radio about menstrual health practices

Most respondents (38.5%) posited that news is the enlightenment campaign method is used by radio for menstrual health among illiterate women in the rural area. News reportage on radio is transient, and therefore, illiterate women cannot comprehend transient nature of menstruation-related health campaigns embedded in news reportage. The findings align with Gambadauro et al., (2024) who found that in spite of rising cases of menstrual health issues among female, unmet menstrual health information needs have become a threat to the well-being of illiterate women living in the rural areas of Oyo State.

Most respondents (38.5%) stated that poor information-seeking habit of women is the barrier to radio menstrual health campaigns in the rural areas of Oyo State. The findings align with major postulations of Health Belief Model which states that women view about implementing recommended health behaviour triggers acceptance of rejection of menstrual health practices. The findings also align with Wongrith et al., (2024) who found that poor knowledge of menstrual health practices, illiteracy, poor access to enlightenment campaigns on menstrual health practices, socio-cultural issues, socio-religious influences are factors determining the adoption or rejection of menstrual health practices by women in rural areas of Oyo State. Predominant illiteracy among married women in the rural areas of Oyo State is a conspicuous barrier to women's menstrual health behaviour in Oyo State

### Conclusion and Recommendations

The main sources of information among illiterate women in the rural areas about menstrual health management are the peers. Radio has failed when it comes to menstrual health campaigns among illiterate women in the rural areas of Oyo State. Inclusion of reproductive health management and menstrual health literacy has become urgent in the curricular of primary, secondary and tertiary institutions. Government policies at federal, state and local government levels in Nigeria must also prioritise women reproductive and menstrual health management for sustainable

development in Oyo State and Nigeria at large. Health education officers in rural-rural local government areas, nurses and medical doctors have a role to play in the enlightenment of illiterate women on the good menstrual health management to attain the development goals of the government. However, radio can also benefit from hosting women to talk about menstrual health practices to enlighten other women. Radio should also anchor programmes of menstrual health in local dialects understood by illiterate women in the rural areas

In lieu of radio medium which failed to deliver relevant menstrual health information among illiterate women in the rural areas of Oyo State, visual materials must be used to educate women in the rural areas of Oyo State about the importance of good menstrual health practices

A unit, funded by Oyo State Government and Local Government administrations in Oyo State, and operated by public health experts, must be established and christened as Reproductive and Menstrual Health Unit must be established. Such Unit must also be established in the Ministry of Health of Oyo State. Each of the Local Government Areas of Oyo State should also have such Unit to oversee the menstrual health management and practices of illiterate women in the rural areas of Oyo State.

### References

- Andrade, C. (2021). The Inconvenient Truth About Convenience and Purposive Samples. Indian *Journal of Psychological Medicine*, 43(1). https://doi.org/10.1177/0253717620977000
- Aziz, A., Memon, S., Aziz, F., Memon, F., Khowaja, B. M. H., & Naeem Zafar, S. (2024). Acomparative study of the knowledge and practices related to menstrual hygiene among adolescent girls in urban and rural areas of Sindh, Pakistan: A cross-sectional study. Women's Health, 20. <a href="https://doi.org/10.1177/17455057241231420">https://doi.org/10.1177/17455057241231420</a>
- Chen, S., Haziza, D., & Mashreghi, Z. (2022). A Comparison of Existing Bootstrap

  Algorithms for Multi-Stage Sampling Designs. Stats, 5(2).

  https://doi.org/10.3390/stats5020031
- Czura, K., Menzel, A., & Miotto, M. (2024). Improved menstrual health and the workplace: An RCT with female Bangladeshi garment workers. Journal of Development Economics, 166. https://doi.org/10.1016/j.jdeveco.2023.103174
- Coppock, A., & McClellan, O. A. (2019). Validating the demographic, political, psychological, and experimental results obtained from a new source of online survey respondents. Research and Politics, 6(1). https://doi.org/10.1177/2053168018822174
- Dessi, D. N. S., Sonya Nelson, & Arif Fadli Muchlis. (2024). Self-Care Education for Adolescent Women with Health Counseling and DisminoreExercise Training in an Effort to Optimize the Intensity of Disminore.

  GANDRUNG: Jurnal Pengabdian Kepada Masyarakat, 5(1). https://doi.org/10.36526/gandrung.v5i1.3412
- DeMaria, A. L., Martinez, R., Otten, E., Schnolis, E., Hrubiak, S., Frank, J., Cromer, R., Ruiz, Y., & Rodriguez, N. M. (2024). Menstruating while homeless:

- navigating access to products, spaces, and services. BMC Public Health, 24(1). https://doi.org/10.1186/s12889-02418379-z
- Dhiya Ulhaq, G., & Wittiarika, I. D. (2024). Faktor-Faktor yang Berhubungan dengan Siklus Menstruasi pada Wanita Usia Subur: Literature Review. Reslaj: Religion Education Social Laa Roiba Journal, 6(4). https://doi.org/10.47467/reslaj.v6i4.1360
- Enoch, O. A., Ifeanyi, A. L., Olajumoke, I. O., Mutairu, B. B., Fatima, L. B., & Victor, O. (2022). Knowledge, attitude, and behaviour towards nutrition radio programmes in mothers of children under five years with severe acute malnutrition in Northern Nigeria.

  Malaysian Journal of Nutrition, 28(1). https://doi.org/10.31246/mjn-2021-0022
- Gaire, T., Adriani, P. A., Santos, O. V., Okuno, M. F. P., Hino, P., Taminato, M., & Fernandes, H. (2024). Violence against women associated factors with the menstrual period: a narrative review.

  CONTRIBUCIONES A LAS CIENCIAS SOCIALES, 17(2). https://doi.org/10.55905/revconv.17n.2-241
- Gambadauro, P., Hadlaczky, G., Wasserman, D., & Carli, V. (2024).

  Menstrual symptoms and subjective well-being among postmenarchal adolescents. AJOG Global Reports, 4(1). https://doi.org/10.1016/j.xagr.2023.100304
- Karlyn, A. S. (2001). The impact of a targeted radio campaign to prevent STIs and HIV/AIDS inMozambique. AIDS Education and Prevention, 13(5). https://doi.org/10.1521/aeap.13.5.438.24144
- Kanakmeet Kaur Anand, Sadhana Awasthi, MohdNajmul Aqib Khan, Rupali Gupta, & Kunal Chaudhary. (2024). Menstrual Hygiene Knowledge and Practices among Adolescent School- Girls in Haldwani, Uttarakhand: Probing the Association with School Environment. Indian Journal of Public Health Research & Development, 15(1). https://doi.org/10.37506/4zwg6527
- Leiner, D. J. (2016). Our research's breadth lives on convenience samples

  A case study of the online respondent pool "SoSci Panel." Studies
  in Communication | Media, 5(4). https://doi.org/10.5771/21924007-2016-4-367
- López, M. (2023). The effect of sampling mode on response rate and bias  $in \quad elite \quad surveys. \quad Quality \quad and \quad Quantity, \quad 57(2). \\ https://doi.org/10.1007/s11135-022-01406-9$
- Mcleod, S. (2023). Qualitative Vs Quantitative Research Methods & Data

  Analysis. Psychology Research Methodology.
- Okamoto, M., Matsumura, K., Takahashi, A., Kurokawa, A., Watanabe, Y.,
  Narimatsu, H., & Yoshida, H. (2024). The Association between
  Menstrual Symptoms and Presenteeism: A Cross-Sectional Study
  for Women Working in Central Tokyo. International Journal of
  Environmental Research and Public Health, 21(3).
  https://doi.org/10.3390/ijerph21030313

- Oktavia, T., Lestari, M., & Sari, G. N. (2024). Parental Support is Associated with

  An Adolescent Girl's Readiness to Facing Menarche. Journal of

  Midwifery, 8(2). https://doi.org/10.25077/jom.8.2.36-41.2023
- Omranian, S., Khoddam, A., Campos-Castillo, C., Fouladvand, S., McRoy, S., & Rich-Edwards, J. (2024). Leveraging Artificial Intelligence to Predict Health Belief Model and COVID 19 Vaccine Uptake Using Survey Text from US Nurses. *Behavioral Sciences*, 14(3). https://doi.org/10.3390/bs14030217
- Panda, N., Desaraju, S., Panigrahy, R. P., Ghosh, U., Saxena, S., Singh, P., & Panda, B. (2024). Menstrual health and hygiene amongst adolescent girls and women of reproductive age: a study of practices and predictors, Odisha, India. BMC Women's Health, 24(1). https://doi.org/10.1186/s12905-024-02894-7
- Priyanka, Jitesh Kumar Panda, & Suniti Tanwar. (2024). Concept of Artava and its applied aspect in Stree Roga. Journal of Ayurveda and Integrated Medical Sciences, 9(1). https://doi.org/10.21760/jaims.9.1.19
- Safdar, N., Abbo, L. M., Knobloch, M. J., & Seo, S. K. (2016). Research Methods in Healthcare Epidemiology: Survey and Qualitative Research. Infection Control and Hospital Epidemiology, 37(11). https://doi.org/10.1017/ice.2016.171
- Salah Eldin, M., Basuny, A., & Ibrahim, I. (2024). Using An Educational Program

  Based On Health Belief Model To Improve The Nutritional Behaviors Of

  Elderly Against Cancer Diseases. NILES Journal for Geriatric and

  Gerontology, 7(1). <a href="https://doi.org/10.21608/niles.2024.316814">https://doi.org/10.21608/niles.2024.316814</a>
- Shanmugham, V., Murugesan, A., & G, V. (2024). Usage of menstrual cups among the doctors of reproductive age group in a tertiary care centre in Kancheepuram, Tamil Nadu, India- An observational study. Clinical Epidemiology and Global Health, 25. <a href="https://doi.org/10.1016/j.cegh.2023.101473">https://doi.org/10.1016/j.cegh.2023.101473</a>
- Sambo, J., Nyambe, S., & Yamauchi, T. (2024). A qualitative study on menstrual health and hygiene management among adolescent schoolgirls in peri-urban Lusaka, Zambia. Journal of Water Sanitation and Hygiene for Development, 14(1). https://doi.org/10.2166/washdev.2024.069

- Talabi, F. O., & Oko-Epelle, L. (2024). Influence of Radio Messages on the Awareness and Adoption of Malaria Preventive Measures among Rural Dwellers in South-West Nigeria. *Journalism and Media*, *5*(1). https://doi.org/10.3390/journalmedia5010018
- Thomas, C., & Melendez-Torres, G. J. (2024). The experiences of menstruation in schools in high income countries: A systematic review and line-of-argument synthesis. Psychology in the Schools, 61(7). https://doi.org/10.1002/pits.23192
- Sharma, H., Joshi, N. K., Jain, Y. K., & Bhardwaj, P. (2024). Promoting Health and Well-being of Institutionalized Destitute Females: A Study from Thar Region of India. Journal of Datta Meghe Institute of Medical Sciences University, 19(1). https://doi.org/10.4103/jdmimsu.jdmimsu\_686\_23
- Sserwanja, Q., Turimumahoro, P., Nuwabaine, L., Kamara, K., & Musaba, M. W. (2022). Association between exposure to family planning messages on different mass media channels and the utilization of modern contraceptives among young women in Sierra Leone: insights from the 2019 Sierra Leone Demographic Health Survey.

  BMC Women's Health, 22(1). https://doi.org/10.1186/s12905-022-01974-w
- Wongrith, P., Buakate, P., Doylee, L., Phonla, N., Dadras, O., & Frampton, G. (2024). Self-protective behaviors of Thai village health volunteers in community engagement during a COVID-19 outbreak: interpretation using the health belief model. BMC Primary Care, 25(1). https://doi.org/10.1186/s12875-024-02346-
- Zipp, S., & Hyde, M. (2024). Go with the flow–menstrual health experiences of athletes and coaches in Scottish swimming. Sport in Society, 27(2). https://doi.org/10.1080/17430437.2023.2184355

