

# ABSTRACT BOOK OF SCIENTIFIC POSTER PRESENTATIONS 2025

DEPARTMENT OF COMMUNITY MEDICINE AND PRIMARY HEALTHCARE,  
BINGHAM UNIVERSITY, KARU, NIGERIA



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## **Foreword**

This abstract book brings together the intellectual output of students across multiple academic levels within the Department of Community Medicine and Primary Health Care.

The inclusion of undergraduate, postgraduate, and medical student research in a single volume underscores the department's integrated approach to training, one that values inquiry, evidence generation, and the practical application of knowledge to real-world health challenges.

These poster presentations have served not only as academic exercises but also as platforms for mentorship, interdisciplinary exchange, and the strengthening of research capacity within the institution.

## About the Conference

The Department of Community Medicine and Primary Health Care has institutionalized scientific poster presentations as a key academic platform for research dissemination and student development.

- The 1<sup>st</sup> BSc Public Health Scientific Poster Presentation was held on 22<sup>nd</sup> October 2025. This event marked a significant milestone in undergraduate public health training, providing students with early exposure to research presentation and evaluation.
- The First Postgraduate Scientific Poster Presentation was held on 22<sup>nd</sup> October 2025. This event represented the University's inaugural postgraduate-level poster session, showcasing a high level of research engagement and independent scholarly work among postgraduate trainees.
- The 1<sup>st</sup> and 2<sup>nd</sup> Scientific MBBS Poster Presentations, held on 1<sup>st</sup> August 2025 at the Bingham University Teaching Hospital, Jos Campus, built on an existing tradition within the medical program, with strong participation from graduating medical students and emphasis on clinical and community health research.

Across these events, students presented original research and were evaluated by faculty panels, reinforcing standards of scientific rigor, clarity of communication, and relevance to public health practice.

## **About the Conference Organizer**

The events documented in this abstract book were organized by the Department of Community Medicine and Primary Health Care, Bingham University, led by the Head of the Department, Professor Oluwatoyosi A. Adekeye.

The department plays a central role in training students in preventive medicine, public health practice, and community-based healthcare delivery. Through structured academic activities such as scientific poster presentations, it promotes research literacy, critical thinking, and professional development.

## **Message from the Convenor**

The scientific poster presentations captured in this abstract book reflect a deliberate effort to embed research culture across all tiers of training within the department.

From undergraduate students taking their first steps in research, to postgraduate trainees conducting independent studies, and medical students engaging with clinically relevant public health issues, these events demonstrate the progressive development of research competencies.

We are encouraged by the quality of work presented and remain committed to sustaining and expanding these platforms in future academic cycles.

## **Message from the Vice Chancellor**

The Vice-Chancellor, Professor Haruna Kuje Ayuba, congratulates the students and the department, he described the event as a demonstration of Bingham University's growing research capacity.

*“The Department of Community Medicine and Primary Health Care is one of our most research-active units. The faculty has attracted huge grants, fostered international partnerships and made tangible community impacts. When a department functions as a family, the results are always remarkable”*

## **Acknowledgment**

The Department acknowledges the support of Bingham University management, College of Medical Sciences, faculty members, and students whose contributions made these scientific poster presentations successful.

Special appreciation is extended to the organizing and scientific committees, as well as all participants whose research work is featured in this abstract book.

# Awareness and Attitudes Towards HPV Vaccination Among Female Secondary School Students in Mararaba, Karu L.G.A, Nasarawa State

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## ABSTRACT

**Introduction:** The Human Papillomavirus vaccine is one of the recommended interventions for cervical cancer control worldwide. It has been included in the national immunization programmes in more than 60 countries around the world. This research aimed to assess the level of awareness and attitude of secondary school female students in Mararaba, Karu L.G.A., Nasarawa State, toward Human Papillomavirus vaccination.

**Method:** The study population comprised female junior secondary students aged 9-14 years in five secondary schools sampled from both private and government secondary schools in Mararaba, Karu L.G.A, Nasarawa State. A cross-sectional descriptive study design was employed for this research. Using Kish's formula, a sample of 320 students was selected with a response rate of 300 students, and a multi-stage sampling technique was employed for the research. Quantitative data were collected using a questionnaire as the data collection tool. Participants independently completed paper versions of the questionnaire (self-administered survey).

**Result:** Firstly, on age was 78.7% aged 12–14 and 21.3% aged 9–11, all respondents were female N=300, most participants attend private schools 61.3% while 38.7% are in public schools, respondents are spread across different ethnic groups, from class JSS1 41.7%, JSS2 24.3%, and JSS3 34.0%, for parental education, the profile is relatively high, 57.0% tertiary and 40.0% secondary, with high parental occupation too. The average awareness level of respondents was 48.1% with teachers being the highest source of HPV information. Only 4.7% of respondents have been vaccinated with the most perceived reasons for attitude towards HPV vaccination are fear that vaccination will be painful and dangerous 48.3%, 27.3% of respondents feel too embarrassed to ask for the HPV vaccination, with traditional methods are more effective 22.7%, Most significant factors influencing respondents willingness to receive HPV vaccine are 55.0% do not know where to go for vaccination, 50.3% don't think the vaccine is available in Nigeria, fear of the adverse effect of the vaccine 31.0% and 21.7% agreed that the vaccine is expensive. Regardless, 91.3% expressed interest in learning more about the HPV vaccine, and 48.7% showed interest in receiving it; additionally, 52.0% agreed to get vaccinated against cervical cancer if the service were available at the school.

**Conclusion:** While awareness significantly impacts attitudes toward vaccine uptake, efforts should target not only increasing awareness among students but also addressing misconceptions and fears related to the vaccine, improving teachers' knowledge of HPV, and conducting public lectures to enhance community awareness about HPV.



# Cost-Effectiveness Analysis of Telemedicine for Out-Patient Care in Abuja: A Comparative Study with In-Person Healthcare Delivery

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## ABSTRACT

**Introduction:** Telemedicine has emerged as a promising innovation in healthcare delivery. Despite the increasing interest and widespread adoption in Nigeria, there remains a limited evidence on the cost-effectiveness of telemedicine compared to the conventional in-person healthcare delivery. This study therefore evaluates the costs and effectiveness outcome of telemedicine relative to in-person care among out-patient population in Abuja, Nigeria.

**Methodology:** A cross-sectional comparative design was employed involving 109 respondents from facilities in Abuja that offers telemedicine and in-person healthcare delivery particularly private facilities. Data was collected using structured questionnaires. Costs were analysed from the patient's perspective incorporating both direct and indirect medical costs. Effectiveness was measured using patient-reported health improvement scores. The average costs and effectiveness were computed for each mode of care and the cost-effectiveness ratio (CER) was calculated to determine the economic advantage of telemedicine. Sociodemographic variables and patient satisfaction indices were analysed to provide additional contextual understanding.

**Results:** The sociodemographic analysis revealed that the majority of patient respondents were employed and tertiary educated indicating a population with high digital literacy and economic activity. The findings demonstrated that usage of telemedicine services incurred an average total cost of ₦5,766.55 with an average effectiveness of 1.60 while in-person care incurred an average total cost of ₦11,484.23 with average effectiveness of 1.82. The results yielded cost-effectiveness ratios of ₦3,604.09 and ₦6,308.92 respectively. Thus, in-person care was approximately twice as expensive as telemedicine largely due to transportation, opportunity costs, and consultation fees. Telemedicine yielded a more favourable cost-effectiveness ratio confirming its economic advantage in out-patient service delivery. It also demonstrated a higher satisfaction in areas such as waiting time, affordability and ease of access.

**Conclusion:** The study concludes that telemedicine is a more cost effective mode of healthcare delivery for outpatient in Abuja. Its economic advantage coupled with high satisfaction ratings positions it as a viable complement to conventional in-person healthcare delivery particularly for follow-ups and consultations. However, scaling up telemedicine will require infrastructural investment, digital literacy and well grounded policy frameworks. To ensure the sustainability of telemedicine in Nigeria, the study recommends the establishment of national policy and regulatory frameworks, investments in digital infrastructure, capacity building and digital literacy among providers and patients.

**Keywords:** Telemedicine, Cost-Effectiveness, Out-Patient Care, In-Person Care, Healthcare Delivery



# Intersectionality Assessment of Young People’s Experiences and Perceptions of Safety in Accessing Sexual Reproductive Health Services in Karu PHCS

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## ABSTRACT

**Introduction:** Primary Health Care (PHC) facilities are mandated to provide equitable, youth-friendly Sexual and Reproductive Health (SRH) services. Yet, young people’s experiences are often shaped by intersecting identities, gender, age, disability, socioeconomic status, and sexual orientation, which influence how safe, respected, and included they feel within healthcare systems. This study applied an intersectionality lens to examine the forms of discrimination young people face, their perceptions of safety, and the responsiveness of PHC services in Karu Local Government Area, Nasarawa State, Nigeria.

**Methodology:** A mixed-methods design was employed, combining a cross-sectional survey of young people aged 15–24 years ( $n = 385$ ; 376 valid responses) with two focus group discussions and five key informant interviews across three PHCs selected through multistage sampling. Descriptive statistics summarized participant characteristics, while chi-square tests and logistic/ordered logistic regressions analyzed relationships between intersecting identities and experiences of discrimination, safety, and responsiveness. Thematic analysis enriched quantitative findings. The study was anchored on the Intersectionality framework, the Health Belief Model (HBM), and the Social Ecological Model (SEM).

**Results:** A total of 42.1% of respondents reported discrimination, mainly due to economic status (23.9%), age (22.3%), gender (19.2%), and sexual orientation (9.4%). Only 56.3% felt safe or very safe in PHCs, citing inadequate privacy, moral judgment, and financial bias as primary threats. Gender, education, income, and disability were significant predictors of perceived safety ( $p < .05$ ). Only 29.1% agreed that PHC staff were responsive to diverse youth needs. Qualitative narratives revealed breaches of confidentiality and exclusionary practices affecting LGBTQ+ and disabled youth.

**Conclusion:** Intersectional discrimination, compromised safety, and limited staff responsiveness continue to undermine equitable SRH access for young people in Karu PHCs. Strengthening provider sensitivity, enhancing privacy infrastructure, and integrating disability inclusion and intersectionality into PHC practice are essential for creating safer, more responsive, and youth-centered health systems.

**Keywords:** Intersectionality; Youth; Sexual and Reproductive Health; Primary Health Care; Safety; Discrimination; Responsiveness; Nigeria; Human Security



# Knowledge and Uptake of Human Papillomavirus Vaccine Among Adolescent Girls in Selected Secondary Schools in Kubwa, Abuja

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## ABSTRACT

**Background:** Human Papillomavirus (HPV) is the leading cause of cervical cancer, which remains a significant public health burden in Nigeria. Despite the availability of safe and effective HPV vaccines and Nigeria's nationwide vaccination program launched in October 2023, knowledge gaps and low vaccine uptake persist among adolescent girls, the primary target population.

**Objective:** This study assessed the knowledge and uptake of the HPV vaccine among adolescent girls in selected secondary schools in Kubwa, Abuja, and examined the association between knowledge level and vaccine uptake.

**Methods:** A descriptive cross-sectional study was conducted among 217 female students aged 10-18 years in six selected secondary schools (three public and three private) in Kubwa, Abuja. A multistage sampling technique was employed, and data were collected using a semi-structured, self-administered questionnaire. Data analysis was performed using SPSS, employing descriptive statistics, bivariate analysis, and chi-square to examine the relationship between HPV knowledge and vaccine uptake. Statistical significance was set at  $p < 0.05$ .

**Results:** The majority of respondents (60.8%) had not heard of HPV, while 52.5% were aware of the HPV vaccine. Among those with knowledge, 54.4% correctly identified HPV as a virus, 37.3% knew sexual contact as the primary transmission route, and 47.9% identified cervical cancer as a health concern. Knowledge regarding vaccine safety (57.6% uncertain) and dosage requirements (73.7% uncertain) was particularly poor. HPV vaccine uptake was low at 16.6%, with 83.3% of vaccinated respondents having received only one dose. Primary barriers to vaccination included lack of awareness (43.1%), parental disapproval (31.5%), and fear of side effects (21.0%). Schools were the predominant source of vaccine information (63.1%). Chi-square analysis revealed a strong positive association between knowledge level and vaccine uptake with knowledge explaining 87.6% of the variance in vaccine uptake ( $R^2 = 0.876$ ).

**Conclusion:** Knowledge about HPV and its vaccine remains inadequate among adolescent girls in Kubwa, Abuja, directly impacting vaccine uptake rates. The strong positive association between knowledge and uptake emphasizes the role of health education in improving vaccination coverage. Comprehensive school-based health education programs, parental engagement and strengthened vaccination delivery systems are needed to address knowledge gaps, dispel misconceptions, and improve HPV vaccine acceptance among Nigerian adolescents.

**Keywords:** Human Papillomavirus, HPV Vaccine, Adolescent Girls, Knowledge, Vaccine Uptake, Cervical Cancer Prevention, Secondary Schools, Nigeria



# Knowledge, Attitude and Uptake of Human Papillomavirus Vaccination Among Girls, Aged 9–14 Years in Makurdi, Benue State

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## ABSTRACT

**Introduction:** Human Papilloma Virus infection is a leading cause of cervical cancer which remains a major public health challenge in Nigeria. Vaccination is an effective preventive measure, yet uptake remains low in many communities. This study assessed the knowledge, attitude and uptake of HPV vaccination among girls aged 9-14 years in Makurdi, Benue State.

**Methodology:** A descriptive cross-sectional survey was conducted among 311 adolescent girls selected through multistage sampling. Data was collected using structured questionnaires and analyzed with descriptive statistics and chi-square tests to determine associations between socio-demographic factors and vaccination outcomes.

**Results:** Awareness of HPV was high (89.7%) and 91.0% had heard of the vaccine. Most respondents recognized its preventive role (94.7%) and affirmed its safety (63.3%). However, only 22.8% had received the vaccine, while 60.1% reported completing the vaccination. Barriers included limited vaccine access (17.7%), fear of side effects (16.7%) and lack of information (18.6%). Age, religion, ethnicity and education significantly influenced knowledge and attitude. Health care provider recommendations and parental support strongly predicted willingness to vaccinate.

**Conclusion:** Despite high awareness, HPV vaccination uptake among adolescent girls in Makurdi remains low due to structural and perceptual barriers. Strengthening school-based programs, improving access and enhancing parental and community sensitization are essential for increasing coverage.



# Timely Uptake of Hepatitis B Vaccine Birth-Dose; Knowledge, Attitude and Practice Amongst Caregivers in Karu Primary Health Care Centers, Karu LGA, Nasarawa State

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## ABSTRACT

**Introduction:** Hepatitis B virus (HBV) poses a significant public health burden in Nigeria, with perinatal transmission being a primary mode of infection. The World Health Organization recommends administering the Hepatitis B vaccine birth dose (HepB-BD) within 24 hours of birth to prevent mother-to-child transmission. Despite this, uptake in Nigeria, particularly in rural areas like Karu Local Government Area (LGA), Nasarawa State, remains low due to gaps in caregiver knowledge, attitudes, and practices (KAP). This study evaluates the KAP of caregivers regarding timely HepB-BD uptake in primary health care (PHC) centers in Karu LGA to identify barriers and propose strategies for improving vaccination coverage.

**Methodology:** A cross-sectional descriptive survey was conducted among 384 caregivers, including mothers of infants aged 0–12 months and pregnant women attending antenatal services at randomly selected PHC centers in Karu LGA. A multistage sampling technique was used, involving random selection of 4–5 wards, PHCs within those wards, and respondents via systematic sampling. Data were collected using a structured, interviewer-administered questionnaire adapted from validated KAP instruments, covering socio-demographics, knowledge, attitudes, practices, and factors influencing HepB-BD uptake. Data analysis was performed using SPSS version 25, employing descriptive statistics, Chi-square tests, and logistic regression to assess associations, with statistical significance set at  $p < 0.05$ .

**Results:** Among the 384 respondents, 71.9% ( $n=276$ ) demonstrated good knowledge of HepB-BD, with 72.7% aware of the vaccine and 50.3% correctly identifying the 24-hour administration window. However, 28.1% had poor knowledge, and 28.4% were unsure of the correct timing. Attitudes were positive in 71.1% ( $n=273$ ) of respondents, with 64.3% strongly agreeing on the vaccine's importance and 49.7% expressing confidence in its safety. Conversely, 28.9% exhibited poor attitudes, with concerns about side effects (41.4%) and cultural beliefs (34.7%) influencing hesitancy. Practice-wise, 76.6% ( $n=294$ ) showed good practices, yet only 41.9% ( $n=161$ ) reported their most recent child received the HepB-BD within 24 hours, while 15.4% reported no vaccination. Key barriers to timely uptake included lack of awareness (78.6%,  $n=302$ ), cultural/religious beliefs (38.3%,  $n=147$ ), distance to health facilities (19.5%,  $n=75$ ), and vaccine cost (9.4%,  $n=36$ ). Significant associations were observed between awareness and age ( $X^2=132.65$ ,  $p=0.002$ ), occupation ( $X^2=26.41$ ,  $p=0.001$ ), and educational status ( $X^2=53.10$ ,  $p=0.004$ ). Facility delivery (OR=5.2, 95% CI 3.4–8.0,  $p<0.001$ ) and antenatal care counseling (OR=3.6,  $p<0.001$ ) were strong predictors of timely uptake. Respondents endorsed strategies to improve uptake, including increased health education during antenatal care (90.4%,  $n=347$ ), free vaccines (83.1%,  $n=319$ ), 24/7 vaccine availability (90.9%,  $n=349$ ), and community leader engagement (86.5%,  $n=332$ ).

**Conclusion:** Caregivers in Karu LGA exhibit relatively high knowledge and positive attitudes toward HepB-BD, but timely uptake remains suboptimal, with less than half of newborns vaccinated within 24 hours. Barriers such as limited awareness, cultural beliefs, and logistical challenges underscore the need for targeted interventions. Strengthening health education, ensuring vaccine availability at all delivery points,



providing free vaccines, and engaging community and religious leaders are critical to enhancing timely HepB-BD administration. These findings offer valuable insights for policymakers to improve immunization programs and reduce HBV transmission in Nigeria.

**Keywords:** Hepatitis B Vaccine, Birth Dose, Timely Uptake, Knowledge, Attitude, Practice, Caregivers, Primary Health Care, Karu LGA, Nasarawa State, Mother-to-Child Transmission

# Effects of Physical Activity on TB Risk and Treatment Success Among People Living with Tuberculosis in Karu LGA, Nasarawa State

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## ABSTRACT

**Introduction:** Tuberculosis (TB) continues to be a leading cause of morbidity and mortality globally, particularly in developing countries like Nigeria, where socio-economic and healthcare challenges hinder effective disease control. This study was conducted in Karu Local Government Area (LGA), Nasarawa State, to assess the role of physical activity in TB prevention and treatment outcomes. Specifically, the study aimed to examine the relationship between physical activity and TB susceptibility, evaluate its influence on treatment adherence and recovery, and explore the knowledge, attitudes, and practices of TB patients concerning physical activity.

**Methodology:** A cross-sectional descriptive study design was employed, involving 220 TB patients currently undergoing treatment in Karu LGA. Data were collected using structured questionnaires, which covered socio-demographic profiles, levels of physical activity before and during treatment, knowledge and beliefs about physical activity, and perceived barriers to engagement. Statistical analysis was performed using SPSS version 25, and chi-square tests were employed to investigate the associations between physical activity levels and factors such as gender, comorbidities, prior awareness, and belief systems.

**Results:** The study found a significant relationship between physical activity and TB outcomes. Patients who engaged in regular moderate physical activity (30–60 minutes, 3–4 times per week) showed better adherence to treatment, improved symptoms (e.g., increased appetite, reduced coughing), and faster recovery. Sedentary behavior was prevalent among females, individuals with comorbidities, and those with low prior knowledge of the benefits of physical activity. Chi-square analysis revealed statistically significant associations between physical activity levels and gender ( $p = 0.003$ ), comorbidities ( $p = 0.001$ ), prior awareness ( $p = 0.000$ ), and belief systems ( $p = 0.000$ ). Additionally, 70% of patients indicated they would be more physically active if guided by health professionals, highlighting the role of healthcare provider support in promoting activity.

**Conclusion:** Physical activity plays a crucial non-pharmacological role in TB prevention and recovery. While many patients in Karu LGA remain physically inactive due to fatigue, fear, and lack of guidance, the findings suggest that regular, moderate activity enhances treatment adherence and overall health outcomes. Public health interventions should therefore include structured, culturally appropriate physical activity programs, coupled with consistent counseling from healthcare workers.



# Assessment of Youth-Friendly Sexual and Reproductive Health Services in Selected Public Health Facilities in FCT, Nigeria

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## ABSTRACT

**Introduction:** Adolescents and young people represent a significant proportion of Nigeria's population and remain central to the country's future health and development. However, they continue to face multiple sexual and reproductive health (SRH) challenges, including early pregnancy, unsafe abortions, and sexually transmitted infections (STIs), often due to inadequate access to youth-responsive health services. Youth-friendly reproductive health services (YFRHS) are essential to improving adolescents' sexual and reproductive health outcomes in Nigeria. This study assessed the availability, accessibility, and utilization of YFRHS in public health facilities across the Federal Capital Territory (FCT), Abuja, and examined the influence of socio-demographic characteristics on service uptake.

**Methodology:** A descriptive cross-sectional design was adopted. Using a multistage sampling technique, data were collected from 423 respondents aged 15–25 years across 24 public health facilities selected from 12 wards within six Area Councils (Abaji, Bwari, Gwagwalada, Kuje, Kwali, and AMAC). A structured, interviewer-administered questionnaire was used, and data were analyzed using descriptive and inferential statistics, including chi-square tests and binary logistic regression at a significance level of  $\alpha = 0.05$ .

**Results:** Findings revealed moderate availability ( $\approx 52\%$ ), high accessibility ( $\approx 55\%$ ), and high utilization ( $\approx 56\%$ ) of YFRHS. However, socio-cultural barriers such as fear of community judgment, limited parental support, and religious or cultural opposition continue to hinder equitable access and use. Statistical analysis showed that sex was significantly associated with accessibility ( $\chi^2 = 5.525$ ,  $df = 1$ ,  $p = 0.019$ ), with females more likely than males to report access. For utilization, employment status emerged as a significant predictor (OR = 1.995,  $p = 0.001$ ), while living arrangement showed a marginal association (OR = 1.620,  $p = 0.091$ ). No socio-demographic variable showed a significant relationship with availability ( $p > 0.05$ ).

**Conclusion:** YFRHS in the FCT are moderately available and accessible and their utilization is strongly influenced by economic independence and supportive living conditions. This study recommends strengthening health facility readiness, enhancing youth empowerment programs, and implementing community sensitization campaigns through collaborative efforts among government agencies, civil society organizations, and development partners to promote equitable and sustainable adolescent health outcomes.

**Keywords:** Youth-Friendly Reproductive Health Services, Adolescents, Accessibility, Utilization, Nigeria, Public Health Facilities, Federal Capital Territory, Sexual and Reproductive Health



# Assessing the Relationship Between Environmental Factors (Water, Sanitation, Pollutants, and Accommodation) and Health Outcomes of Internally Displaced Persons (IDPs) in Makurdi, Benue State

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## ABSTRACT

IDPs are individuals who have been forced to flee their homes but remain within their country's borders. The internally displaced population in Nigeria is diverse, comprising individuals from various ethnic, religious, and socio-economic backgrounds. A significant proportion of IDPs are women and children, who are particularly vulnerable to exploitation, violence, and health risks. The elderly and people with disabilities also face heightened challenges in displacement settings. This study assessed the relationship between environmental factors and health outcomes among internally displaced persons (IDPs). The project aimed to assess the relationship between environmental factors and health outcomes among IDPs in Makurdi, Benue State, Nigeria. The study will adopt quantitative analysis, a cross sectional administration of structured questionnaire designed to obtain information regarding the socio-demographic characterization, environmental conditions, health condition and accessibility of health care facilities from the IDPs (participants). The Stratified Random Sampling Technique was used. 400 Internally Displaced Persons (IDPs) cut across the three camps, in Makurdi, Benue State, Nigeria, focusing on Agan, Abagena, and Daudu camps, comprising of mainly adults were considered for the study. Descriptive statistics summarized population profiles, prevalence of environmental hazards, and health conditions, while inferential analyses, including correlation, regression, and multivariate models, examined the influence of environmental factors on health outcomes. Findings indicate that the majority of respondents were young adults (31–40 years, 47.5%), predominantly female (62.5%), with low educational attainment (27.5% had no formal education). Environmental conditions were generally poor, with less than 50% reporting access to safe water, only 32.5% having adequate sanitation, and 25% living in adequate housing. Malaria (62.5%), diarrheal diseases (45%), respiratory infections (40%), skin diseases (27.5%), and malnutrition (35%) were the most prevalent health outcomes, with significant variations across camps linked to environmental deficits. Regression analysis identified poor sanitation ( $p=0.002$ ), unsafe water ( $p<0.001$ ), and inadequate waste management ( $p=0.019$ ) as significant predictors, explaining 40% of the variance in health outcomes. Healthcare access was primarily through camp clinics and mobile medical teams, with significant barriers including distance, overcrowding, long waiting times, and limited drug availability. Self-reported health status revealed worsening conditions for over one-third of respondents, underscoring the compounded effect of environmental hazards and healthcare limitations. The study concludes that environmental deficits, including unsafe water, inadequate sanitation, and poor housing, which constitutes about 40% of the health outcomes among IDPs in Makurdi. Integrated interventions addressing water, sanitation, housing, and healthcare access are essential to reduce disease burden and improve overall well-being in displacement settings.

**Keywords:** Environmental Factors, Health Outcome, IDPs



# Primary Homecare for Febrile Illness Among Mothers in Auta Balefi, Karu, Nasarawa State

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## ABSTRACT

**Introduction:** In Nigeria, febrile sickness is a serious public health issue that has a big influence on both mothers' and children's health. Effective home-based care solutions are now necessary due to the incidence of febrile illnesses, which are frequently linked to diseases like malaria. The study aims to assess the knowledge, skills and ability of mothers on how to provide effective primary home care for febrile illness in Auta Balefi, Karu, Nasarawa State.

**Objectives:** The study aims to assess the level of knowledge regarding febrile illness among mothers in Auta Balefi. It further seeks to evaluate home-based care practices adopted for febrile illness and to identify the factors influencing healthcare utilization among mothers in the same setting.

**Methodology:** A cross-sectional study is an observational study where data from a population is analyzed at a single point in time. The study population will be mothers between the ages of 18 to 40 in Auta Balefi, Karu Local Government Area. I used Simple Random Sampling by balloting, where Auta Balefi was selected also out of 27 areas in Auta, I selected 10 areas using simple random sampling by balloting. Well-structured questionnaires were distributed for this study to mothers with children.

**Result:** This study showed that most participating mothers out of the 246 participants who participated were young adults aged 24–35 years and mainly married, making them a key group for child health education. Educational attainment was generally high, and this significantly influenced knowledge of febrile illness ( $\chi^2 = 3.80$ ,  $df = 3$ ,  $p = 0.0283$ ). Overall, 84.6% of mothers demonstrated good knowledge.

**Conclusion:** Most mothers practiced appropriate home-care measures such as giving paracetamol, tepid sponging, and ensuring hydration, but many still relied on traditional remedies. While most expressed confidence in local health facilities, cost and distance were major barriers that encouraged home treatment too.



# Determinants and Barriers to the Actual Timing of Early Neonatal Immunization Services After Delivery Among Mothers in Kuje, Abuja

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## ABSTRACT

**Introduction:** Despite global initiatives such as the Expanded Programme on Immunization (EPI), sub-Saharan Africa continues to experience substantial gaps in routine immunization coverage. Nigeria's Federal Capital Territory (FCT), including Kuje Area Council, demonstrates persistent inequalities in the timeliness of early neonatal immunization. This study investigates the determinants and barriers to the actual timing of early neonatal immunization services after delivery among mothers in Kuje, Abuja.

**Methodology:** This study employed a descriptive cross-sectional design and was conducted at Kuje General Hospital, Abuja, Nigeria, a peri-urban setting. The study population comprised 217 mothers with children aged 0–23 months who were accessing neonatal care at the hospital.

**Results:** The study revealed that mothers whose spouses were in formal employment were 3.13 times more likely to have good knowledge of early neonatal immunization than those whose spouses were not. Joint household decision-making also showed a significant positive influence on maternal knowledge. However, only 46.5% of newborns received their first vaccine dose within 24 hours of delivery, reflecting suboptimal timeliness. The major barriers to timely immunization included: inadequate information provided at discharge (54.4%), long waiting times at clinics (34.6%), inconvenient clinic schedules (82.5%). These findings demonstrate that health-system constraints and poor communication remain major contributors to delayed immunization despite moderate maternal awareness.

**Conclusion:** The study revealed that the key determinants of maternal knowledge on early neonatal immunization in Kuje were the spouse's occupation and joint decision-making on child health. Mothers whose spouses were in formal employment were 3.13 times more likely to have good knowledge of early neonatal immunization than those whose spouses were not, while shared household decision-making significantly enhanced awareness. However, several barriers continue to hinder the timely uptake of immunization services. The most notable include inadequate information provided at discharge (54.4%), long waiting times (34.6%), and inconvenient clinic schedules (82.5%). These systemic and service-related factors, rather than maternal unwillingness, largely account for the missed opportunities observed in the area. Consequently, the timeliness of early neonatal immunization remains suboptimal, with less than half (46.5%) of newborns receiving their first vaccine dose within 24 hours after delivery. The determinants and barriers identified in this study highlight the need for targeted interventions that combine male partner engagement, effective health worker communication, and improved service delivery systems. Strengthening these areas is essential for achieving timely vaccine administration, reducing missed opportunities, and improving neonatal health outcomes in Kuje and similar peri-urban communities across Nigeria.



# **Assessing the Effect of National TB Control Policy Gaps on Community Health Among People Living with TB and Healthcare Providers in Karu (L.G.A), Nassarawa State**

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## **ABSTRACT**

**Introduction:** Tuberculosis (TB) remains a significant public health problem globally and is closely felt in Nigeria. Despite the TB control policies, namely DOTS, National TB Control Policy, Community-Based TB care policy and MDR TB management policy, implementation gaps still persist, especially at the local level. In Karu L.G.A, the persistence of TB reflects challenges like poor healthcare infrastructure that have limited the success of these policies. The study aimed to identify specific gaps in national TB control policies in Karu L.G.A and assessed community health impact. It identified the perspectives and challenges faced by health workers in implementing these policies.

**Methodology:** A descriptive cross-sectional study design was used in this study. The study participants were 217 people living with TB and health care providers, selected through stratified random sampling from three health facilities involved in TB care. Data was analyzed using SPSS. Ethical approval was obtained from the Health Research Ethics Committee of Bingham University.

**Results:** The study revealed structural weaknesses in Karu L.G.A's TB control policies. Lack of awareness and education accounted for 40.3% of weaknesses with 71.4% of respondents not being aware of TB control policies. Limited diagnostic access made up 33.9%, while inadequate funding, poor follow-up, and weak collaboration contributed 25.9%. These gaps caused delayed diagnosis in 30.9% and poor public health education in 52.5% worsening TB spread, and confirming a strong negative correlation between TB policy gaps and community health.

**Conclusion:** Improving TB control efforts in Karu L.G.A requires effective strategies like policy reforms, health-system capacity enhancement, resource mobilization, enhanced governance commitment, stigma reduction, targeted and active community involvement. The recommendations highlighted could inform future guidelines for National TB control programs aligned with Nigeria's vision of eradicating TB as a public health problem.

**Keywords:** Tuberculosis, Policy Gaps, Community Health, Implementation Challenges, Nigeria



# The Influence of Socioeconomic Factors on Tuberculosis Transmission and Control in Auta Balefi, Nasarawa State; Implications for Public Health Policy

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## ABSTRACT

**Introduction:** The study assessed the influence of socioeconomic factors on tuberculosis transmission and control in Auta- Balefi, Nasarawa State. Three research objectives were formulated to guide the study which include; to assess the prevalence of Tuberculosis (TB) among individuals aged 18years and above in Auta-Balefi; to identify the key socioeconomic factors influencing Tuberculosis (TB) transmission among individuals aged 18 years and above in Auta Balefi and to evaluate the effectiveness of current Tuberculosis (TB) control measures in the context of socioeconomic disparities among individuals aged 18years and above in Auta Balefi.

**Method:** A cross-sectional descriptive study design was conducted to assess the prevalence of tuberculosis and its socioeconomic determinants in Auta-Balefi and a structured questionnaire was used for data collection. Descriptive statistical of frequency, percentages and charts were used to analyze the socio-demographic characteristics of respondents. Mean and standard deviation were used to answer the research questions with benchmark mean of 2.00 as agreed and otherwise disagreed while inferential statistics of independent samples t-test, PPMCC and ANOVA were used to test the hypotheses at  $p \leq 0.05$  level of significance.

**Result:** Findings revealed that significant difference does not exist in access and prevalence of tuberculosis between male and female individuals in Auta Balefi ( $p = 0.18 > 0.05$ ); socio-economic factors influence the effectiveness of the current tuberculosis control measures in the study area ( $p = 0.01 < 0.05$ ) and level of education significantly influenced the effectiveness of the current tuberculosis control measures in the study area ( $p=0.05$ ).

**Conclusion:** It was therefore concluded that gender may not be a significant factor in tuberculosis prevalence in this region and socio-economic factors significantly influence the effectiveness of tuberculosis control measures in Auta Balefi. I was recommended that public health initiatives in Auta Balefi be made available to focus on equitable access to tuberculosis screening and treatment for both genders and there is need to develop integrated health programs that address socio-economic determinants of health, such as poverty, education, and access to healthcare services and targeted educational programs that enhance awareness about tuberculosis, its treatment, and the importance of adherence to medication be implemented.



# The Impact of Social Media on Mental Health Stigma: An Exploratory Survey Among University Students, Karu

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## ABSTRACT

**Introduction:** Mental health stigma remains a major barrier to care seeking globally, particularly among young adults. As social media has become a primary source of information for this demographic, it plays a dual and complex role: either disseminating positive awareness or reinforcing negative stereotypes. This study was conducted to explore the specific impact of social media use, whether it contributes to reducing or reinforcing mental health stigma among undergraduate students at Bingham University, Nigeria.

**Methodology:** An exploratory quantitative survey design was employed. A structured, self-administered questionnaire was used to collect data from a purposively selected sample of 378 undergraduate students (aged 18-25) across seven departments at the university. Data collection utilized both paper questionnaires and online distribution via Google Forms. Descriptive statistics, including frequencies, percentages, mean scores, and standard deviations, were used to analyze the collected data using SPSS version 25.0.

**Results:** The most frequently used social media platforms were WhatsApp, Instagram, and Facebook. Findings revealed a dual outcome: while students strongly acknowledged the positive role of social media in spreading awareness and reducing overall stigma (with most agreeing that awareness has increased), they simultaneously highlighted significant concerns. These concerns centered on the frequent spread of misinformation, the trivialization of serious mental health conditions through humour and memes, and the perception that stigma continues to prevent peers from seeking help.

**Conclusion:** Social media plays a dual role in shaping the mental health perceptions of university students, acting both as a primary source of awareness and a propagator of harmful content. To leverage its positive influence while mitigating the negative, the study recommends the implementation of targeted awareness campaigns, strategic collaboration with verified mental health influencers, and the introduction of mandatory digital literacy training for students.

**Keywords:** Social Media, Mental Health, Mental Health Stigma, Digital Platforms



# Perception, Preference and Practices of Pregnant Women Towards the Choice of Public or Private Health Facility for Antenatal Care Services in Makurdi, Benue State

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## ABSTRACT

**Introduction:** This study assessed the perception, preference, and practices of pregnant women in Makurdi, Benue State, regarding their choice between public and private health facilities for antenatal care (ANC) services. Antenatal care (ANC) is a crucial aspect of maternal health that significantly contributes to the reduction of maternal and neonatal morbidity and mortality.

**Methodology:** A quantitative cross-sectional design was employed using structured questionnaires administered to 400 pregnant women, 200 from public and 200 from private health facilities. A two - staged technique of stratified and systematic sampling techniques were used to ensure fair representation.

**Results:** Data were analyzed using descriptive statistics and chi-square tests to determine relationships between socio-demographic characteristics and ANC-related outcomes. Findings revealed that the majority (81%) of respondents had a positive perception of ANC services in both public and private facilities, though private facilities received slightly higher approval (46%) due to efficiency, individualized care, and responsiveness. Public facilities were appreciated mainly for affordability and accessibility but faced challenges of long waiting times and perceived poor staff attitude. Preference patterns showed that 27% of respondents had no fixed choice, while 41% preferred public and 32% private facilities. Practices reflected flexibility, with less than one-third of respondents relying exclusively on either public (18%) or private (13%), about 24% combining both sectors and 45% switching based on need and circumstance. Socio-demographic factors such as education, income, marital status, occupation, and residence significantly influenced perception, preference, and practices. Educated and higher-income women tended to favor private care emphasizing quality and respectful treatment.

**Conclusion:** The study concludes that ANC utilization in Makurdi is driven by pragmatic considerations rather than fixed loyalties, highlighting the need to improve staff training, infrastructure, and service delivery in public facilities while promoting affordability and accessibility in private ones to enhance maternal health outcomes.



# Comparing Knowledge, Practices, and Outcome of Preeclampsia Among Pregnant Women Attending Antenatal Clinics in Federal Staff Hospital, Gwarinpa, and Grabbo Fertility Clinic, Gwarinpa

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## ABSTRACT

**Background:** Low- and middle-income countries (LMICs), including Nigeria, experience a higher prevalence of preeclampsia among pregnant women compared to the global rate of 2-8%. This study examined knowledge, practices, and delivery outcomes related to preeclampsia among pregnant women at the Federal Staff Hospital and Grabbo Fertility Clinic.

**Methodology:** This research utilised a comparative cross-sectional study design. The researchers recruited a total of 390 pregnant women who visited the Federal Staff Hospital, Gwarinpa and Grabbo Fertility Clinic, Gwarinpa, Abuja, for antenatal care (ANC) and who met the inclusion criteria of the study. Using a multistage sampling technique which involved simple random, stratified, and systematic sampling methods, study participants were sampled from both settings. This ensured the study sample was representative and minimised selection bias. Moreover, a well-structured, pretested questionnaire was the research instrument for this study.

**Results:** Results from the study revealed high levels of awareness of preeclampsia in both settings (78.9% and 82% respectively) with the majority of individuals indicating that high blood pressure was the primary cause. The knowledge of symptoms, complications and early detection practices were similar in both settings and there were no significant differences ( $p > 0.05$ ). In practice, most women indicated they received ANC education and believed preeclampsia could be managed medically, though postpartum follow up, monitoring and counselling for future pregnancies was low. Delivery outcomes revealed a little bit higher caesarean rate at Grabbo (53.5%) as compared to Federal Staff Hospital (40.4%). In contrast, adverse neonatal outcomes such as preterm birth, low birth weight, and NICU admissions were reported in both facilities, without significant differences.

**Conclusion:** Based on the findings of the study, the study concludes that in as much as respondents showed high awareness and good antenatal education, there are still gaps in postpartum care and long-term follow-up. It is therefore, recommended that there is a need to strengthen counselling, postpartum monitoring, and community awareness programs is essential.

**Keywords:** Preeclampsia, Knowledge, Practices, Delivery Outcomes, Antenatal Care



# Prevalence, Risk Factors and Community Perception of Lymphatic Filariasis Among Adults in the Bwarri Area Council

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## ABSTRACT

Lymphatic filariasis (LF), a neglected tropical disease caused primarily by *Wuchereria bancrofti* and transmitted via mosquito vectors, remains a significant public health challenge in Nigeria, with an estimated 22 million people infected and over 100 million at risk. Despite control efforts like mass drug administration (MDA), persistent transmission is driven by environmental, socio-economic, and behavioral factors. This study aimed to assess the prevalence, identify risk factors, and evaluate community perceptions of LF in Bwari Area Council, Federal Capital Territory, Nigeria. A descriptive cross-sectional study was conducted among 425 residents of Bwari Area Council who had lived in the area for over two years. Using a multi-stage sampling method was used, data were collected through structured questionnaires, interviews, and parasitological tests (Immunochromatographic Test, ICT) to detect circulating filarial antigens, with blood samples collected between 10:00 PM and 2:00 AM due to the nocturnal periodicity of *W. bancrofti*. Descriptive statistics and chi-square tests were used to analyze prevalence, risk factors, and community knowledge, attitudes, and practices (KAP) using SPSS software. The study found a high level of LF awareness (85.4%), with health workers (46.6%) and mass media (44.9%) as primary information sources. However, misconceptions persisted, with 12.2% attributing LF to dirty water, 9.2% to witchcraft, and 7.1% to curses. Mosquito bites were correctly identified as the cause (64.7%) and transmission mode (70.1%) by most respondents. Common symptoms recognized included swollen legs (50.3%) and scrotal swelling (24.9%). Attitudes toward LF prevention were positive (71.3% believed it was preventable), but only 28.2% considered LF a serious community health issue. Discrimination against LF patients was reported by 43.1%. Behavioral risk factors included inconsistent mosquito net use (34.8% did not use nets regularly) and limited use of repellents (53.2%). MDA participation was high (72.9%), though adherence was inconsistent (51.1% always complied), with fear of side effects (10.1%) and disbelief in efficacy (5.4%) as barriers. Parasitological tests revealed zero prevalence of active LF infection, but 14 participants (3.3%) exhibited chronic symptoms (e.g., swollen limbs), primarily among those over 30 years, farmers (6.8%), and the unemployed (6.7%). No statistically significant associations were found between clinical symptoms and age, gender, education, marital status, or knowledge levels, though occupational status showed a significant association ( $p = 0.027$ ). In conclusion, while active LF infection was not detected, the presence of chronic symptoms indicates past exposure and ongoing morbidity. High awareness coexists with persistent misconceptions and suboptimal preventive behaviors, highlighting the need for targeted health education and improved MDA adherence. Occupational and socio-economic factors, particularly among farmers, underscore the importance of tailored interventions to address environmental and behavioral risks. Strengthening community engagement and addressing stigma could enhance LF control efforts in Bwari Area Council toward achieving WHO elimination goals.

**Keywords:** Lymphatic Filariasis, Prevalence, Risk Factors, Community Perception



# Perceived Quality of Life and Its Associated Factors Among Persons Living with Tuberculosis in Karu Local Government Area, Nasarawa State

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## ABSTRACT

**Introduction:** Tuberculosis (TB) remains one of the world's infectious diseases of great public health importance particularly in low- and middle-income countries (LMICs) like Nigeria. Current management strategies for TB have decreased the disease's morbidity and mortality rates, mainly by emphasizing on clinical and microbiological results. However, these strategies often overlook many other factors affecting these outcomes, such as the patient's socioeconomic status, comorbidities, stigmatization, and the psychosocial support system, which influence patients' self-reported outcomes like their quality of life (QOL). To strengthen and improve the gains of this current TB control efforts, adequate attention needs to be given to self-reported QOL. This study assessed the perceived quality of life and its associated factors among persons with TB in Karu Local Government Area, Nasarawa State.

**Methodology:** A cross-sectional study in the primary health centers in Karu LGA involving adult TB patients aged 18 years or above. Data were collected using the World Health Organization Quality of Life-BREF (WHOQOL-BREF) questionnaire. Socio-demographic and clinical variables were also obtained. Data were analysed using Statistical Package for the Social Sciences (SPSS) version 25. Descriptive statistics such as frequencies, percentages were used to report demographic characteristics of the participants. Inferential statistics such as chi-square test and binary logistic regression were used to investigate the associations between QOL and variables. Statistical significance was set at  $p < 0.05$ .

**Results:** There were 205 TB patients, majority were males [133 (64.9%)], mean age was  $40.42 \pm 13.60$  years, 61% were married and 69.3% had at least secondary level of education. The overall global QOL and overall satisfaction of health of the patients were ( $2.76 \pm 1.03$ ) and ( $2.53 \pm 1.02$ ) respectively and majority of the participants reported poor QOL across all domains with mean scores: physical ( $45.2 \pm 21.4$ ), psychological ( $50.1 \pm 22.7$ ), social ( $40.4 \pm 22.4$ ) and environmental ( $42.8 \pm 17.8$ ). The social and environmental domains were most affected. Age, marital status, type of TB, phase of treatment, and educational attainment were significantly associated with one or more QOL domains ( $p < 0.05$ ). Binary logistic regression analysis identified independent predictors of poor QOL in each domain as follows: age group and type of TB for the physical, age group, type of TB and duration of treatment in the psychological, type of TB and duration of treatment for social and duration of treatment for environmental. Patients with pulmonary TB, older age and those in the continuation phase were more likely to report poor QOL.

**Conclusion:** TB significantly impairs the overall quality of life and all its domains of patients in Karu LGA, with both socio-demographic and clinical factors significantly contributing to outcomes. Findings highlight the need for integrated, patient-centered TB care that addresses economic, financial, psychosocial, physical and environmental determinants while ensuring the drug treatment through DOTS management. Incorporating QOL assessments into TB programs will achieve a holistic care in alignment with global strategies to end TB.

**Keywords:** Tuberculosis, Quality of Life, WHOQOL-BREF, Domains, Nasarawa State, Nigeria



# Access to Accurate Cosmetic Information and Its Effect on the Prevalence of Adverse Cosmetic Events (ACE) in the Federal Capital Territory, Nigeria

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## ABSTRACT

**Background:** The widespread use of cosmetics, particularly skin-lightening products, in Nigeria has raised major public health concerns due to adverse cosmetic events (ACE) linked to inadequate labeling, deceptive marketing practices, and weak regulatory enforcement by the National Agency for Food and Drug Administration and Control (NAFDAC). Misleading advertisements and incomplete disclosure of risks further increase consumer vulnerability, especially in informal markets.

**Objective:** This study aimed to evaluate the accuracy, completeness, and regulatory compliance of cosmetic product labels and advertisements; assess consumer awareness and comprehension of labeling information; and determine the relationship between access to accurate information and ACE prevalence in the Federal Capital Territory (FCT), Nigeria.

**Methods:** A cross-sectional mixed-methods study was conducted among 434 consumers in the FCT. Data were collected using structured Likert-scale questionnaires and analyzed with SPSS for descriptive statistics and chi-square tests. Additionally, twelve semi-structured interviews were conducted with regulatory officers, manufacturers/importers, retailers, and healthcare providers (dermatologists and pharmacists). The interviews explored perspectives on labelling, advertising standards, enforcement, and consumer information gaps. Thematic analysis was used to integrate stakeholder narratives with quantitative findings.

**Results:** Quantitative findings revealed weak consumer trust in cosmetic labeling: only 37.7% agreed that ingredient lists are accurate (mean  $3.00 \pm 1.23$ ), 37.9% trusted advertising claims (mean  $2.84 \pm 1.16$ ), and only 26.1% acknowledged disclosure of adverse effects in adverts (mean  $2.34 \pm 1.34$ ). Consumer awareness was moderate (47.8% understood labels, mean  $3.11 \pm 1.30$ ), but 79.5% could not identify harmful ingredients (mean  $2.10 \pm 1.02$ ). The prevalence of ACE was high (67.8%, mean  $3.55 \pm 1.34$ ) and significantly associated with sex, marital status, religion, employment, and income ( $p < 0.05$ ). Qualitative results reinforced these patterns: regulators reported persistent labelling gaps, including missing expiry dates and vague “herbal blend” ingredients. Misleading advertising was found to be widespread, especially on social media, radio, and market posters, with exaggerated claims such as “instant whitening” or “permanent cure for eczema.” Healthcare providers linked these practices to delayed diagnosis and inappropriate treatment of ACE, while retailers admitted to practices like repackaging products into unlabelled containers. Enforcement efforts were found to be undermined by manpower shortages, weak laboratory capacity, and the growth of informal imports.

**Conclusion:** Inadequate labelling, misleading advertising, and weak enforcement significantly contribute to the high prevalence of ACE in Nigeria. Strengthening NAFDAC’s enforcement capacity, enhancing inter-agency collaboration, and investing in laboratory facilities are urgent priorities. Clearer labelling standards, stricter penalties for false advertising, and targeted consumer education campaigns particularly via social media and in peri-urban markets are needed to reduce deceptive practices and enhance cosmetic safety. Future longitudinal and product-specific studies are recommended to inform sustainable policy interventions.



# Knowledge, Attitude and Practice of Sewage Disposal Among Residents in Rural Communities in Bwari Area Council, FCT, Abuja

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## ABSTRACT

**Introduction:** The disposal of sewage is an essential aspect of public health and environmental management in the world. This study examined knowledge, attitudes and practices in regard to sewage disposal in the rural community in the Bwari Area Council, FCT Abuja.

**Methodology:** Using a cross-sectional survey design, a sample of 395 respondents who are residents of rural communities in the Bwari Area Council and met the inclusion criteria were selected for the study.

**Results:** Based on the results, it was revealed that most respondents (59.5%) had poor knowledge of sewage disposal practices, despite 55.5% saying that they are aware of the disposal of sewage. Moreover, it was found that 23.7% of the study participants showed a poor attitude to sewage disposal. While a poor attitude of sewage disposal was seen among the study participants, this translated to poor waste disposal practices as only 29.1% of the respondents had poor practices.

**Conclusion:** the research study emphasises that improving sewage disposal inculcation systems in Bwari Area Council requires a well-detailed approach that combines awareness creation, subsidised sanitation infrastructure, enhanced community engagement, and ongoing health education, to rectify the existing deficits will not only help to improve environmental sanitation, but also will help to alleviate a substantial burden of preventable diseases and help successfully achieve the national target of ending open defecation. Based on the study findings, it is recommended that with the assistance from health workers and NGOs, there is a need to implement regular sanitation awareness campaigns to put emphasis on the link between the sanitary disposal of sewage and waterborne diseases like diarrhoea and typhoid.



# Prevalence, Risk Factors, and Socio-Economic Effect of Onchocerciasis Among Farmers in Kagarko Local Government Area of Kaduna State

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## ABSTRACT

**Introduction:** Onchocerciasis remains a significant public health concern in rural farming communities across sub-Saharan Africa, exerting substantial health and socio-economic impacts. This study aimed to assess the prevalence, risk factors, and socio-economic effects of onchocerciasis among farmers in Kagarko Local Government Area, Kaduna State, Nigeria.

**Methodology:** A community-based cross-sectional study was conducted among 400 farmers selected from three communities: Kubacha, Kenyi, and Kagarko using structured questionnaires and serological testing with the SD Bioline Onchocerciasis IgG4 rapid test kit. Data were analyzed to determine prevalence, associated risk factors, and socio-economic implications.

**Results:** The overall prevalence of onchocerciasis was 3.8%, with the highest prevalence observed in Kubacha (5.4%), followed by Kenyi (2.8%) and Kagarko (2.7%). Male farmers had a higher seropositivity rate (5.6%) than females (2.0%) (OR = 0.279; 95% CI: 0.083–0.943;  $p = 0.060$ ). Educational status showed a significant association with infection ( $p = 0.034$ ); farmers with only FSLC education had a prevalence of 7.7%, compared to 1.8% among those with WASSCE/GCE/NECO. Regarding risk factors, 86.0% of respondents reported blackfly bites, and 75% lived near breeding sites, though these were not statistically significant predictors of infection. Long-term ivermectin use (>15 years) significantly reduced seropositivity (1.2% vs 5.4%;  $\chi^2 = 4.695$ ;  $p = 0.033$ ). Routine annual ivermectin intake, however, showed no significant difference (2.1% vs 4.6%;  $p = 0.208$ ). Socio-economic analysis revealed that 45% of farmers experienced onchocerciasis-related symptoms such as eye itching or nodules, with 42.3% reporting reduced farm productivity. Additionally, 45% reported stigmatization, and 43.8% indicated limited access to ivermectin despite free distribution, while nearly 40% used personal funds for treatment.

**Conclusion:** The study revealed a moderate prevalence of onchocerciasis among farmers in Kagarko LGA, with educational level and long-term ivermectin use significantly influencing infection rates. Onchocerciasis continues to pose socio-economic challenges, highlighting the need for strengthened control efforts, enhanced drug accessibility, and targeted health education to mitigate transmission and improve community well-being.



# Assessment of Utilization of Reproductive and Maternal Health Services in Primary Health Care Facilities in Karu Local Government Area of Nassarawa State

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## ABSTRACT

**Introduction:** Maternal mortality continues to be a major global public health concern, with Nigeria accounting for a significant proportion of deaths. Effective reproductive and maternal health (RMH) services offered through primary health care (PHC) facilities play a vital role in improving maternal outcomes. However, the utilization of these services remains low in many parts of the country.

**Aim:** This study assessed the level of knowledge, extent of utilization, barriers, and potential strategies for improving RMH service uptake among women of reproductive age in Karu Local Government Area (LGA), Nassarawa State, Nigeria.

**Methodology:** A descriptive cross-sectional study was conducted among 318 women attending selected PHC facilities in Karu LGA in 2025. A multistage sampling technique was used to select participants. Data were collected using a structured self-administered questionnaire and analyzed using descriptive statistics, chi-square tests, and logistic regression to determine associations between socio-demographic characteristics, awareness, utilization, and influencing factors.

**Results:** Most respondents (76.7%) were aged 21–40 years, and 70.4% were married. A considerable proportion (45.3%) had tertiary education, with 38.1% engaged in business and 18.2% employed as civil servants. Over half (57.2%) demonstrated excellent knowledge of RMH services, with antenatal care (74.5%) and family planning (45.3%) being the most recognized. However, utilization was moderate, with only 52.5% attended four or more antenatal visits, and 54.4% delivered in PHC facilities. Although 71.7% preferred facility delivery, 19.8% still chose home birth due to cultural and religious influences. Key barriers included dislike of vaginal examinations (29.9%), privacy concerns (21.4%), poor staff attitude (27%), cost, and perceived unfair treatment.

**Conclusion:** Despite good knowledge, utilization of RMH services in Karu LGA remains low due to social, cultural, and systemic constraints. Strengthening PHC infrastructure, improving staff responsiveness, and implementing community-based health interventions are crucial to enhancing RMH uptake and achieving Sustainable Development Goal 3.

**Keywords:** Reproductive health, maternal health, utilization, antenatal care, barriers, primary health care, Karu LGA, Nigeria



# The Prevalence of Hepatitis C Virus Among People Living with HIV in Our Lady of Apostle (OLAH) Hospital of Akwanga LGA, Nasarawa State

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## ABSTRACT

**Introduction:** Co-infection with Hepatitis C Virus (HCV) among people living with HIV (PLHIV) remains a growing public health challenge, particularly in low-resource settings like Nigeria. This study was conducted to determine the prevalence, clinical manifestations, socio-economic factors, and barriers to effective HCV management among PLHIV attending Our Lady of Apostles (OLA) Hospital, Akwanga.

**Methodology:** A descriptive cross-sectional study was conducted using a sample of 300 HIV-positive individuals receiving care at OLA Hospital. Participants were selected through purposive sampling. Data collection involved the administration of pre-tested structured questionnaires and direct interviews, focusing on socio-demographics, clinical symptoms, risk behaviors, and healthcare access. The collected data were analyzed quantitatively using frequency and percentage distributions presented in tables. The findings were then compared with established literature to provide contextual interpretation and relevance to broader public health frameworks.

**Results:** The study revealed that 20% of the respondents were co-infected with HCV, indicating a considerable burden among the HIV-positive population. Clinical assessments showed that fatigue (76%), abdominal pain (60%), and jaundice (50%) were the most commonly reported symptoms among those diagnosed. The majority of HCV diagnoses (100%) were made via blood testing. Socio-economic factors such as living with family (73.3%), low monthly income (73.3% earning below ₦30,000), history of blood transfusion (23.3%), and sharing of personal items (30%) were all associated with higher HCV risk. While 56% of those diagnosed had received HCV treatment, only 57.1% of those treated reported successful outcomes. Major challenges to effective management of HCV included financial constraints (66.7%), lack of information (53.3%), unavailability of medications (40.0%), and stigma or discrimination (30%). Furthermore, a significant gap in health communication was identified, as only 36.7% of participants were aware of HCV treatment availability at the facility, and just 31.7% had discussed HCV with a healthcare provider.

**Conclusion:** This study highlights a significant burden of HCV co-infection among HIV-positive individuals in Akwanga, driven by socio-economic vulnerabilities and systemic barriers to care. It underscores the urgent need for integrated HCV screening within HIV programs, increased health education, improved drug access, and strategies to reduce stigma and financial burden in order to improve outcomes for co-infected patients.



# Prevalence and Predisposing Factors of Obesity Among Adults in Makurdi

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## ABSTRACT

**Introduction:** Obesity is a serious global public health issue associated with high morbidity and mortality. It contributes to chronic conditions such as cardiovascular diseases, diabetes, and hypertension. In Nigeria, urbanization, changes in dietary patterns, and sedentary lifestyles have significantly increased obesity prevalence, particularly among adults. Despite its growing burden, little is known about the knowledge level, prevalence, and predisposing factors to obesity among adults in Makurdi, Benue State. As such, this study is aimed at assessing the knowledge, prevalence, and predisposing factors of obesity among adults in Makurdi.

**Method:** The study was conducted in Makurdi, Benue State, Nigeria, using a descriptive cross-sectional design. The study population consisted of adults who are within the age of 18-90 years. A total of 385 adult residents were selected using a multistage sampling technique. Data were collected through a structured, interviewer-administered questionnaire and anthropometric measurements including height and weight. The Body Mass Index (BMI) was calculated to determine obesity status. Data were analyzed using descriptive statistics such as frequencies, percentages, and means, while inferential statistics (Chi-square test) were used to examine associations between socio-demographic variables and prevalence of obesity at a significance level of  $p < 0.05$ , using SPSS version 23.

**Result:** Findings from the study revealed that the majority of respondents had normal weight (72.7%), while 13.8% were obese, 7.8% overweight, and 5.7% underweight. Awareness of obesity was moderate, with 55.6% of participants aware of obesity and its associated risks, and 50.1% acknowledging its link to serious health conditions. Knowledge assessment revealed that 49.9% of respondents had good knowledge of obesity, 46.8% had moderate knowledge, and 3.4% demonstrated poor knowledge. The main predisposing factors identified included excessive television viewing (60.0%), overeating (61.0%), eating in front of television (79.7%), high consumption of carbonated drinks (63.9%), consumption of chocolate (72.5), inadequate sleep or stress (62.1%), sedentary lifestyle (55.1%), having less than 8hrs sleep (70.4%), and excessive computer/phone usage (56.6%). Socio-demographic factors such as age, marital status, educational level, ethnicity, religion, and family type showed significant associations with obesity prevalence ( $p < 0.05$ ), while sex, occupation, and income were not statistically significant ( $P > 0.05$ ).

**Conclusion:** The study concludes that although awareness and knowledge of obesity among adults in Makurdi are relatively high, the prevalence of obesity remains considerable, reflecting poor lifestyle practices and low engagement in preventive behaviors. The most influential determinants of obesity in Makurdi include age, marital status, education, and lifestyle factors such as poor dietary habits and physical inactivity. It is therefore recommended that continuous community-based health education, nutrition counselling, and routine screening for obesity be strengthened to improve awareness and mitigate the rising trend of obesity among adults in Benue State.

**Keywords:** Obesity, Prevalence, Knowledge, Predisposing Factors, Adults



# A Comparative Assessment of the Nutritional Status and Dietary Practices of Adolescents in Public and Private Secondary Schools in a Community in the Federal Capital Territory

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## ABSTRACT

**Background:** Adolescence represents a nutritionally vulnerable period characterized by rapid growth and physiological change. However, this group remains neglected in public health policy, particularly in Nigeria. Hence, this study aimed to Assess and compare the nutritional status and dietary practices of adolescents attending private and public secondary schools in Kubwa, Abuja.

**Method:** A cross-sectional comparative study was conducted among 440 adolescents selected using a two-stage sampling technique. Data were collected using a structured questionnaire, including a 24-hour dietary recall, a food frequency questionnaire (FFQ), and anthropometric measurements (height and weight) to determine nutritional status according to WHO standards. Data were analyzed using descriptive statistics, chi-square tests, and logistic regression at a  $p < 0.05$  significance level.

**Result:** A clear dual burden of malnutrition was identified. Adolescents in public schools had a significantly higher prevalence of stunting (21.4% vs. 12.7%) and a lower mean BMI. Those in private schools had significantly higher rates of overweight/obesity (32.7% vs. 25.9% for overweight; 12.7% vs. 2.3% for obesity). Dietary assessment revealed significant differences in meal frequency, snack consumption, and food diversity, with private-school adolescents demonstrating higher intake of energy-dense foods.

**Conclusion:** The findings highlight a socioeconomic gradient in adolescent nutrition, demonstrating a dual burden of malnutrition across school types. Context-specific school-based interventions, nutrition education, and strengthened implementation of Nigeria's School Health Policy are recommended to address both under- and overnutrition among adolescents.

**Keywords:** Adolescent Nutrition, Dietary Practices, Double Burden of Malnutrition, Stunting, Obesity, Dietary Diversity



# Assessment of the Uptake of Cervical Cancer Screening Services Among Female Traders in Wuse Market, AMAC, FCT-Nigeria

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## ABSTRACT

**Background:** This study assessed the uptake of cervical cancer screening (CCS) services among female traders in Wuse Market, AMAC, FCT, Nigeria. The study aimed to examine the level of awareness, attitudes, and barriers affecting participation in cervical cancer screening among this population.

**Methodology:** A total of 400 female traders participated in the study. Data were collected to assess their knowledge, attitudes, and barriers toward cervical cancer screening, including personal, financial, accessibility, and health system–related factors.

**Results:** The findings revealed that only 12.0% of respondents had knowledge of cervical cancer, while a large majority, 88.0%, had no prior knowledge, indicating a significant gap in awareness and understanding of cervical cancer prevention. On personal and perceived barriers, 11.0% of respondents admitted feeling too embarrassed to undergo screening, while 88.5% stated they had never felt embarrassed. Additionally, 30.25% expressed fear that screening might reveal a positive cancer diagnosis, whereas 69.75% were not afraid of the possible results. Regarding financial and accessibility barriers, 56.0% of respondents considered the screening cost too expensive, while 44.0% disagreed. Also, 41.25% stated that their business activities limited their ability to create time for screening, while 48.5% reported that screening centres were too far from their places of residence or business. In terms of health system and service delivery barriers, 12.75% had experienced unfriendly treatment from health workers, and 21.75% believed that facilities lacked proper equipment or trained personnel for screening. When asked about preferred sources of information, 48.0% preferred community health talks, followed by 15.25% who preferred social media, and 14.5% who preferred radio or television programs. As for factors that could encourage screening, 58.75% called for more awareness campaigns, 41.25% preferred reduced or free screening costs, and 41.0% recommended mobile screening units at markets.

**Conclusion:** The study concluded that inadequate awareness, cost concerns, limited accessibility, and health system challenges significantly affect the uptake of cervical cancer screening among female traders in Wuse Market, AMAC, FCT, Nigeria.

**Keywords:** Cervical Cancer Screening, Awareness, Barriers, Female Traders, Wuse Market, Abuja, Nigeria, Health Services, Accessibility, Prevention



# Knowledge, Attitude and Prevention of Hepatitis B Among Drivers in Karu Local Government Area, Nasarawa State

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## ABSTRACT

**Introduction:** Hepatitis B virus (HBV) infection is a significant public-health issue globally and in Nigeria, with a disproportionate burden in low- and middle-income countries. In Nigeria, high endemicity, low knowledge, restricted access to diagnosis and partial vaccine coverage underlie continued transmission and liver morbidity and mortality. Mobile occupation groups like commercial drivers can be at higher risk. This research evaluated the knowledge, attitudes, prevalence and prevention of hepatitis B among commercial drivers in motor parks within Karu Local Government Area, Nasarawa State, in an aim to present gaps that can inform directed public-health interventions.

**Methods:** The target population were registered commercial drivers in operating capacity in motor parks within Karu, 268 drivers were selected with data collected using the DKAPHQ.

**Results:** 77.2% of the surveyed 268 drivers were unaware if they were HBV infected or not, 13.1% indicated a negative test result and 9.7% indicated a positive test result. Awareness about HBV was high on all major items: 90.3% recognized the liver damage done by HBV, 92.5% recognized that HBV is sexually transmitted, 90.7% recognized that casual contact does not spread HBV, 92.5% recognized that infected individuals can be asymptomatic, and 92.2% recognized that screening and vaccination exist. Truckers were recognized as a risk group by the majority (85.1%). Attitude scales measured quite positive orientations towards prevention: subjects concurred with the value of vaccination (mean = 2.843, SD = 0.797), public education (mean = 2.884, SD = 0.860), acceptance of screening (mean = 2.851, SD = 0.812) and willingness to get oneself tested/vaccinated (mean = 2.948, SD = 0.837). Distress in working with HBV-infected individuals still existed (mean = 2.187, SD = 0.841), reflecting stigma-related concerns. Actual preventive measure was uncommon: only 10.1% ever screened by a health worker, and 11.6% reported co-residence with HBV. Most reported family members (36.9%) or driver/acquaintances (30.2%) with HBV infection, and 76.5% knew HBV-related death in their neighborhoods. Significant structural barriers were faced: 82.8% reported absence of testing facilities in motor parks. Most of the participants agreed on preventive measures, complete vaccination (86.6%), safe sex on a regular basis (93.7%), screening of blood/organ (80.2%), avoidance of needle sharing (78.7%), routine testing of high-risk groups (86.6%), increased awareness promotion (91.4%), provision of park-based testing (89.2%) and compulsory screening of drivers (89.6%).

**Conclusion:** While there are positive attitudes and awareness about hepatitis B that are robust among Karu drivers, structural hindrances (lack of onsite testing, in part) and stigma limit effective prevention and adequate uptake of testing and vaccination. To stem HBV transmission among this high-risk occupational population, health programme managers and policy makers can enhance focused health education, provide affordable testing and vaccination services at motor parks or nearby facilities, incorporate HBV screening in occupational health requirements for drivers, and implement stigma-reduction interventions. The interventions will enhance early detection, linkage to care and vaccine coverage, thereby decreasing HBV-related morbidity and mortality among the study population.



# Prevalence and Determinants of Substance Use Among Adolescents in Keffi, Nasarawa State, Nigeria

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## ABSTRACT

**Background:** Adolescent substance use is a worsening global and national public health concern, with serious health, social, and economic consequences. In Nigeria, rising use of alcohol, codeine, tramadol, and cannabis among young people underscores an urgent need for local data to ensure effective interventions. However, evidence from semi-urban communities such as Keffi, Nasarawa State, remains limited.

**Objective:** This study aimed to determine the prevalence, patterns, and determinants of substance use among adolescents in Keffi, Nasarawa State, Nigeria.

**Methods:** A descriptive cross-sectional study was conducted among 242 adolescents aged 10–19 years residing in selected communities across five wards of Keffi Local Government Area. Participants were selected using a multi-stage sampling technique. Data were collected through interviewer-administered structured questionnaires adapted from the WHO Student Drug Use Survey and analyzed using SPSS version 25. Descriptive statistics summarized prevalence and patterns of substance use, while inferential analysis using chi-square and multivariate logistic regression identified significant determinants at a 95% confidence level.

**Results:** The lifetime prevalence of substance use among adolescents in Keffi was approximately 45%, while current use was about 30%. The most commonly used substances were alcohol, codeine, tramadol, cannabis, and tobacco. The mean age of initiation was 15 years, with males reporting higher rates of use than females. Peer influence emerged as the strongest determinant of substance use ( $p < 0.001$ ), followed by parental substance use, poor academic performance, and easy access to drugs within the community. Adolescents with strong family support and religious engagement demonstrated significantly lower likelihood of use.

**Conclusion:** Substance use among adolescents in Keffi is widespread and influenced by a complex interplay of social, familial, and environmental factors. The findings highlight the urgent need for community-based, family-centered, and school-driven preventive interventions tailored to local contexts.

**Keywords:** Adolescents, Substance Use, Prevalence, Determinants, Keffi, Nigeria, Public Health



# Exploring the Relationship between Social Media Screen Time, Mental Health and Academic Well-Being of Undergraduate Students at Nasarawa State University, Keffi

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## ABSTRACT

**Background:** The pervasive use of social media among university students globally has raised significant public health concerns regarding its impact on mental health and academic well-being. In Nigeria, where digital media consumption is rapidly increasing, understanding this relationship is critical for developing targeted interventions. This study investigated the relationship between social media screen time, mental health, and academic well-being among undergraduate students at Nasarawa State University, Keffi (NSUK).

**Methods:** A cross-sectional study design was employed, utilizing a structured, self-administered questionnaire for data collection. A sample of 400 undergraduate students was selected using a multi-stage sampling technique. Firstly, stratified sampling technique was used to divide the students into their respective faculties. Proportional sampling technique was then applied to determine the number of students to be sampled from each faculty, calculated as a proportion of the total population. Cluster sampling by lottery method was used to select departments from each faculty. Finally, simple random sampling technique by balloting was used to select individual students within the selected departments. The questionnaire captured data on socio-demographics, social media screen time, device usage, academic well-being, mental health, sleep patterns, and coping strategies. Data were analyzed using the Statistical Package for the Social Sciences (SPSS), presenting descriptive statistics (frequencies, percentages, mean, and standard deviation).

**Results:** The study recorded a 100% response rate. The mean age of respondents was 29.85 years ( $\pm 7.73$ ), with a female predominance (61.0%). A significant proportion of students (20.0%) spent over 10 hours daily on social media, with 46.0% checking their accounts 15 or more times a day. Smartphones were the primary access device (50.0%). Key findings indicate that 62.3% of respondents experienced physical symptoms like eye strain, and a substantial 73.1% reported that social media use interfered with their sleep (42.3% 'always,' 30.8% 'sometimes'). Regarding mental health, 33.5% reported experiencing depression symptoms associated with social media use. Academically, while a majority (80.3%) reported no concentration difficulties, 40.3% engaged in social comparison of their academic progress with peers online.

**Conclusion and Recommendations:** The study concludes that while social media is deeply integrated into the lives of NSUK students, its use is associated with significant negative consequences, particularly sleep disruption and symptoms of poor mental health among a substantial minority. There is a pressing need for institutional action. Recommendations include integrating digital wellness and sleep hygiene education into university orientation programs, strengthening mental health support services to address social media-related issues, and promoting peer-led awareness campaigns on healthy screen time management.

**Keywords:** Social Media, Screen Time, Mental Health, Academic Performance, Sleep Patterns, Undergraduate Students, Nigeria, Public Health



# Prostate Cancer Screening: Exploring the Knowledge, Prevalence, and Willingness Amongst Adult Males Receiving Care at Tertiary Hospitals in FCT, Abuja

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## ABSTRACT

**Background:** Prostate cancer remains the second most frequently diagnosed malignancy and a major cause of cancer-related mortality among men globally. In Sub-Saharan Africa, limited awareness and low screening uptake contribute to late presentation and poor outcomes. In Nigeria, prostate cancer represents a growing public health concern, yet men's knowledge, attitudes, and willingness toward screening remain inadequately understood. This study assessed the knowledge, willingness, and practice of prostate cancer screening among adult men attending tertiary hospitals in the Federal Capital Territory (FCT), Abuja, Nigeria.

**Methods:** A descriptive cross-sectional study was conducted among 418 men aged 40 years and above attending outpatient clinics at Federal Medical Centre (FMC) Jabi (n = 141), National Hospital Abuja (n = 119), and University of Abuja Teaching Hospital, Gwagwalada (n = 158). Participants were selected through a multi-stage sampling technique. Data were collected using a semi-structured, interviewer-administered questionnaire and analyzed with SPSS version 22. Descriptive and inferential statistics were used, with statistical significance set at  $p < 0.05$ .

**Results:** Most respondents (373; 89.2%) had heard about prostate cancer, and 312 (74.6%) were aware of screening methods. Only 117 (28.0%) had ever undergone prostate cancer screening, mainly via Prostate-Specific Antigen testing (24.9%) and Digital Rectal Examination (12.2%). Willingness to screen was expressed by 255 (61.0%). Screening uptake was significantly associated with age, educational level, knowledge, awareness, and willingness ( $p < 0.05$ ).

**Conclusion:** The study highlights a critical need for targeted awareness campaigns, improved accessibility to screening services, and culturally sensitive health education to enhance early detection and reduce prostate cancer morbidity and mortality in Nigeria. These findings provide evidence to inform policy development and public health interventions aimed at increasing prostate cancer screening uptake among Nigerian men.

**Keywords:** Prostate cancer, Screening, Knowledge, Willingness, Health Belief Model, Abuja, Nigeria



# Assessing Frontline Health Workers' Capacity to Detect and Manage Perinatal Depression in Primary Health Facilities in Kaduna South, Kaduna State, Nigeria

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## ABSTRACT

**Background:** Perinatal depression (PND), a depressive mood occurring during pregnancy or within one year after childbirth, is one of the most common yet under-recognized maternal mental health conditions worldwide. It affects 10–25% of women, with higher rates in low- and middle-income countries where sociocultural stigma, weak healthcare systems, and limited awareness impede detection and treatment. In Nigeria, where primary health centers (PHCs) are the first point of maternal care, frontline health workers (FHWs) play a crucial role in identifying and managing PND. However, little is known about their capacity to detect, support, and treat affected women, especially in northern regions like Kaduna State.

**Objective:** To assess the knowledge, attitudes, and existing care practices of frontline health workers toward perinatal depression, identify factors influencing their willingness to deliver PND-related services, and examine the relationship between knowledge and practice at the PHC level in Kaduna South Local Government Area (LGA).

**Methodology:** A descriptive cross-sectional study design with a mixed-methods approach was used. A multistage sampling technique selected 198 respondents, including nurses, midwives, community health officers, and community health extension workers, from 37 PHCs across six randomly selected wards of Kaduna South LGA. Data were collected using a structured, self-administered questionnaire adapted from validated tools and analyzed with SPSS version 25. Descriptive statistics summarized socio-demographics, while Chi-square tests evaluated associations between knowledge, attitudes, and practices at a 5% significance level.

**Results:** Awareness of perinatal depression was high (89.9%), with 62.1% of respondents rating their knowledge as good. However, the understanding of severe or atypical symptoms remained limited. Most respondents displayed positive attitudes, showing confidence in recognizing PND and willingness to refer women for mental health support, but a minority (10%) still attributed depression to spiritual causes. Routine screening for PND was inconsistent; only a small proportion reported conducting regular assessments. Training significantly influenced behavior: respondents with prior mental health training were more likely to screen or refer affected women ( $p < 0.05$ ). Knowledge was positively associated with willingness to deliver PND-related services. Major barriers included inadequate training, high workload, stigma, and poor referral systems.

**Conclusion:** Frontline health workers in Kaduna South demonstrate strong awareness and generally positive attitudes toward perinatal depression, yet a persistent gap exists between knowledge and practice. Limited training opportunities and sociocultural misconceptions continue to impede effective detection and management at the PHC level. Strengthening workforce capacity through continuous professional education, integrating validated tools such as the Edinburgh Postnatal Depression Scale (EPDS) into antenatal and postnatal services, and establishing clear referral pathways are essential to improving maternal mental health outcomes.



# Assessment of Visual Acuity and Academic Performance Among Public Senior Secondary School Students in Abuja Municipal Area Council, Federal Capital Territory, Nigeria

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## ABSTRACT

**Background:** Vision plays a vital role in the learning and development of school-aged children, yet visual impairment remains a neglected public health issue among adolescents in Nigeria. This study assessed the relationship between visual acuity and academic performance among public senior secondary school students in Abuja Municipal Area Council (AMAC), Federal Capital Territory.

**Methods:** A descriptive cross-sectional design was adopted, involving 451 students selected through multistage sampling from public senior secondary schools. Data were collected using a semi-structured, interviewer-administered questionnaire and standardized visual acuity tests with the Snellen and near-vision charts. Academic performance was assessed using students' official term examination scores. Data were analyzed using descriptive and inferential statistics, with significance set at  $p < 0.05$ .

**Results:** The results showed that 55.9% of respondents were male and the majority (46.6%) were aged 15–19 years. The prevalence of visual impairment was 40.1%. Although 67.2% of students performed well academically, a significant association was found between visual acuity and academic performance ( $\chi^2 = 174.699$ ,  $p = 0.001$ ). Students with normal vision achieved higher scores than their visually impaired peers. The study also revealed that only 33.1% of students had ever undergone a routine eye examination, while 74.9% were unaware of any school-based vision screening programs.

**Barriers:** The most commonly reported barriers were poor awareness, limited access to eye care services, and the absence of structured school vision health programs.

**Conclusion:** The study concludes that visual impairment is prevalent among adolescents in AMAC and significantly affects academic achievement and social participation. It recommends integrating routine vision screening into school health programs, training teachers to identify early signs of eye problems, and strengthening referral systems between schools and nearby eye care facilities. Policy-level interventions and funding support are essential to ensure that no student's learning potential is hindered by preventable visual impairment. **Keywords:** Visual acuity, Academic performance, Vision impairment, School-based screening, Abuja Municipal Area Council (AMAC), Nigeria.



# Knowledge and Perception of Primary School Teachers Towards Pupils with Dyslexia in Selected Schools in AMAC

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## ABSTRACT

Dyslexia is a neurodevelopmental learning disorder that affects reading and spelling despite normal intelligence. Teachers play a crucial role in identifying and supporting affected pupils; however, limited awareness and misconceptions often hinder effective intervention, particularly in Nigeria. This study assessed the knowledge and perception of primary school teachers toward pupils with dyslexia in selected schools within the Abuja Municipal Area Council (AMAC), Federal Capital Territory. A descriptive cross-sectional design was adopted, involving 308 teachers drawn from both public and private primary schools using multistage sampling. Data were collected using a structured questionnaire adapted from the Learning Disabilities Screening Scale (LDSS) and analysed using SPSS version 26. Descriptive statistics, chi-square tests, and Pearson's correlation were applied. Findings revealed that 37.3% of teachers demonstrated good knowledge of dyslexia, 42.9% had fair knowledge, while 19.8% had poor knowledge. Most teachers (82.5%) showed a neutral perception toward pupils with dyslexia, with only 6.5% exhibiting positive attitudes and 7.8% showing negative perceptions. There was a statistically significant moderate positive correlation between teachers' knowledge and perception ( $r = 0.357$ ,  $p < 0.001$ ), indicating that higher knowledge levels are associated with more favourable perceptions. Significant relationships were found between knowledge and demographic variables such as age, educational qualification, and school type, while perception was also significantly influenced by age and school type. However, prior training on dyslexia was not significantly related to either knowledge or perception. The study concludes that primary school teachers in AMAC possess only moderate knowledge and largely neutralized perceptions of dyslexia, reflecting insufficient training and awareness. It emphasizes the need for integrating dyslexia focused modules into teacher education curricula, organizing regular professional development workshops, and promoting inclusive education policies to enhance early identification and classroom support for pupils with dyslexia.



# Tuberculosis Awareness, Perception and Stigma Among Adolescents in Tafa Local Government Area, Niger State

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## ABSTRACT

**Introduction:** Tuberculosis (TB) continues to be a serious public health concern in the world and in high-burden nations like Nigeria. Adolescents, described by the WHO as being between the ages of 10 and 19, are a vulnerable group whose health-seeking habits are influenced by their life stage and sensitivity to false information. In order to guide focused public health initiatives in line with national TB reduction objectives, this study aims to evaluate the degree of awareness, perception, and stigma around tuberculosis among adolescents in Tafa Local Government Area (LGA), Niger State. **Methods:** The study used a descriptive cross-sectional design. Adolescents in Tafa LGA's secondary schools made up the study population. Based on a 50% prevalence rate, the Cochran method was used to determine a total sample size of 422, and 409 completed questionnaires were collected and examined. A multistage random sampling procedure was used to recruit participants from five randomly selected public secondary schools. A questionnaire measuring sociodemographic characteristics, awareness of TB transmission and prevention, attitudes toward TB patients, and stigma-related beliefs was used to gather data. The Bingham University Teaching Hospital Health Research Ethics Committee granted ethical approval. Descriptive statistics (frequency distributions, percentages) and chi-square tests were used in the data analysis. **Result:** The results showed that although most respondents (66.7%) had heard of tuberculosis, there were still a lot of misconceptions. Just 8.8% of respondents correctly identified bacteria as the cause of tuberculosis, and a significant minority (46.0%) did not know. There were several misconceptions, with 18.8% citing drinking alcohol and 15.6% citing contaminated water as causes. Regarding transmission, 59.9% of respondents correctly stated that coughing, sneezing, singing, or spitting could spread the disease, while 40.8% correctly identified that staying close to someone with TB can cause transmission. 50.6% of respondents agreed that people with TB should get medical help right away, reflecting a generally favourable opinion. High levels of stigma is recorded, as 87.5% of respondents said they would not want to associate with or purchase things from TB-affected people, and 55.6% said they would be reluctant to notify their friends if they found out they had the disease. According to bivariate analysis, perception and knowledge were substantially correlated with age and sex ( $p < 0.05$ ).

**Conclusion:** The study highlights a glaring contradiction: whereas Tafa LGA teenagers exhibit excellent awareness (name recognition), their in-depth understanding of causation and transmission is inadequate, which fosters misconceptions. High levels of social stigma, which show up as avoidance and a reluctance to report one's infection status, are closely related with this lack of understanding and fear. Given the strong association between sociocultural characteristics (religion and ethnicity) and all four outcomes, it is imperative that interventions be culturally specific and not just general. Community outreach and school-based health education programs are desperately needed to debunk myths, advance correct biological knowledge about tuberculosis, and cultivate sympathetic, non-stigmatizing attitudes toward those who are affected.



# Assessment of Male Partner Involvement in the Uptake of PMTCT Services Among Pregnant Women Accessing Care in Karu, Nasarawa State

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## ABSTRACT

**Introduction/Background:** The prevention of mother-to-child transmission (PMTCT) of HIV remains a critical public health strategy for achieving the global target of eliminating new HIV infections among children. Despite significant progress, male partner involvement in PMTCT services continues to be suboptimal in many parts of Nigeria, including Karu, Nasarawa State. Male participation plays an essential role in improving maternal adherence, reducing stigma, and enhancing PMTCT outcomes. This study therefore assessed the level of male partner involvement in PMTCT services and identified factors influencing or hindering their participation among pregnant women in Karu Local Government Area.

**Methodology:** A descriptive cross-sectional study design was employed, involving 192 pregnant women attending antenatal clinics in selected health facilities in Karu LGA. Data were collected using a structured, interviewer-administered questionnaire and analyzed using descriptive statistics, chi-square tests, and binary logistic regression at a significance level of  $p < 0.05$ .

**Results:** Findings revealed that 67.7% of respondents reported that their partners accompanied them to antenatal care (ANC) visits, while 49.5% attended PMTCT counselling sessions. Only 57.3% of partners consented to HIV testing, and 75.5% discussed ANC or PMTCT issues with their spouses. Chi-square analysis showed significant associations between male involvement and marital status ( $p = 0.02$ ), educational level ( $p = 0.01$ ), and occupation ( $p = 0.05$ ). Logistic regression identified secondary/tertiary education (AOR = 2.45), employment (AOR = 1.86), good knowledge of PMTCT (AOR = 2.98), effective spousal communication (AOR = 3.42), and favourable health facility environment (AOR = 2.12) as positive predictors of male involvement, while high perceived barriers (AOR = 0.42) negatively influenced participation. The major barriers identified included time and work constraints (70.8%), long waiting times (77.1%), sociocultural beliefs that PMTCT is for women only (65.1%), and fear of stigma and HIV testing (61.5%).

**Conclusion and Recommendations:** The study concluded that male partner involvement in PMTCT services in Karu LGA is moderate, with participation constrained by socio-cultural norms, occupational pressures, and health system barriers. Key predictors of involvement were education level, employment status, knowledge of PMTCT, and spousal communication. The study recommends strengthening health education campaigns, implementing male-friendly facility policies, and promoting community-based interventions to enhance male engagement in PMTCT programs. Additionally, reducing waiting times, encouraging couple communication, and addressing gender-related misconceptions will further improve male participation and contribute to the elimination of mother-to-child transmission of HIV in the study area.

**Keywords:** Male Involvement, PMTCT, HIV, Pregnant Women, Maternal Health



# Knowledge and Practice on the Use of Rapid Diagnostic Test in Testing for Malaria Among Community Health Extension Workers in the Federal Capital Territory

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## ABSTRACT

**Introduction:** Malaria remains a major public health issue, causing high levels of illness and death worldwide, especially in sub-Saharan Africa, where about 90% of all malaria deaths occur. Rapid diagnostic tests help improve accurate diagnosis at community level. Despite the proven effectiveness of Rapid Diagnostic Tests in malaria diagnosis, health workers (HWs), especially in sub-Saharan Africa, sometimes prescribe antimalarial drugs for patients with negative Rapid Diagnostic Test results even when it is obvious that not giving such prescriptions will do no harm to the patient. Specifically, this study aimed to assess the relationship between the knowledge and practice on the use of RDTs in testing for malaria among CHEWs.

**Objectives:** To assess the level of knowledge about Rapid Diagnostic Test kits among Community Health Extension workers in the Federal Capital Territory. To ascertain the practice of Community Health Extension workers in using Rapid Diagnostic Test kits in testing for malaria in the Federal Capital Territory. To evaluate factors associated with accurate Rapid Diagnostic Test use and areas for improvement. To establish the relationship between the knowledge and practice of the use of Rapid Diagnostic Test Kit in testing for malaria among Community Health Extension Workers in the Federal Capital Territory.

**Methodology:** Study Area: Primary health care centers within Abuja Municipal Area Council (AMAC) and Kuje Area Council (KAC) in the Federal Capital Territory. Study Design: Descriptive cross-sectional survey. Study Population: Community Health Extension Workers within the Abuja Municipal Area Council and Kuje Area Council. Sample size: 191. Sampling Technique: Multistage sampling technique. Data Collection: A quantitative method was used for the data collection of this research, which contained a self-administered questionnaire used to assess knowledge and practices regarding the use of Rapid Diagnostic Test Kits in testing for malaria. Data Analysis: Statistical Package for Social Sciences (SPSS) was used for descriptive and inferential statistics. Ethical approval: Obtained from the Bingham University Teaching Hospital Head Research and Ethics Committee, Abuja Municipal Area Council and Kuje Area Council.

**Results:** The results showed that 82.0% of respondents demonstrated good knowledge levels in the use of RDTs, while 18.0% had poor knowledge. 86.8% of respondents had received formal training on the use of RDTs which contributed to good knowledge and practices. From the results, there was a statistically significant association between knowledge and practice levels on the use of Rapid Diagnostic Tests among Community Health Extension Workers ( $\chi^2 = 0.0214$ ,  $p < 0.05$ ), indicating that better knowledge was linked to better practice.

**Conclusion:** The study concluded that CHEWs possess high level of knowledge and practice in the use of RDTs. However, the findings show that the availability of RDTs contribute to the practice levels in malaria diagnosis which can further help in proper management of malaria cases. The lack of training also has implications on the knowledge and practice on the use of RDTs in testing for malaria ranging from improper utilization of kits which can bring about improper diagnosis malaria.



# Assessment of Artificial Intelligence Readiness Among Medical Doctors in Abuja, Nigeria: An Online Cross-Sectional Study of Knowledge, Attitudes, and Practices

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## ABSTRACT

**Background:** Artificial intelligence (AI) promises to transform healthcare delivery through enhanced diagnostics and decision support. However, successful implementation depends on healthcare workforce readiness. Nigeria has launched national AI strategies, yet data on medical doctors' preparedness for AI adoption remains limited, particularly in Abuja, the nation's capital and healthcare policy hub. This study assessed AI knowledge, attitudes, practices, and readiness among medical doctors in Abuja.

**Methodology:** An online cross-sectional study was conducted among 345 medical doctors from four tertiary healthcare facilities (two public, two private) in Abuja. Data were collected using structured questionnaires covering socio-demographic characteristics, AI knowledge (15-item assessment), attitudes (23-item scale based on Technology Acceptance Model), current practices, and barriers/facilitators to adoption. Knowledge scores were categorized as good ( $\geq 70\%$ ), moderate (60-79%), or poor ( $< 60\%$ ). Data were analyzed using R, with descriptive statistics, chi-square tests, and multiple linear regression.

**Results:** Participants had a median age of 41 years and 12 years' clinical experience. Good AI knowledge was demonstrated by 42%, with 36% having moderate knowledge (mean score: 71.2%). Nearly all respondents (98%) expressed positive attitudes toward AI benefits, though 60-65% simultaneously recognized risks including patient safety concerns and liability issues. Only 29% currently use AI tools, and just 21% received formal AI training. No demographic factors significantly predicted readiness. Top barriers included concerns about replacing human judgment (8.6%), regulatory uncertainties (8.2%), and infrastructure limitations (7.8%). Key facilitators were comprehensive training opportunities (7.8%), peer support (7.4%), and financial incentives (7.3%).

**Conclusion:** Medical doctors in Abuja demonstrate solid foundational AI knowledge and positive attitudes but minimal practical implementation. System-wide interventions are needed including curriculum integration, regulatory framework development, infrastructure investment, and comprehensive training programs to bridge the readiness-practice gap and enable responsible AI adoption in Nigerian healthcare.

**Keywords:** Artificial Intelligence, Readiness, Knowledge, Healthcare, Barriers, Facilitators



# Assessment of Postpartum Mental Health and Its Determinants Among Women in Karu LGA, Nasarawa State, Nigeria

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## ABSTRACT

**Introduction:** Postpartum mental health disorders (PMHD) continue to be an essential but underappreciated public health concern in Nigeria, where social, biological, and cultural factors interact to influence women's psychological health following childbirth. Despite growing awareness, there is a lack of research evidence integrating these complex determinants in peri-urban settings, such as Karu LGA in Nasarawa State. Therefore, this study aims to determine the prevalence of postpartum mental health challenges among women in Karu LGA, Nasarawa State, Nigeria.

**Methodology:** A cross-sectional survey was conducted among 220 postpartum women attending selected primary health care centres in Karu LGA between the 3rd of August and the 2nd of October 2025. A face-to-face interviewer administered a structured questionnaire that included socio-demographic variables and the World Health Organization Self-Reporting Questionnaire-20 (WHO SRQ-20) and adapted questions on awareness, knowledge, coping strategy and determinants of PMHD. Data were analysed using descriptive and bivariate analyses using a binary logistic regression model to identify factors associated with PMHD. Odds ratios with 95% CI were computed, and a p-value of < 0.05 was used to declare statistically significant factors.

**Results:** The mean age of the mothers was  $27.87 \pm 5.81$ . Using a cut-off score of  $\geq 8$ , 82 (37.3%) of the mothers were classified as having probable cases of common mental disorder symptoms. The most frequently endorsed symptoms were frequent headaches (62.3%), getting tired easily (54.5%), and feeling tired all the time (48.2%). The study identified husband's level of education (primary education, OR 0.07, 95% CI 0.0 to 0.93), women's marital status (divorced, OR 0.06, 95% CI 0.01 to 0.641 and widowed, OR 0.06, 95% CI 0.01 to 0.898) and antenatal care attendance (OR 0.37, 95% CI 0.14, 0.95) as significant predictors of maternal emotional distress. 54.5% of the women relied on more family and friend support; sleep disturbances, breastfeeding difficulties, and emotional well-being showed moderate associations with mental distress, while biological stressors like postpartum pain or exhaustion showed a weak association.

**Conclusion and Recommendations:** Overall, PMHD among Karu LGA mothers are influenced by intertwined biological, psychosocial, and cultural factors. Improving maternal psychological outcomes among postpartum mothers requires addressing socioeconomic barriers, incorporating routine mental health screening into maternal care, and bolstering family support.

**Keywords:** Postpartum; Mental Health; Depression



# Assessing the Effect of the USAID’s Stop Work Order on Tuberculosis Programmes in FCT, Abuja, Nigeria: Challenges and Opportunities for Domestic Resources Mobilization

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## ABSTRACT

**Introduction:** Tuberculosis (TB) remains a leading cause of infectious disease deaths worldwide, with Nigeria among the top ten high-burden countries. The 2025 USAID stop-work order on TB programmes disrupted interventions in 18 high-burden states, including the Federal Capital Territory (FCT), Abuja. This study assessed the effect of the suspension on TB control and explored options for sustainable domestic resource mobilization.

**Methodology:** The study employed a mixed approach focusing mainly on qualitative data collection and analysis. Qualitative data were gathered through key informant interviews and focus group discussions with FCT program managers, healthcare workers, and civil society representatives to explore perceptions of challenges and opportunities related to domestic financing of TB programs. Quantitative data was solely secondary data reviewed from the National TB program data report, focusing on the period before and after the USAID stop work order, looking into the case detection, treatment, and health workforce statistics.

**Results:** The findings showed a significant decline in case detection, treatment interruptions, and reduced diagnostic capacity. The layoff of 1,800 health workers and suspension of community screenings led to service gaps and increased risk of undetected cases. Nonetheless, opportunities exist to strengthen domestic financing through the Basic Health Care Provision Fund (BHCPF), the National Health Insurance Authority (NHIA) Act, and innovative taxes on alcohol and tobacco. Strengthening public-private partnerships and integrating TB services within primary healthcare also offer sustainable pathways.

**Conclusion:** The USAID stop-work order acted as a stress test for the TB control programme in the FCT, revealing a system heavily dependent on external funding and vulnerable to sudden disruptions. The study conclusively demonstrates that the funding suspension led to a catastrophic decline in case detection and treatment outcomes, exacerbated by a severe human resource crisis and breakdowns in the supply chain for diagnostics and drugs.

**Keywords:** Tuberculosis, USAID Stop-Work Order, Abuja, Domestic Financing, Donor Funding



# Knowledge, Attitude, and Practice of Infection Prevention and Control Among Hospital Cleaners in Secondary Health Facilities in FCT

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## ABSTRACT

Infection prevention and control (IPC) is one of the pillars of safe healthcare provision, especially in low- and middle-income countries where healthcare-associated infections (HAIs) are a significant public health concern. Hospital environment cleanliness and cross-contamination prevention depend on the hospitals' cleaners, but their knowledge, attitudes, and practices (KAP) regarding IPC are seldom documented. In Nigeria, there is poor evidence of IPC compliance among non-clinical secondary healthcare workers. This research evaluated the KAP of hospital cleaners towards IPC and identified determinants that affect their compliance in chosen secondary health care institutions in the Federal Capital Territory (FCT) Abuja. A descriptive cross-sectional study was implemented among 116 hospital cleaners in four secondary health care institutions in FCT Abuja (Asokoro, Nyanya, Karshi, and Wuse General Hospitals). Questionnaire information based on WHO IPC guidelines was collected and analyzed with descriptive and inferential statistics (Chi-square and Spearman's rho) at  $p < 0.05$  levels of significance. Ethical clearance and institutional permissions were sought before collecting data. Respondents were found to be pre-dominantly 26–45 years (53.44%), female (74.14%), and having at least secondary education (51.72%). 62.07% of these have attended IPC training, and training was predominantly in 2024 and 2025. Respondents demonstrated satisfactory overall knowledge in IPC, especially on modes of infection transmission along routes (77.59%), importance of hand hygiene (89.66%), and correct use of personal protective equipment (94.83%). However, procedural knowledge was moderate, i.e., on WHO's Five Moments of Hand Hygiene (65.52%) and hand rubbing duration (70.69%). Attitudes were generally positive, with most respondents recognizing IPC as a significant job aspect and having the inclination to follow IPC practices, even if some showed unwillingness in the use of PPE. Practices were moderate: 68.97% always washed hands when working, 65.52% wore PPE when cleaning spills, and 87.07% followed waste segregation practice. Practice and knowledge had a strong association with years of experience and level of education and not age. Availability of PPE and disinfectants also had a strong positive effect on IPC practice and knowledge ( $p < 0.05$ ). This research shows that hospital cleaners have good general knowledge and good attitudes towards IPC but poor practices, reflecting the discrepancy between awareness and persistent practice. Education level, experience, availability of resources, and supportive management were determinants of compliance. IPC among hospital cleaners can be enhanced through regular, cleaner-specific training and refresher courses, regular and sufficient availability of IPC supplies like PPE and disinfectants, and hospital cleaner involvement in facility IPC policy platforms. Enhanced supervision and supportive leadership will guarantee compliance. Emphasizing these factors will enhance IPC adherence, decrease the burden of healthcare-associated infections, and contribute to healthier working conditions for patients and health workers. practices were moderate: 68.97% always washed their hands during work, 65.52% used PPE when cleaning spills, and 87.07% adhered to waste segregation protocols. Educational level and years of experience were significantly associated with knowledge and practice, while age was not. Availability of PPE and disinfectants also significantly improved IPC knowledge and practice ( $p < 0.05$ ). This study demonstrates that hospital cleaners possess good general knowledge and positive attitudes toward IPC, but their practices remain suboptimal, indicating a gap between awareness and consistent implementation.



Educational level, work experience, resource availability, and management support were identified as key determinants of compliance. Strengthening IPC among hospital cleaners requires regular, cleaner-specific training and refresher programmes, adequate and consistent supply of IPC materials such as PPE and disinfectants, and integrating hospital cleaners into facility IPC policy frameworks. Reinforcing supervision and supportive leadership will further sustain adherence. Addressing these areas will enhance IPC compliance, reduce healthcare-associated infections, and contribute to safer healthcare environments for both patients and health workers.

**Keywords:** Infection Prevention and Control; Hospital Cleaners; Knowledge, Attitude and Practice; Healthcare-Associated Infections; Personal Protective Equipment; Hand Hygiene; Abuja, Nigeria

# A Study of the Awareness and Involvement of Male Partners in Family Planning Services in Kagoro Community, Kaura LGA, Kaduna State

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## ABSTRACT

**Introduction:** Since the 1994 ICPD, family planning has broadened into reproductive health, ensuring access to safe and affordable methods. In Nigeria, however, contraceptive use remains low, mainly due to male dominance in family decisions, especially in the North where cultural and religious norms give men control over reproductive health choices. Despite this influence, men show low involvement in FP. Studying male awareness and participation in family planning in communities like Kagoro is crucial for advancing inclusive reproductive health services that benefit women, families, and society.

**Methodology:** A cross-sectional descriptive study was done among the men in Kagoro village, Kaura LGA, Kaduna State, with a focus on males aged 18 to 60 years. Data were collected using structured questionnaires that covered demographic information, awareness levels, perception of FP methods, and actual contraceptive practices. The data were analyzed using statistical software, IBM SPSS statistical software version 23, and the results were presented in tables and charts.

**Results:** The study found that 90.1% of respondents were aware of family planning, but only 47.1% of respondents regularly use any one form of contraceptive. The commonly used contraceptives among the respondents are condoms (72.9%) and vasectomy (1.2%). There was a noticeable gap between awareness and actual practice. Partners' decisions, side effects, and religion were the major barriers to the use of family planning services, while facilitating factors include educational level, access to healthcare, and gender roles within the community.

**Conclusion:** The study highlights the need for intensified community-based education and sensitization campaigns to bridge the gap between awareness and practice of family planning methods. Addressing cultural and gender-based barriers would significantly enhance the uptake of contraceptive services, contributing to improved reproductive health outcomes.

**Keywords:** Family Planning (FP); Contraceptive Use; Male Involvement; Awareness; Cultural and Religious Barriers; Kagoro, Kaura LGA, Kaduna State



# Prevalence and Determinants of Occupational Stress Among Emerging Occupations in Karu, Nasarawa State

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## ABSTRACT

Occupational stress has become a major public health issue, particularly among individuals engaged in emerging occupations that often lack job security, structured working conditions, and welfare benefits. These occupations such as POS operators, dispatch riders, and online vendors are increasingly common in Nigeria, yet little is known about the psychological challenges faced by these workers. This study aimed to assess the prevalence and identify the key determinants of occupational stress among individuals in emerging occupations in Karu, Nasarawa State, Nigeria. A descriptive cross-sectional study design was employed, recruiting 422 participants engaged in emerging occupations (including Point-of-Sale operators, gig workers, online vendors, tech-based service providers, and remote workers) within Karu Local Government Area. A snowball sampling technique was used due to the informal and decentralized nature of the population. Data were collected using a semi-structured, interviewer-administered questionnaire that incorporated socio-demographic sections, the Perceived Stress Scale (PSS), and modules on determinants, coping strategies, and morbidity patterns. Data analysis was performed using SPSS version 25, employing descriptive statistics, chi-square tests, and multiple logistic regression to identify significant associations and predictors, with a significance level set at  $p < 0.05$ . The study revealed an alarmingly high prevalence of occupational stress, with 86.3% of respondents having experienced work-related stress. Notably, 74.4% were classified in the 'High Stress' category, and nearly half (48.3%) reported always feeling stressed. The primary determinants were economic: low or irregular income (Mean Score=4.42) and job insecurity (Mean=4.31) were identified as major contributors. Prevalent stress-related symptoms included fatigue (68.7%), insomnia (68.2%), and anxiety (64.5%). The morbidity pattern showed high rates of musculoskeletal pain (63.5%), gastrointestinal problems (47.6%), and anxiety (44.5%). Coping strategies were predominantly informal, with 76.1% relying on talking to family/friends and 68.2% taking breaks; alarmingly, 28.0% used alcohol or drugs, while only 11.4% sought professional help. Multivariable analysis identified younger age, being a tech-based service provider, long working hours, and using alcohol/drugs as significant predictors of high stress levels. The study concludes that workers in emerging occupations in Karu experience a severe and pervasive level of occupational stress, primarily driven by structural economic insecurities rather than individual factors. This stress manifests in significant physical and psychological morbidity, compounded by a reliance on informal and often maladaptive coping mechanisms due to a critical lack of formal support systems. To address this public health crisis, it is recommended that policymakers expand occupational health and safety regulations to include psychosocial risks for informal workers. Public health interventions should integrate community-based mental health screening and counselling into primary healthcare. Furthermore, digital labour platforms should be encouraged to provide transparent policies and integrate mental health support resources for their workers.



# Gaps in the Prevention and Control of Lassa Fever in New Karu, Nasarawa State

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## ABSTRACT

**Background:** Lassa fever remains a persistent public health problem in Nigeria, especially in endemic regions such as Nasarawa State. Despite ongoing efforts, outbreaks continue to occur, suggesting gaps in community-level prevention and control efforts. This study assessed the level of knowledge of Lassa fever, attitudes, preventive practices, and challenges in the implementation of preventive measures against Lassa fever among residents of New Karu, Nasarawa State, and evaluated the availability and accessibility of preventive resources.

**Methods:** A descriptive cross-sectional study was conducted among 272 community members using a structured interviewer-administered questionnaire. Data was analyzed using SPSS version 27 and presented in frequencies, percentages, and chi-square tests of association, with a significance value of  $p < 0.05$ .

**Results:** Awareness of Lassa fever was high (97.4%), and 94.9% correctly identified rats or contaminated food as the source of infection. However, only 29.4% demonstrated high knowledge of the disease, 21% of the respondents practiced consistent preventive behaviors such as proper food storage and rodent control. Only 40.4% had received any form of health education, and education level was the only factor significantly associated with preventive practices ( $p = 0.001$ ). Major gaps identified included weak health education coverage, difficulty in rodent control, poor environmental sanitation, and limited access to preventive and treatment facilities.

**Conclusion:** Although community awareness of Lassa fever is high, preventive practices remain inadequate due to insufficient health education, infrastructural challenges, and socio-cultural factors. Strengthening health education and improving access to preventive resources are vital for effective control of Lassa fever in New Karu and similar communities.



# Unlocking Dyslexic Potential: A Case Study of the Prevalence of and Knowledge, Attitude and Practice of Caregivers Towards Dyslexia in Nigeria

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## ABSTRACT

Dyslexia is a neurodevelopmental learning disorder affecting reading, spelling, writing and decoding, remains widely misunderstood and underdiagnosed in Nigeria despite its high global prevalence. The lack of awareness among caregivers, teachers and administrators has majorly perpetuated stigmatization and hindered early intervention. This study titled “Unlocking Dyslexic Potential: A Case Study of the Prevalence of and Knowledge, Attitude and Practice of Caregivers towards Dyslexia in Nigeria” sought to explore how understanding and perception among key stakeholders influence support for dyslexic learners in primary schools within Abuja, Nigeria. A mixed-method case study design was adopted, combining quantitative and qualitative approaches. Data were collected from five purposively selected schools across Abuja using standardized dyslexia screening tools (CLDQ-R), structured questionnaires, and semi-structured interviews. Quantitative data were analyzed using descriptive and inferential statistics in SPSS, while qualitative data were subjected to thematic analysis to capture lived experiences and contextual barriers. Findings revealed that 54.3% of pupils were at high risk of dyslexia-related reading difficulties, 21.9% at moderate risk, and 23.8% at low risk. Male pupils exhibited higher prevalence (62.3%) compared to females (46.2%), aligning with global trends. Among teachers and administrators, 75.9% demonstrated fair knowledge, while 17.2% had poor and 6.9% good knowledge levels. Attitudes toward dyslexia and inclusion were generally positive but constrained by limited training and systemic barriers. Qualitative findings revealed recurring themes of inadequate teacher preparation, stigmatization, lack of policy implementation, and the urgent need for early screening and specialized support systems. The study underscores the pressing need for structured dyslexia screening programs, teacher training, and inclusive education policies tailored to Nigeria’s context. Improving caregivers’ knowledge and attitudes through evidence-based interventions can significantly enhance early detection and management of dyslexia, reducing educational inequities. Advocacy efforts should focus on reframing dyslexia as a learning difference rather than a disability, fostering environments where every child, regardless of neurodiversity, can thrive.

**Keywords:** Dyslexia, inclusive education, caregivers, knowledge-attitude-practice, prevalence, Nigeria, Health Belief Model



# Workplace Stress and Burnout Among Medical Laboratory Scientists in Public Hospitals in Abuja, Nigeria

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## ABSTRACT

Workplace stress and burnout are growing challenges among healthcare professionals, particularly Medical Laboratory Scientists (MLS), whose work is essential to patient diagnosis and treatment. In public hospitals, high workload, inadequate staffing, and poor supervisor support often lead to emotional exhaustion and reduced job satisfaction. This study assessed the prevalence, causes, and effects of workplace stress and burnout among Medical Laboratory Scientist working in public hospitals within the Abuja Municipal Area Council (AMAC), Federal Capital Territory and Bwari. A descriptive cross-sectional study was conducted among 218 Medical Laboratory Scientist, selected through random sampling. Data were collected using a structured questionnaire based on the Perceived Stress Scale (PSS) and the Maslach Burnout Inventory (MBI). Data were analyzed using Power BI for descriptive and inferential statistics. Most respondents were female (60.6%), aged 20–29 years, and had 1–5 years of work experience. The study found moderate levels of burnout (mean = 2.54), with a significant relationship between long working hours and higher burnout ( $p < 0.001$ ). Medical Laboratory Scientist who received supervisor support had lower burnout levels ( $p = 0.021$ ). Heavy workload and lack of managerial support were major contributors to stress and burnout. Workplace stress and burnout among Medical Laboratory Scientist in public hospitals remain moderate but concerning. The main causes are excessive workload, long hours, and inadequate supervision. Addressing these factors through fair scheduling, adequate staffing, and improved staff support can enhance mental well-being and job performance.



# Assessing the Relationship Between Sex Education and Adolescent Pregnancy Rates Among Pregnant Adolescents in Madalla, Niger State

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## ABSTRACT

**Introduction:** Adolescent pregnancy remains a pressing public health challenge in Nigeria, with serious implications for maternal health, education, and future opportunities.

**Objective:** This study assessed the relationship between sex education and adolescent pregnancy among pregnant adolescents in Madalla, Niger State.

**Methodology:** Using a cross-sectional design, 365 pregnant adolescents aged 13–19 years attending antenatal clinics were studied using structured questionnaires. Data were analyzed through descriptive and inferential statistics.

**Results:** Findings showed a mean age of 16.6 years, with most respondents married (61.6%) and not in school (54.5%). Although awareness of menstruation was high (96.7%), gaps existed in knowledge of pregnancy risk at first sex (15.3% uncertain) and contraceptive methods, with only 10.7% aware of pills. High-risk practices included early sexual debut (mean 15.5 years), coerced first sex (44.1%), and non-use of contraception at debut (54.5%). While 56.7% believed sex education could reduce early pregnancy, only 35.9% had received it before pregnancy. Exposure to sex education was significantly associated with correct knowledge of pregnancy risk and contraceptive use at first debut ( $p < 0.05$ ).

**Conclusion:** The study concludes that sex education improves SRH knowledge and protective behaviors, highlighting education level as a critical determinant. It recommends strengthening comprehensive school-based and community sex education, enhancing youth-friendly services, and engaging families and stakeholders to reduce adolescent pregnancy in Nigeria.



# Assessing the Economic Burden and Health Consequences of Sanitary Pad Inaccessibility on Adolescent Girls in Nasarawa State, Nigeria

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## ABSTRACT

**Background:** Menstrual Hygiene Management (MHM) has been recognized at a global level as an essential public health issue, particularly for the health, well-being, and development of the millions of adolescent girls. The gap in access is especially pronounced in low or middle-income context, where women and girls in rural and underserved areas, such as Nasarawa State, Nigeria, bear significant economic and health consequences due to the inaccessibility to sanitary pads.

**Objective:** The study assessed the economic barriers, health implications, educational impact, and socio-cultural factors connected with adolescent girls' limited access to sanitary pads in Nasarawa State.

**Methods:** Using a descriptive cross-sectional design, this study assessed the extent to which economic constraints prevent adolescent girls from accessing menstrual products and explored how these limitations lead to a wider range of impacts on their health, education, and social inclusion. A total of 422 adolescent girls were selected using a multi-stage sampling technique, and the data was collected with the help of structured questionnaires.

**Results:** Results from the study revealed that many families couldn't afford sanitary pads and the high cost of the sanitary pads imposed a significant financial burden on them, forcing majority of girls to use unhygienic alternatives like rags and cloth materials, which heightened their risk of infections. The inaccessibility of pads also leads to frequent school absenteeism and difficulty concentrating in class. The study added that these further hampered the girls' experiences of exclusion and embarrassment, lower self-esteem as well as limited participation in school and community activities.

**Conclusion:** The study concluded that to tackle the economic and health consequences of menstrual product inaccessibility, there is a need for a comprehensive plan to be adopted which includes investment in Water, Sanitation, and Hygiene (WASH) facilities, menstrual health education initiatives and government-subsidized menstrual hygiene interventions. The results underscore the need for inclusive policies that treat menstrual equity as a fundamental human right, not a privilege. Government agencies, non-governmental organizations (NGOs) and school authorities must collaborate to ensure open conversations that dismantle misconceptions about menstruation.



# Assessing the Prevalence and Risk Factors of Tuberculosis Infection Among Patients in Gwagwalada Area Council, FCT, Nigeria

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## ABSTRACT

**Background:** Tuberculosis (TB) is one of the key public health issues in Nigeria, especially in the semi-urban regions like the Gwagwalada Area Council of the Federal Capital Territory (FCT). Although there is a continuous control effort, there are minimal data on socio-demographic, behavioural, as well as environmental determinants of the TB infection in this region. The aim of the study was to determine the prevalence and risk factors of tuberculosis infection among adult patients in the University of Abuja Teaching Hospital (UATH), Gwagwalada Area Council, FCT, Nigeria.

**Objectives of study:** To assess the association between patients' level of knowledge about TB transmission and their risk of TB infection in Gwagwalada. To determine how patients' attitudes towards TB (e.g., stigma, care-seeking) influence their risk of infection. To identify socio-demographic, behavioral, and environmental risk factors associated with TB infection. To determine the prevalence of TB among patients attending selected health facilities in Gwagwalada. To examine the relationship between the adoption of preventive practices (such as the use of face masks, adequate ventilation, and early diagnosis) and TB infection rates among patients in Gwagwalada.

**Methods:** This study employed a cross-sectional descriptive design, sampling 325 participants (aged 18 years and above) using systematic random sampling. The study instrument was a structured questionnaire used to collect data on socio-demographic, behavioural, and environmental factors, as well as knowledge and awareness of TB. TB status was confirmed in the laboratory with the normal diagnostic tests. Data analysis was conducted using descriptive statistics and Chi-square tests at a 5% level of significance.

**Result:** The research found that the prevalence of TB was 14.5%, which shows that the burden of infection is quite low but yet persistent. It was also found that TB infection was significantly associated ( $p < 0.05$ ) with certain risk factors, smoking, wearing a mask, overcrowding, and poor ventilation. The respondents had good knowledge of the prevention and treatment of TB, but the stigma and disclosure fear were quite prevalent.

**Conclusion:** The results indicate that the socio-economic factors, health behaviour, and environmental exposure are determinants of TB infection in UATH, Gwagwalada. Based on the study findings, it is recommended that targeted interventions, including health education, improved living conditions, and communication of behaviour change, should be implemented to mitigate the spread of TB and improve detection at an early stage.

**Recommendation:** There is a pressing need for the Government and health authorities to increase the availability of TB diagnostic devices, such as GeneXpert and digital chest X-ray machines, in primary and secondary health care institutions in order to ensure early case identification. Active community-based case-finding interventions, especially in high-risk populations and close contacts, as well as in overcrowded populations, need to be implemented in health programs by relevant authorities. There is a need to project community sensitisation and media advocacy on reducing stigma associated with TB.

**Keywords:** Tuberculosis, Prevalence, Risk Factors, Behavioural Determinants, Environmental Health, Gwagwalada, Abuja, Nigeria



# Assessment of Knowledge, Attitude, and Practice and the Availability of Water, Sanitation and Hygiene (WASH) Facilities Among Secondary School Students in AMAC FCT, Abuja, Nigeria

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## ABSTRACT

Access to adequate water, sanitation and hygiene (WASH) facilities is recognized as a basic human right and essential for public health, within schools where children spend a large portion of their day. Despite global efforts to improve WASH facilities worldwide, many regions continue to struggle with providing adequate access, especially in developing countries like Nigeria. This study aimed to assess the knowledge, attitude, and practice of secondary school students regarding Water, Sanitation and Hygiene (WASH) and to evaluate the availability of WASH facilities in secondary schools in Abuja, Nigeria. A cross-sectional study was conducted among secondary school students across 6 schools in AMAC, between August and September 2025. A multistage sampling technique was employed to select participants. Data were collected using a structured, close-ended, self-administered questionnaire to assess students' knowledge, attitude, practice, and availability of facilities. Data analysis was performed using IBM SPSS version 25 and R programming language. A total of 385 participants were included in the study. The findings revealed that 60% of respondents had good knowledge of WASH, particularly regarding safe drinking water sources (73.2%), proper handwashing (78.7%), and appropriate waste disposal (86.2%). Attitude toward WASH was highly positive among 99.2% of students and good hygiene practices were observed in 71.9% of students, with most washing hands with soap and water (64.4%) and properly disposing of waste (93.2%). Availability of WASH facilities was reported in 61.6% of schools, though soap and menstrual hygiene provisions were inadequate. The statistical significance was taken at  $p$ -value  $< 0.05$ , and the odd ratios (OR) of the variables were examined. Knowledge was significantly associated with school attended ( $p=0.003$ ), class ( $p=0.020$ ), and school location ( $p=0.012$ ). Additionally, students in rural areas were twice as likely to have poor knowledge (OR=2.174,  $p=0.013$ ). Attitude correlated significantly with school location ( $p=0.004$ ); rural students showed less positive attitudes and practice was associated with gender ( $p=0.018$ ); males were 1.7 times more likely to have poor practices (OR=1.712,  $p=0.019$ ). Availability of WASH facilities was linked to school and class ( $p=0.040$  and  $0.014$  respectively). The study reveals generally good knowledge, positive attitudes, and fair practices toward WASH among students; however, gaps remain in facility adequacy and hygiene resource availability. Therefore, strengthening WASH infrastructure and continuous health education are recommended to promote sustainable hygiene practices in schools.

**Keywords:** Water, Sanitation, Hygiene, Knowledge, Practice, Attitude and Accessibility



# Knowledge, Attitude and Willingness to Accept Malaria Vaccine Amongst Pregnant Women in Abuja Municipal Area Council (AMAC), Federal Capital Territory

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## ABSTRACT

This study assessed the knowledge, attitude, and willingness to accept malaria vaccination among pregnant women attending antenatal clinics in Abuja Municipal Area Council (AMAC), Federal Capital Territory, Nigeria. A descriptive cross-sectional design was adopted, and data were collected from 415 respondents using a structured questionnaire, achieving a 98.3% response rate. Analysis was conducted using frequencies, percentages, chi-square tests, and multiple logistic regressions. Findings revealed that 269 (64.8%) of respondents had good knowledge about malaria vaccine. Positive attitudes towards vaccination were recorded among 289 (69.6%) of respondents, with 365 (88.0%) trusting healthcare providers, yet 235 (56.6%) worried about side effects while 347 (83.6%) expressed willingness to accept the malaria vaccine if offered; however, only 276 (66.5%) were willing to pay if it was not free. Significant predictors of good knowledge included education ( $p = 0.007$ , OR = 2.27) and religion ( $p = 0.022$ , OR = 2.15), for Attitude, education ( $p = 0.000$ , OR = 3.92) and occupation ( $p = 0.004$ , OR = 3.27), while religion (Christianity) significantly predicted willingness to accept vaccination ( $p = 0.002$ ). The study concludes that although knowledge and willingness are high, concerns about vaccine side effects and cost remain barriers. Recommendations are intensified health education, community engagement through religious and traditional leaders, and policies on subsidy to improve vaccine uptake among pregnant women in AMAC.

**Keywords:** Malaria Vaccine, Pregnant Women, Knowledge, Attitude, Willingness, Abuja, Predictors, Vaccine Acceptance



# **Prevalence and Determinants of Health Insurance Uptake Among Informal Sector Workers in Abuja Municipal Area Council (AMAC), Federal Capital Territory (FCT)**

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## **ABSTRACT**

In Nigeria, the informal sector constitutes over 80% of the workforce, yet this economically vital group remains largely excluded from formal health insurance schemes, perpetuating a heavy reliance on out-of-pocket payments and a high risk of catastrophic health expenditures. This study aimed to determine the prevalence and identify the key determinants of health insurance uptake among informal sector workers in the Abuja Municipal Area Council (AMAC). A descriptive cross-sectional study was conducted among 435 workers, with data collected via a structured questionnaire and analysed using descriptive statistics, chi-square tests, and multivariate logistic regression. The findings revealed a very low enrolment prevalence of 10.8%. While general awareness was relatively high (72.5%), only 49.3% of respondents correctly understood the principle of health insurance. The analysis identified trust in insurance management and general awareness as the only significant independent predictors of uptake; respondents who strongly trusted schemes had 7.28 times higher odds of enrolling, and those who were aware had 2.44 times higher odds. Socioeconomic factors were not significant predictors. The study concludes that uptake is critically low and driven more by institutional trust and awareness than by income or education. Therefore, policy efforts must prioritize building transparent governance, implementing targeted communication, and designing flexible, community-based insurance models to effectively expand coverage to this population.



# Prevalence and Factors Associated with the Use of Contraceptives Among Women of Reproductive Age in Selected Rural Communities in AMAC, Abuja

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## ABSTRACT

**Introduction:** Contraceptive use is essential for reproductive health, allowing women and couples to plan their families responsibly. Despite global progress, low- and middle-income countries, particularly in sub-Saharan Africa, still experience low uptake due to socio-cultural and economic barriers. In Nigeria, only about 17–25% of women use any contraceptive method, with rural areas facing even greater challenges of access and misinformation. These gaps contribute to high maternal mortality, unsafe abortions, and population growth pressures, highlighting the urgent need for improved family planning services.

**Methodology:** The study was conducted in Jiwa, a rural community within Abuja Municipal Area Council (AMAC), FCT, known for its agrarian lifestyle and limited access to healthcare. A cross-sectional mixed-methods study involving women aged 18–49 years who had lived in Jiwa for at least six months and provided informed consent. Data were collected from 308 questionnaires (298 completed), along with interviews and FGDs, using multistage stratified sampling. Quantitative data were analyzed with SPSS, qualitative data with NVivo 12, and ethical approval was secured from Bingham University, ensuring confidentiality and voluntary participation.

**Results:** The prevalence of current contraceptive use among women of reproductive age in rural Abuja communities was 37.6%, indicating moderate uptake but highlighting a substantial unmet need. The most commonly used contraceptive methods were injectables (18.8%) and implants (14.1%), with health centers and pharmacies identified as the main sources of supply. Socio-demographic factors significantly associated with contraceptive use included higher educational attainment, formal employment, higher household income, Islamic faith, and fewer living children. Major barriers to contraceptive use were fear of side effects (33.6%), partner opposition (36.2%), high cost (39.6%), and socio-cultural beliefs, along with limited spousal support (63.8%) and economic vulnerability. Qualitative findings revealed widespread misinformation, strong spousal influence, and underscored the need for community-based education and awareness creation to improve contraceptive access and utilization.

**Conclusion:** Contraceptive use in rural Jiwa remains moderate but hindered by socio cultural, perceptual, and economic factors. Addressing these barriers through targeted interventions, male involvement, and sustained community education is essential to improve contraceptive access and utilization among rural women in Nigeria.

**Recommendations:** Based on the findings of this study, the following public health interventions were recommended: Community based campaigns should be implement to debunk myths by using communities head and religious leader and testimonials from satisfied users. There should be more advocacy for policies that will ensure the availability of a wide range of affordable through public health systems.

**Keywords:** Contraceptive Use, Prevalence, Rural Women, Nigeria, Socio-Demographic Factors, Barriers, Reproductive Health, Family Planning, Mixed-Methods



# Knowledge, Attitude, and Willingness to Utilize the Treatment and Prevention of Sexually Transmitted Diseases Among Adolescents in Nasarawa State, Nigeria

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## ABSTRACT

**Introduction:** Understanding awareness of and attitude towards STDs is essential in designing strategies that can be used to achieve reduction of the prevalence. Adolescents, particularly in low- and middle-income countries, represent a high-risk group due to their behavioral patterns, evolving sexual autonomy, and limited access to accurate sexual health information and services

**Methodology:** Study design: a descriptive cross-sectional study which will be conducted among adolescent students of government secondary schools. Study area: Karu LGA, Keffi LGA, Nasarawa State. Sampling technique: a multi-stage sampling techniques was adopted. Stage 1: selection of local government areas (LGAs). Stage 2: selection of schools. Stage 3: selection of students within the school. Stage 4: selection of respondents. Study population: adolescent students within the adolescent age range (10-19 years). Data collection: data would be collected using a properly structured, self-administered questionnaire. Data management analysis: using SPSS, descriptive statistics such as frequencies, percentages, mean, standard deviation, chi square tests will be conducted to determine associations between categorical variables.

**Results:** The respondents' age ranged between 11 and 19 years, with a mean age of 14.4 years (std = 1.8). The age distribution of respondents revealed a diverse range across the different age groups. The highest representation was observed in the 14-16 age group, constituting 61.6% of the total respondents. The knowledge section revealed that the vast majority of participants (86.3%) demonstrated good knowledge of STDs, particularly recognizing HIV/AIDS (99.5%) and gonorrhoea (98.6%) as common STDs. Findings about attitudes towards STDs were mixed as some respondents' (69.4%) acknowledged STDs as a serious health issue, a significant proportion felt embarrassed discussing STDs (73.2%) or expressed stigma towards affected persons. Willingness to use prevention and treatment services was high, with 96.4% respondents willing to attend a clinic for std testing, and 97.9% respondents were also eager to learn more about prevention.

**Conclusion:** The study reveals the need for tailored health education that considers cultural and gender dynamics, addresses stigma, and promotes positive sexual health attitudes to improve outcomes among adolescents.

**Recommendation:** It is recommended to implant cultural sensitive sexual health education programs in school to help curb misinformation and help in promoting positive attitude towards STD treatment and prevention. Expansion of youth friendly health services: confidential, stigma free std testing and treatment should be done at various clinics with trained health workers to deliver respectful, non-judgmental care towards adolescents.



# Prevalence and Sociodemographic Determinants of Malnutrition Among Under-5 Children in Internally Displaced Persons (IDP) Camps in Abuja

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## ABSTRACT

Malnutrition among children under five years of age continues to be a major public health concern in Nigeria, particularly among vulnerable populations living in internally displaced persons (IDP) camps. This study assessed the prevalence and sociodemographic determinants of malnutrition among under-five children in three selected IDP camps, Wassa, Kuchingoro, and Area 1, within Abuja, Nigeria. A descriptive cross-sectional survey design was adopted, involving 187 caregiver–child pairs selected through multistage stratified random sampling. Data were collected using a structured, interviewer-administered questionnaire and anthropometric measurements of weight, height, and mid-upper arm circumference (MUAC), following World Health Organization (WHO) guidelines. Data analysis was performed using SPSS version 25, applying descriptive statistics, Chi-square tests, and multivariable logistic regression models at a 5% significance level. The study found an overall malnutrition prevalence of 21.4% among children under five, with the highest burden observed in Wassa Camp (29%). Bivariate and multivariable analyses identified several significant determinants of malnutrition, including low caregiver education (AOR = 2.14,  $p = 0.021$ ), child illness within the previous two weeks (AOR = 2.67,  $p = 0.006$ ), low meal frequency ( $\leq 2$  meals per day) (AOR = 2.93,  $p = 0.003$ ), and incomplete immunization (AOR = 1.89,  $p = 0.039$ ). Factors such as household size, child's age, and sex were not statistically significant. The findings highlight that socioeconomic and environmental conditions, rather than biological factors, are the key drivers of malnutrition in these displacement settings. The study concludes that addressing malnutrition in IDP camps requires integrated, multisectoral interventions encompassing nutrition education, livelihood empowerment, healthcare access, and improvements in water, sanitation, and hygiene (WASH) infrastructure. It recommends strengthened coordination between government agencies, NGOs, and community stakeholders to ensure sustainable nutritional outcomes for displaced children in Abuja and similar contexts across Nigeria.

**Keywords:** Malnutrition, Under-five Children, Internally Displaced Persons (IDPs), Sociodemographic Determinants, Abuja, Nigeria, Nutrition Policy



# Assessment of the Knowledge and Utilization of Family Planning Services Among Women of Reproductive Age in Nasarawa State, Nigeria

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## ABSTRACT

Family planning is a vital component of reproductive health and remains central to achieving sustainable development and improving maternal and child health outcomes. Despite its proven benefits, utilization of family planning services in many parts of Nigeria, including Nasarawa State, remains below expected levels. This study assessed the knowledge and utilization of family planning services among women of reproductive age (15-49 years) in three Local Government Areas Keffi, Lafia, and Akwanga of Nasarawa State. The study also examined the socio-demographic, cultural, religious, and spousal factors influencing the use of contraceptive methods within the study areas. A descriptive cross-sectional study design was adopted. Data were collected from 271 women who were selected using a multi-stage sampling technique. Findings revealed that out of 271 women, 178 (65.7%) were aware of different types of family planning, with 69 (25.5%) demonstrating good knowledge, 141 (52.0%) average knowledge, and 61 (22.5%) poor knowledge. An equal percentage of respondents, 219 (80.8%), reported obtaining family planning information from social media and health workers. This was followed by 76 (28.1%) who identified television and radio as their main sources. In addition, 75 (27.7%) received information from friends and family, 71 (26.2%) from community outreach programmes, while 35 (13.1%) mentioned religious leaders as their primary source of family planning information. Among users, modern contraceptives were more common, with condoms 55 (72.7%) being the most frequently used, followed by pills 28 (36.4%), injectables 25 (32.5%), implants 13 (16.9%), and natural methods 16 (20.8%). The main barriers to utilization included side effects (46%) indicated side effects as a reason for not using any family method, and 32.8% indicated they were not sexually active. Partner disapproval was indicated by 9.5%, followed by no access (8.5%), lack of information (8.5%), religion (6.3%), planning pregnancy (5.8%), tradition (2.1%), and cost (1.1%). A majority 172 (63.5%) didn't know about the extent of the accessibility, 57 (21%) indicated that it is very accessible, 41 (15.1%) indicated that it is somewhat accessible, and 1 (0.4%) indicated that it is not accessible. However, only 120 (44.3%) found the services affordable, while 151 (55.7%) cited cost or distance as barriers to regular use. Most respondents, 195 (72.0%), described service providers as friendly, but 76 (28.0%) noted stock-outs and long waiting times as challenges. Chi-square analysis revealed significant relationships between age ( $\chi^2 = 41.199$ ,  $p < 0.001$ ), marital status ( $\chi^2 = 23.452$ ,  $p = 0.002$ ), education level, and spousal support ( $p < 0.05$ ) with family planning utilization. Despite high awareness of family planning methods among women in Nasarawa State, actual utilization remains low due to fear of side effects, cultural and religious barriers, and limited partner support. Improving male involvement, addressing misconceptions, and enhancing access to affordable, quality services are crucial to increasing family planning uptake.



# Perception of and Intention to Accept the Malaria Vaccine Amongst Pregnant Women in Nasarawa State: A Cross-Sectional Study

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## ABSTRACT

**Background:** Malaria is still one of the main causes of maternal and neonatal morbidity and mortality in Nigeria, and pregnant women are especially at risk. The RTS, S/AS01 malaria vaccine has been approved by the World Health Organisation, but there isn't much information and limited data exists on how pregnant women in Nasarawa State feel about it. Malaria remains prevalent in Nasarawa state and causes about 60% of outpatient visits during pregnancy. This study examined socio-demographic factors, identified barriers and facilitators to vaccine acceptance, and evaluated pregnant women in Nasarawa State, Nigeria, regarding their perceptions of, and intentions to accept the malaria vaccine.

**Methods:** A descriptive cross-sectional study of 480 pregnant women attending antenatal care clinics was carried out from June to September 2025 across the three senatorial zones of Nasarawa State employing the use of a two-stage sampling technique. These pregnant women were assessed from six healthcare facilities. The data was collected using structured questionnaires based on the Health Belief Model and Theory of Planned Behaviour framework to assess the socio-demographic characteristics, their awareness, knowledge, perceptions, and lastly intentions to accept the malaria vaccine. Also, of the 480 pregnant women, 32 were selected for in-depth interviews to obtain thematic qualitative insights into their perceptions and intentions to assess vaccine uptake influences. The quantitative data were analysed using the Statistical Package for Social Sciences, while the qualitative data were analysed thematically using NVivo 12 software. Descriptive statistics, chi-square tests, independent t-tests, Pearson correlation, and reliability analyses were all carried out in this study.

**Results:** The average age of participants in this study was 33.2 years. The majority of respondents were either Christians (48.8%), married (71.5%), and had a bachelor's degree (46%). Awareness of malaria vaccines was high at 72.5%, primarily through healthcare workers (33.3%) and media (28.9%). However, detailed knowledge remained moderate; with Health Belief Model scale mean scores of 21.90 out of 30. Overall, 58.9% of the pregnant women showed a good intention to accept the vaccine, with 15.6% of them expressing negative intentions and 20.8% remaining neutral. Vaccine acceptance and uptake were significantly associated with education level ( $p = 0.002$ ), marital status ( $p < 0.001$ ), occupation ( $p = 0.034$ ), and household income ( $p = 0.005$ ). The Health Belief Model and Theory of Planned Behaviour scores had high internal consistency (with Cronbach's alpha values of 0.798 and 0.909, respectively) and a significant correlation ( $r = 0.733$ ,  $p < 0.001$ ). The major barriers identified from this study were concern for safety regarding the state of the foetus, gaps in information, cultural beliefs, and lack of support from spouses/partners. Healthcare provider advice, prior malaria experience, and family support all played important roles in influencing vaccine perception and intentions.

**Conclusion:** Although pregnant women in Nasarawa State are generally aware of malaria vaccines, there are significant information gaps, and conditional acceptance remains. Socioeconomic circumstances, health beliefs, and family dynamics heavily influence vaccine acceptability.



# Prevalence and Socio-Demographic Predictors of Mental Health Among Undergraduates in Bingham University, Karu, Nasarawa State

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## ABSTRACT

Mental health challenges among university students have become increasingly prevalent globally, with undergraduate populations facing stressors that can affect their academic performance and overall well-being. Limited research exists on mental health status and socio-demographic predictors among private universities in Nigeria, particularly at Bingham University. This study aimed to assess the prevalence of mental health conditions and identify socio-demographic predictors related to the mental health of undergraduates at Bingham University, Karu, Nasarawa State. A cross-sectional analytical was conducted among 364 undergraduate students selected from 4 randomly sampled faculties. Data collection utilized a structured questionnaire incorporating the validated mental health screening tool Depression, anxiety, and Stress Scale-21 (DASS-21). Socio-demographic variables assessed include age, gender, year of study, income, residential status, and family support systems. Data analysis employed descriptive statistics, chi-square tests, and bivariate logistic regression. The overall prevalence of mental health conditions was severe at 41.8%, with anxiety affecting 72.5%, and stress and depression at 41.8% each. Significant predictors of mental health prevalence included age ( $p = 0.012$ ), monthly allowance ( $p = 0.003$ ), level of study ( $p = 0.004$ ) and the reason for choosing the course of study ( $p = 0.002$ ). Gender ( $p = 0.544$ ) and number of roommates ( $p = 0.430$ ) showed no significant relationship. Mental health challenges are prevalent in Bingham University, with notable variations across socio-demographic characteristics. These findings highlight the need for tailored systems and mental health interventions across all levels of education.

**Keywords:** Mental Health, Undergraduates, Prevalence, Socio-Demographic Predictors, Nigeria, Depression, Anxiety, Stress



# Awareness, Acceptance and Potential Hesitancy Towards the Malaria Vaccine Among Caregivers of Under-Five Children and Healthcare Providers in FCT, Abuja

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## ABSTRACT

About 76% of global malaria deaths occur in children under five years old (U5s) and despite existing solutions, malaria-related deaths account for 20% of U5 mortality in Nigeria. In 2024, Nigeria received 1 million doses of the newly developed R21/Matrix-M vaccine with a view to full implementation in 2025. Yet, previous experiences intimate that any vaccine rollout would be met with significant hesitancy especially in the wake of recent global vaccine controversies. This study aims to generate useable empirical data to guide vaccine policy and planning by assessing local populations in Abuja, Nigeria. Our mixed-methods approach combined structured self-administered questionnaires of caregivers (CGs) (n = 246) and key informant interviews (KIIs) of health care providers (HCPs) (n = 20), all stratified across 11 facilities in 3 area councils (AMAC, Bwari, and Gwagwalada). Qualitative data was analysed using the Braun and Clark Framework for thematic analysis while quantitative data used SPSS vs25 for descriptive and inferential statistics. New variables, awareness scores, acceptance scores, hesitancy scores, trust scores, perceived benefits, and perceived barriers were computed as composites of the respective appropriate variables. Of the 246 CGs, 52.4% had heard of a malaria vaccine, 72% were unaware it was in Nigeria. Although 79.27% indicated a willingness to vaccinate their U5s, computed acceptance scores showed majority (45.12%) were in the low acceptance category. Only 29.26% indicated hesitancy towards the vaccine, and computed hesitancy scores showed majority (40.65%) in the low hesitancy category. Fear of side effects (50.0%), religious/cultural beliefs (26.5%) and lack of information about the vaccine (8.8%) were the primary concerns driving hesitancy, while health worker advice (51.6%) and getting more information (15.9%) were the major acceptance factors. Pearson's Chi-square test revealed low-effect significant associations ( $p < 0.05$ ) between acceptance and age, marital status, devoutness to religion, level of education, and number of U5's malaria episodes, but the strongest association with acceptance was source of health information  $\chi^2(4, N = 246) = 9.514, p = 0.049, \text{Cramer's } V = 0.49$ ). Binary logistic regression analysis revealed that caregivers aged 26-35 were 16 times more likely (AOR = 15.914, 95% CI [1.646 - 153.859],  $p = 0.017$ ) to accept the vaccine than other age groups, and those who received their health information via TV and radio were 6 times more likely (AOR = 5.988, 95% CI [1.061 - 33.798],  $p = 0.043$ ) to vaccinate their U5 children than others. The odds of acceptance were also reduced with lower education levels (AOR = 0.195, 95% CI [0.044-0.863],  $p = 0.031$ ). Thematic analysis revealed themes of 1) 'Awareness without knowledge'; 2) 'Critical training gaps/needs'; 3) 'Strong support despite hesitation'; 4) 'Malaria burden as primary motivator' etc. as key themes among HCPs. These findings buttress the pivotal influence of HCPs on CGs health decisions as well as health information sources as important factors in malaria vaccine acceptance. This underpins the need for HCP training and full participation in targeted vaccine education, as a recipe for successful rollouts and uptake in this and similar settings.

**Keywords:** R21/Matrix-M; Vaccine Hesitancy; Under-Five Children; Mixed Methods Study; Qualitative Study; Thematic Analysis; Malaria Burden; Regression Analysis



# Public Trust in Vaccines and Its Implications for Global Health Security: A Study of Perception, Barriers, and Compliance in Jikwoyi-Abuja, Nigeria

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## ABSTRACT

Vaccine hesitancy remains a growing public health challenge globally and in Nigeria, threatening progress toward achieving Sustainable Development Goal (SDG) 3 - good health and wellbeing. Despite free vaccine availability, misinformation, socio-cultural beliefs and low trust in the health care system continue to limit vaccine uptake, given the heavy burden of infectious diseases in our region, the emergence of needed new vaccine, and the absence of vaccine dynamics data in this region of Nigeria. This study examines public trust in vaccines and its implications for global health security, focusing on community perception, barriers and compliance in Jikwoyi, Abuja. The study adopted a mixed-method approach. Quantitative data were collected from 242 adult residents using structured questionnaires. While 20 in-depth interviews were conducted with key informants (community members, health workers and religious leaders). Data were analyzed using SPSS version 27 for descriptive and inferential statistics and Qualitative data were analyzed thematically. The findings showed that of the 242 respondents, (44%) were fully compliant, (35%) partially compliant and (21%) non-compliant with vaccination schedules. Trust was significantly associated with compliance ( $p < 0.05$ ); respondents with higher trust levels were 10-15% more likely to complete vaccination schedules. Major barriers included misinformation 33%, limited access (22%), fear of side effects (19%) and Religious and cultural influence (13%). Qualitative findings revealed that Misinformation, healthcare system barriers and economic hardship reinforce vaccine hesitancy. Study concludes that public trust strongly influences vaccine compliance in Jikwoyi-Abuja. Even where vaccines are free and accessible, misinformation and healthcare system barriers reduce uptake. Strengthening community engagement, transparent communication and trust-based interventions is essential to improve vaccine uptake and sustain global health security.

**Keywords:** Public Trust, Vaccine Hesitancy, Perception, Barriers & Compliance, Global Health Security



# Comparative Study of In-School Adolescents in Government Secondary Schools and Out-of-School Adolescents on Knowledge, Attitudes, and Practices of Hepatitis-B Prevention in F.C.T Abuja: Lugbe as a Case Study

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## ABSTRACT

**Background:** Hepatitis B virus (HBV) is a significant public health issue in Nigeria, with an HBV prevalence of 8–12% and despite the availability of an effective and safe vaccine, vaccination and screening rates for adolescents remain suboptimal, as observed during this study. The knowledge, attitudes, and preventive practices (KAP) associated with HBV prevention were assessed and compared between in-school and out-of-school adolescents in Lugbe, Federal Capital Territory (FCT), Abuja.

**Methods:** This was a comparative cross-sectional study involving 198 adolescents (99 in-school and 99 out-of-school adolescents) in Lugbe and was selected using a multi-stage sampling model, and data were collected using a structured, self-administered questionnaire based on the WHO Knowledge, Attitude, and Practice (WHO KAP) survey method. The data were analyzed using IBM Statistical Package for Social Science version 25, descriptive and inferential statistics (independent samples t-tests and Chi-square tests) with a 5% significance level and 95% confidence interval.

**Results:** The participants were almost equally shared by sex (52% were male and 48% female respondents). The mean knowledge score was  $3.58 \pm 2.99$ , and only 52% of the respondents expressed good knowledge of HBV transmission and prevention. The Attitude scores averaged  $16.49 \pm 3.82$ , with the out-of-school adolescents having more positive attitudes towards HBV prevention ( $t = -3.58$ ,  $p < 0.001$ ). Preventive practice level was low, with about 9.6% respondents receiving all three doses of the HBV vaccine and reporting ever being tested for HBV. Differences in knowledge ( $p = 0.129$ ) and practice ( $p = 0.634$ ) between the groups were not statistically significant, while the attitude difference was significant ( $p < 0.001$ ).

**Recommendation:** To close the space between knowledge and practice, policies must make the establishment of school-based vaccination programs important, and the establishment of community outreach programs that target both groups. These efforts must be introduced with public health campaigns that should be designed to dismiss false information and address financial and psychological barriers to vaccine uptake and increase awareness.



# Knowledge and Acceptability of Malaria Vaccine Among Mothers of Under-Five Children in Auta Balefi, Karu LGA, Nasarawa State

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## ABSTRACT

**Introduction:** Malaria remains a major public health problem, with almost half of the world's population at risk of infection, contributing substantially to global morbidity and mortality. Despite preventive strategies such as insecticide-treated nets, environmental management, and chemoprophylaxis, malaria continues to cause high mortality among children under five years in sub-Saharan Africa. With the World Health Organization (WHO) prequalifying two vaccines, RTSS (2022) and R21 (2023), new opportunities have emerged for malaria prevention. This study assesses the knowledge and acceptability of malaria vaccines among mothers of under-five children in Auta Balefi, Karu LGA, Nasarawa State.

**Objective:** The general objective of this study is to assess the knowledge and acceptability of malaria vaccines among mothers of under-five children in Karu LGA, Nasarawa State. The specific objectives are to: (1) determine the level of knowledge of malaria vaccines among mothers of under-five children; (2) assess the acceptability of malaria vaccines among these mothers; and (3) identify factors influencing the acceptability of malaria vaccines in the study area.

**Methodology:** A cross-sectional study design was adopted among mothers aged 18–40 years with children under five in Auta Balefi. A multistage sampling technique and simple random sampling were used to select participants. Data were collected using a structured, self-administered questionnaire and analyzed using the Statistical Package for the Social Sciences (SPSS). Chi-square tests were employed to assess associations between socio-demographic characteristics and vaccine knowledge, with significance set at  $p < 0.05$ .

**Results:** Findings revealed that 55.2% of respondents had heard of the malaria vaccine, but only 5.0% knew its name, and 19.9% knew the correct age for administration. Overall knowledge was low, with 95.5% having poor knowledge. Despite this, vaccine acceptability was high, 95.9% expressed willingness to vaccinate their children, 69.2% believed the vaccine is safe, and 71.5% believed it is effective. The main factors influencing vaccine acceptability were cost (31.2%) and safety concerns (26.7%). Educational level, religion, and trust in health workers were significantly associated with acceptability ( $p = 0.001$ ).

**Conclusion and Recommendations:** The study concludes that although knowledge of malaria vaccines among mothers in Auta Balefi is poor, their willingness to accept vaccination is encouragingly high. Education, religion, and trust in healthcare providers play pivotal roles in shaping vaccine decisions. It is therefore recommended that: (1) public health authorities and policymakers (e.g., the Federal and State Ministries of Health and the Primary Health Care Development Agency) should strengthen community education and awareness programs; (2) healthcare providers should be trained and supported as vaccine advocates; (3) community and religious leaders should be actively engaged to promote trust and vaccine acceptance; (4) vaccines should be made free or subsidized to improve accessibility; and (5) researchers and academic institutions should conduct further community-based studies to monitor uptake and address barriers to malaria vaccine implementation.



# Public Trust in Health Messaging from Social VS Traditional Media in Abuja

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## ABSTRACT

The proliferation of both social and traditional media for health communication in Abuja, Nigeria, presents a critical challenge: navigating the balance between the reach of digital platforms and the credibility of established channels. Public trust is a fundamental determinant of message acceptance, yet comparative data on trust levels between these media types in Abuja is limited. This study aimed to assess and compare the level of public trust in health messaging from social media versus traditional media among residents of Abuja, Nigeria. A cross-sectional study was conducted among 398 adults aged 18 and above across three Area Councils (AMAC, Bwari, Gwagwalada), selected via a multistage sampling technique. Data were collected using a structured, interviewer-administered questionnaire. Descriptive statistics, paired t-tests, and chi-square tests were employed for data analysis using SPSS version 26. The study revealed a statistically significant difference in trust levels between the two media types ( $p < 0.001$ ). The mean trust score for traditional media (3.12) was higher than for social media (2.73). However, trust in traditional media was polarized, while trust in social media was consistently low-to-moderate. A notable paradox was observed: 60.1% of respondents frequently verified health information from social media, compared to only 42.4% for traditional media. Significant demographic variations were found, with females and younger respondents demonstrating higher trust in social media, whereas older respondents trusted traditional media more. WhatsApp (39.7%) and Facebook (34.4%) were the most used social media platforms for health information. Key factors influencing trust included the presence of an official source, particularly for traditional media. While traditional media holds a higher level of trust for health messaging in Abuja, its credibility is not absolute. The public demonstrates active scepticism, especially towards social media. Health communication strategies should adopt an integrated approach, leveraging the credibility of traditional media for official announcements and the reach of visual platforms like YouTube and Facebook for engagement. Messages should be tailored to demographic profiles, and efforts to enhance public digital health literacy are essential for combating misinformation.



# Comparative Study of the Effect of School Meal Program on Nutritional Status, Dietary Diversity and School Performance of School Children in Wassa Community, FCT, Abuja

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## ABSTRACT

**Introduction:** School feeding programs are widely promoted as a strategic intervention to help combat hunger, address malnutrition and improve educational outcomes. However, their effectiveness in settings experiencing the double burden of malnutrition and their possible effects on overweight requires robust evidence.

**Methods:** This comparative cross-sectional study evaluated the effect of school feeding program on 313 school-aged children (164 control, 149 intervention) in a peri-urban Nigerian community with a significant population of Internally Displaced Persons. Data included anthropometric measures (converted to WHO HAZ, WAZ, BAZ z-scores), dietary diversity scores and school records. Multiple linear and logistic regression models were employed to adjust for key social demographic confounders.

**Results:** The program was significantly associated with improved nutritional status, which is seen in its high mean z-scores for HAZ (-1.35 vs. -1.78,  $p = 0.011$ ), WAZ (-0.34 vs. -1.39,  $p = 0.001$ ) and BAZ (0.18 vs. -0.61,  $p < 0.001$ ). This led to substantial lower odds of stunting (aOR = 0.58,  $p = 0.036$ ), underweight (2.0% vs. 26.2%; aOR = 0.08,  $p = 0.001$ ) and thinness (aOR = 0.20,  $p = 0.015$ ). A critical finding was the significantly higher prevalence of overweight in the intervention group (16.1% vs. 1.8%, aOR = 5.12,  $p = 0.001$ ), highlighting an emerging nutritional transition. The program also independently predicted higher dietary diversity ( $B = 0.14$ ,  $p = 0.005$ ), improved academic scores ( $B = 5.044$ ,  $p < 0.001$ ) and reduced absenteeism ( $B = -1.956$ ,  $p = 0.004$ ).

**Conclusion:** These results demonstrate the program's dual benefit for nutrition and education. However, the observed rise in overweight underscores the need to shift from calorie-dense to nutrient-dense meals, better positioning school feeding as a strategic tool to tackle the double burden of malnutrition.

**Keywords:** School Feeding; Child Nutrition; Anthropometric Measures; Dietary Diversity; Educational Outcomes; Double Burden of Malnutrition; Overweight; Internally Displaced Persons (IDPs); Nigeria



# Assessing Water and Sanitation Challenges and their Public Health Effects in the Informal Settlements, Karu, Nasarawa State

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## ABSTRACT

**Introduction:** Access to safe water and adequate sanitation are among the most pressing global challenges, particularly in the rapidly expanding cities of developing nations like Nigeria. This study, therefore, assessed water and sanitation challenges and their public health effects in the Informal Settlements of Karu Local Government Area, Nasarawa State.

**Methodology:** A cross-sectional descriptive survey design was employed, and data were collected using structured questionnaires administered to a random sample of 392 respondents in selected informal settlements. A multistage sampling technique, such as the purposive, systematic sampling technique and simple random sampling, to select the study participants.

**Results:** According to the study results, it was found that most respondents relied on unsafe and unreliable sources of water, including water vendors (23.5%), sachet or bottled water (22.7%), and unprotected wells (10.7%). Only 6.6 per cent of respondents had access to piped water in their homes. The quality of water was also very low, as 37.2% of the participants rated it as fairly good, 27.0% rated it as poor, and 61.2% of the participants reported having no reliable water supply. Water quality was generally poor, with 37.2% rating it as fair and 27.0% as poor, while 61.2% lacked a reliable water supply. Regarding sanitation, 59.7% did not have private toilets, and 31.6% still practiced open defecation. Shared and public toilet facilities were common, but their cleanliness, accessibility, and safety were poor, especially for women and persons with disabilities. The major challenges identified were poor water quality (63.5%), intermittent supply (60.5%), long distance to water sources (43.1%), lack of toilet facilities (37.8%), and waste accumulation (37.2%). The health effects could also not be ignored as the most widespread diseases included malaria (50.3), diarrhea (29.6), along with skin infections, intestinal worms, and typhoid. The hypothesis results showed that improved water sources and sanitation exposure had no strong correlation with the decrease in waterborne diseases ( $P=0.738$ ); however, the odds of contracting the disease were higher in households with poorly maintained or unofficial forms of sanitation. Additionally, socio-economic and infrastructural factors, including education ( $P=0.001$ ), occupation ( $P=0.027$ ), the number of individuals living ( $P=0.011$ ) in a household, the availability of water, and proximity, were significantly correlated as predictors of better water source access in Karu LGA.

**Conclusion:** This paper concludes that the informal settlements of Karu have increased vulnerability to the health needs of the people due to inadequate water supply and sanitation, as well as a weak institutional response. Based on the study's findings, it is recommended that investments be made in sustainable water infrastructure, improvements be made to sanitation facilities, community engagement be fostered, continuous monitoring be conducted, and policy reforms be implemented to enhance equitable access and reduce the disease burden in informal urban environments.



# Social Support and Access to Health Care Among Hypertensive People with Disability at Karamajiji Disability Colony of the Federal Capital, Abuja

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## ABSTRACT

Social support which exists in various forms is crucial in patient management. It has significant role to play especially in individuals with disability and chronic disease such as hypertension. Individual's with adequate social support tends to do well with regards to accessing healthcare. It is essential in people's coping mechanisms and adaptation to any form of stress. People with good network of social support are well positioned to manage any condition they are predisposed to. Hypertension is a chronic disease that needs adequate management to achieve control thereby decreasing the chances of developing complications. Complications associated with hypertension have significant effect in patients' quality of life, productivity and finances. The aim of the study was to determine the relationship between social support and use of healthcare facilities among hypertensive people with disability at Karamajiji disability colony of Federal Capital Territory Abuja with the view of improving the quality of their care.

**Methods:** A cross sectional descriptive study was carried out on 244 hypertensive people with disability who are 18 years and above at Karamajiji disability colony of the Federal Capital Abuja who met the inclusion criteria using systematic random sampling technique. Data were collected through a semi structured interviewer administered questionnaire. Data collected from the study was analysed using Statistical Package for social sciences (SPSS) version 21 IBM Corporation, United States of America (USA). Descriptive statistics was used to report continuous variables while frequencies and percentages were used to report categorical variables.. Bivariate analysis such as Chi square exact test was used to determine relationship. Multivariate analysis using binary logistic regression was used to test independent predictors of social support. The level of statistical significance was set at P- value <0.05.

**Results:** From the results of the study, 53.7% of the study participants have high perceived access to healthcare. It was noted that 74.0 % of them from overall total subscale have high social support and 92.6% of the study participants agreed that functional social support is the most common. However, with regards to relationship between social support and blood pressure control, it showed that 60.3% of, the study participants have poor blood pressure control and 39.7% have good blood pressure control with P-value of < 0.001 which is significant. Logistic regression analysis was used to test the independent predictors of social support. For stage 1 Hypertension and Stage 2 Hypertension, blood Pressure control among the study participants from the four different social support subscales have P-values < 0.05 which is less than 95% level of significant. They were found to be the predictors of social support in the study population.

**Conclusion:** Social support network, especially the functional was observed in helping patients to access healthcare. Access to healthcare is vital in individuals with disability and helps in achieving controlled blood pressure and thereby preventing or delaying the emergence of complications. More efforts are needed in encouraging social support network among disabled people to achieve good health outcome.



# **Knowledge, Attitudes, and Practices Toward Malaria Transmission and Prevention Among Pregnant Women Receiving Antenatal Care in Primary Health Care Centers in AMAC, Abuja, Nigeria**

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## **ABSTRACT**

Malaria in pregnancy is a major public health concern in Nigeria, contributing significantly to maternal and child morbidity and mortality. Even with existing preventive measures, such as intermittent preventive treatment in pregnancy (IPTp) and the use of insecticide-treated nets (ITNs), the prevalence of malaria among pregnant women remains high. Understanding the knowledge, attitudes, and practices of pregnant women toward malaria prevention is essential for improving uptake of effective interventions. The study assessed the knowledge, attitudes, and practices toward malaria transmission and prevention among pregnant women attending antenatal care in Primary Health Care Centres (PHCs) within the Abuja Municipal Area Council (AMAC), Federal Capital Territory, Nigeria. A descriptive cross-sectional study was conducted among 366 pregnant women selected through multistage random sampling from 15 PHCs in AMAC. Data were collected using a structured, interviewer-administered questionnaire and analysed with SPSS version 25 and R. Descriptive and inferential statistics, including chi-square and multivariate regression, were used to assess associations between variables. Overall, 61.2% of respondents showed good knowledge of malaria transmission and prevention, while 59.6% showed positive attitudes toward preventive measures. Only 60.01% exhibited good preventive practices. Although awareness of malaria and ITN ownership was high (77.3%), consistent use remained suboptimal due to factors such as heat and net damage. Most respondents (59.6%) had received at least one dose of IPTp-SP, but only 6.6% completed the recommended three or more doses. Despite good awareness and generally positive attitudes, there are still gaps in consistent malaria prevention practices among pregnant women in AMAC. Strengthening antenatal health education, addressing misconceptions, and ensuring IPTp-SP is regularly available could significantly improve compliance with malaria prevention and outcomes among this vulnerable group.



# An Assessment on Knowledge, Attitude, And Practice Towards Cervical Cancer and Its Screening Among Women of Reproductive Age in Karu Local Government Area, Nasarawa State

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## ABSTRACT

**Background/Introduction:** Cervical cancer remains a major cause of morbidity and mortality among women globally and is the fourth most common cancer in women worldwide. In Nigeria, it is the second leading cause of female cancer deaths, largely due to late diagnosis, poor awareness, and low screening coverage. Despite the availability of effective screening methods such as Pap smear, HPV testing, and Visual Inspection with Acetic Acid (VIA), uptake remains low. Knowledge gaps, negative attitudes, cultural beliefs, and access barriers contribute significantly to poor preventive practices. This study assessed the knowledge, attitude, and practice (KAP) towards cervical cancer and its screening among women of reproductive age in Karu Local Government Area, Nasarawa State, Nigeria.

**Methodology:** A descriptive cross-sectional study was conducted among 422 women aged 18–49 years residing in Karu LGA. A multistage sampling technique was used to select respondents from four communities (Uke, Masaka, New Karshi, Tudunwada). Data were collected using a semi-structured interviewer-administered questionnaire. Descriptive statistics, Chi-square tests, and logistic regression were applied to analyze associations between socio-demographic factors and KAP variables at a significance level of  $p < 0.05$ .

**Results and Findings:** The study revealed that 63.5% of respondents were aware of cervical cancer, while 42.7% knew about the Pap smear test. Awareness of VIA and HPV DNA testing was very low (1.2% and 0.2%, respectively). Although 80.4% of participants agreed that cervical cancer is a serious disease, only 36.7% had ever been screened. Cost (38.2%) and lack of awareness (25.1%) were major barriers. Most screening took place in hospitals (45.8%). Fear and psychological factors influenced attitudes but did not always translate into preventive action. A majority (81.5%) expressed willingness to undergo future screening if services were accessible and affordable.

**Conclusion/Recommendations:** Despite moderate awareness and generally positive attitudes, cervical cancer screening uptake remains low among women of reproductive age in Karu LGA. Interventions should prioritize community health education, awareness campaigns, and free or subsidized screening services to improve access and uptake. Strengthening health systems, integrating screening into routine reproductive health services, and addressing cultural and psychological barriers can support the achievement of national and global cervical cancer prevention targets. The study concludes that increasing community-based education, expanding access to free or low-cost screening, and integrating services into routine reproductive health care could significantly improve early detection and reduce cervical cancer burden in Karu LGA. These findings provide a critical evidence base for targeted interventions and policy actions aligned with national and global cervical cancer elimination goals.

**Keywords:** Cervical cancer, Knowledge, Attitude, Practice, Screening, HPV, Women of reproductive age, Karu LGA, Nasarawa State



# Knowledge and Utilization of Complete Tetanus-diphtheria (Td) Vaccination in Pregnant Women: A Mixed Methods Study in Tertiary Hospitals, FCT Abuja

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## ABSTRACT

**Introduction:** Maternal and neonatal tetanus remains a major public-health challenge in Nigeria, with an estimated incidence of 14.6–20.0 per 1,000 live births. Despite an effective tetanus-diphtheria (Td) vaccine, completion rates remain low.

**Methodology:** This cross-sectional mixed-methods study assessed the level of knowledge of Td vaccination utilization and completion of the Td schedule, barriers influencing completion, and healthcare workers' perspectives on service delivery among pregnant women attending antenatal clinics at three tertiary hospitals in Abuja: University of Abuja Teaching Hospital (UATH), Federal Medical Centre Jabi (FMC), and National Hospital Abuja. Using structured questionnaires and systematic sampling, 218 pregnant women were surveyed, while purposively selected healthcare workers were interviewed. Quantitative data were analyzed with descriptive statistics, chi-square tests, and logistic regression in SPSS v26, and qualitative data underwent thematic analysis.

**Results:** Results showed that 66.5% of respondents had good knowledge of Td vaccination (Objective 1), but only 15.6% completed the full vaccination schedule (Objective 2), with completion rates varying across hospitals (UATH 38.2%; FMC and National Hospital 0%). Barriers (Objective 3) included distance to facilities (mean = 3.46), fear of injection pain (mean = 3.45), and healthcare worker attitudes (mean = 3.42); overall, 62.4% reported moderate and 33.9% high barrier severity. Logistic regression identified barrier severity as the strongest predictor of non-completion (AOR  $\approx$  0.00,  $p < 0.001$ ). Qualitative findings (Objective 4) revealed knowledge gaps among healthcare workers, unstructured reminder systems, and weak inter-departmental coordination.

**Recommendation:** To improve Td completion, this study recommends implementing SMS-based reminder systems, continuous healthcare worker training, integration of Td vaccination into routine ANC and postnatal visits, mobile outreach services for rural areas, and better coordination between immunization and obstetrics units.

**Keywords:** Tetanus-diphtheria Vaccination, Maternal Health, Immunization Uptake



# **Assessment of the Burden of Care Among Chronic Kidney Disease (CKD) Caregivers in Two (2) Selected Hospitals in Abuja Municipal Area Council (AMAC), FCT, Abuja, Nigeria**

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## **ABSTRACT**

Chronic Kidney Disease (CKD) is a growing global health concern, affecting millions of people and placing significant demands on individuals, families, and healthcare systems. It is a progressive condition characterized by a gradual loss of kidney function over time, often leading to end-stage renal disease (ESRD), which requires long-term dialysis or a kidney transplant for survival. This study assessed the burden of care among caregivers of chronic kidney disease (CKD) patients in AMAC, FCT, Nigeria. A total of 305 respondents participated in the study. Findings revealed that most caregivers (94.75%) lived with the patients, while 94.43% were the main caregivers, and 64.59% had been providing care for less than six months. Additionally, 97.70% of patients had been hospitalized within the past six months due to kidney-related issues, highlighting the demanding nature of care. On physical burden, 33.44% of caregivers said they never felt physically tired, 29.18% said sometimes, and 23.93% said rarely. However, 44.59% sometimes felt too tired to engage in other activities after care giving, while 42.62% sometimes woke up feeling physically drained. Sleep disturbance was also common, with 34.10% sometimes having trouble sleeping, and 43.93% sometimes feeling weak or unwell since becoming caregivers. Moreover, 36.72% reported sometimes skipping meals due to care duties, and 31.80% said the cost of dialysis and transportation strained their household income. The emotional and psychological findings showed that 28.51% sometimes felt emotionally drained, 31.76% often felt sad, and 38.69% sometimes worried about emergencies. Additionally, 38.89% sometimes felt mentally exhausted, and 40.98% rarely concentrated on other things due to care giving stress. Feelings of embarrassment and the desire to hand over care to someone else were also reported by 36.40% and 37.05% respectively. Regarding financial burden, 43.28% sometimes spent significant amounts on care, 47.87% sometimes had difficulty meeting financial needs, and 26.88% often borrowed money. Overall, 51.15% often felt financially and emotionally burdened by care giving responsibilities. The study concludes that CKD care giving imposes significant physical, emotional, psychological, and financial strain on caregivers. It recommends targeted interventions such as financial assistance, caregiver support programs, and policy inclusion to reduce caregiver burden and improve their overall well-being.



# Prevalence and Risk Factors of Hypertension Among Adults Aged Above 40 Years Living in Mararaba, Nasarawa State, Nigeria

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## ABSTRACT

**Introduction:** Hypertension is a major public health challenge in Nigeria, particularly among rapidly urbanizing areas. This study investigated its prevalence and associated risk factors in Mararaba, Nasarawa State. This study aimed to determine the prevalence of hypertension and identify its associated risk factors among adult aged over 40 years in Mararaba, Nasarawa State. **Methodology:** A cross-sectional descriptive survey design was employed, and data were collected using a structured questionnaire adapted from the WHO STEPS tool, alongside anthropometric measurements (blood pressure, height, weight, BMI) and pulse rate administered to a random sample of 420 respondents in selected permanent resident. A multistage sampling technique, such as the simple random sampling, and systematic random sampling technique, to select the study participants. Descriptive statistics, chi-square tests, and ANOVA were employed for analysis.

**Results:** According to the study results, it was found that hypertension is highly prevalent among this population with an overall hypertension prevalence of 90.95%. Prevalence increased with age: 80.77% (41-50 years), 96.70% (51-60 years), and 97.56% (>60 years). Females had higher prevalence (50.95%) than males (40.00%). Significant associations were found with behavioral factors: smoking (40.71% prevalence among current/former smokers), daily/occasional alcohol use (68.10%), high salt/fat diets (97.73%), and physical inactivity (59.38% among infrequent exercisers). Clinically, obese individuals (BMI >30) had 44.05% prevalence, and 55.24% reported family history. High stress affected 57.85%, linked to family (68.81%), health (58.81%), work (55.00%), and finances (47.14%). The hypothesis results showed that significant associations between hypertension and demographic factors (age, sex, education, occupation; all  $p < 0.05$ ), behavioral/lifestyle factors (alcohol intake, exercise, diet, salt addition; all  $p < 0.001$  except smoking,  $p = 0.536$ ), while ANOVA indicated no significant difference in mean BMI between hypertensive and non-hypertensive groups ( $F = 0.0048$ ,  $p > 0.05$ ), underscoring modifiable risks as key drivers.

**Conclusion:** Hypertension prevalence is alarmingly high in this population, driven by modifiable factors like poor diet, inactivity, and stress. Targeted interventions, including community screening and lifestyle education, are urgently needed to mitigate this burden.

**Keywords:** Hypertension, Prevalence, Risk Factors, Nigeria, Cross-Sectional Study, Lifestyle Factors, BMI, Family History



# A Comparison of Stress, Burnout, and Coping Mechanisms Among Female Employees at a Selected Federal Ministry in Abuja, Nigeria

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## ABSTRACT

Workplace stress is a response people's body make when their work demands and pressures don't match their knowledge and ability to cope, the effect of chronic workplace stress not managed properly is burnout. The efforts made to manage stress or burnout is called Coping Mechanisms. Female employees working in government institutions are exposed to a range of stressors found within public service systems, and despite growing awareness of occupational stress globally, there is limited context-specific research addressing how marital status influences the experience of stress, burnout, and coping mechanisms among Nigerian women. Here, we used a comparative cross-sectional research design, where 420 female employees were selected through multistage sampling techniques. Data were using standardized questionnaires, including the Perceived Stress Scale for measuring stress, the Copenhagen Burnout Inventory for assessing burnout, and the Brief COPE Inventory for identifying coping strategies. Data were analyzed using SPSS and Chi-square to assess association of stress, burnout and coping mechanisms. The study revealed that majority of the respondents (54%) experienced moderate levels of stress and burnout, while a smaller proportion (26%) reported high levels of both. The most common coping strategies adopted were problem solving, religious engagement and social support. Maladaptive coping strategies such as disengagement, denial and self-blame were also reported by the same respondents. Married women experienced higher level of stress compared to the single women, and were more likely to adopt maladaptive coping strategies methods. Our findings indicate that stress and burnout are major occupational health challenges among women working in the Federal Ministry of Health, Abuja. The marital status of the female employee determines the intensity of stress and burnout, they face, which further affects their overall wellbeing and job performance. We recommend the ministry adopts employee wellness program such as flexible work schedules, provision of childcare support, stress management training and regular mental health awareness session, that promotes work-life balance. By addressing these factors, government institutions can enhance job satisfaction, improve productivity, and foster a healthier work environment for its female workforce.



# Assessment of Knowledge, Perception, and Use of Electronic Medical Records Among Health Workers at the University of Abuja Teaching Hospital, Gwagwalada

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## ABSTRACT

The advent of Electronic Medical Records (EMRs) has transformed healthcare delivery by improving efficiency, accuracy, and accessibility of patient information. EMRs are essentially digital versions of the paper documents used in a clinician's office, typically functioning as an internal system within a practice. Successful implementation of EMRs depends largely on the knowledge, perception, and utilization patterns of healthcare workers who use these systems. This study was conducted to assess knowledge, Perception, use as well as explore barriers to effective use of EMR among health workers at University of Abuja Teaching Hospital, Gwagwalada. with the ultimate goal of providing evidence-based recommendations to strengthen EMR utilization in the institution as well as other health institutions that utilize EMR.

**Objectives:** To determine the level of knowledge of EMR among Health Care workers. To assess the perception of EMR utilization among Health Care workers.

**Study Area:** University of Abuja Teaching Hospital (UATH), Federal Capital Territory (FCT), Gwagwalada. **Study Design:** Descriptive cross-sectional survey. **Population:** Medical doctors, Nurses/midwives, Medical Laboratory Scientists, Health Information Officers and Pharmacists. **Sample size:** 344. **Sampling Technique:** Multistage sampling technique.

**Results:** The findings revealed that 73.7% of respondents demonstrated a high level of knowledge of EMRs, while 64.9% had received formal training. Most participants (99.1%) had positive perceptions toward EMR use, acknowledging that it improves the quality of care, enhances workflow efficiency, and reduces medical errors. Utilization of EMRs was high, with 74.3% of respondents reporting that they "always" use the system. Among professional groups, pharmacists (100%) and health information officers (96.3%) had the highest usage rates, while laboratory scientists had the lowest (19.4%). There was a significant association between knowledge level and EMR utilization ( $\chi^2 = 24.256$ ,  $p = 0.002$ ), but no significant relationship between perception and utilization ( $p = 0.345$ ). The most commonly reported barriers to EMR utilization were power outages (29.6%), system downtime (27.9%), poor infrastructure (24.1%), inadequate training (11.4%) and resistance to change (7%). These infrastructural and technical challenges limit the full potential of EMRs in healthcare practice.

**Conclusion:** The study concluded that healthcare workers at UATH possess high knowledge levels and positive perceptions toward EMR systems, with substantial utilization rates. However, infrastructural deficiencies such as unreliable power supply, system downtime, and inadequate training hinder optimal use. Continuous professional capacity building, investment in power and ICT infrastructure, system optimization, and supportive national policies are recommended to enhance EMR sustainability and improve healthcare delivery outcomes.



# Determinants of Uptake and Adherence to Intermittent Preventive Treatment of Malaria Among Pregnant Women Attending Antenatal Clinic in Tertiary Health Facilities in FCT, Nigeria

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## ABSTRACT

Malaria in pregnancy can lead to severe anaemia, stillbirth and low birth weight. However, these adverse outcomes are largely preventable. In line with this, the World Health Organization (WHO) recommends the use of intermittent preventive treatment in pregnancy with sulfadoxine–pyrimethamine (IPTp-SP) as a key strategy to prevent malaria and its complications among pregnant women. Despite this recommendation, uptake and adherence remains suboptimal across the country. This study assessed the determinants of IPTp-SP uptake and adherence among pregnant women attending tertiary health facilities in the FCT, Nigeria. A cross-sectional mixed- methods study was conducted among 300 pregnant women attending ANC across three tertiary hospitals in the FCT: National Hospital Abuja, University of Abuja Teaching Hospital Gwagwalada, and Federal Medical Centre Jabi. Quantitative data were obtained through structured questionnaires, and qualitative data were collected through key informant interviews with healthcare providers. Findings revealed that although 94% of respondents had heard of IPTp-SP, only 49.7% demonstrated high uptake and adherence, while 50.3% showed low adherence. Knowledge was significantly associated with IPTp-SP uptake and adherence (AOR=1.383,  $p < 0.05$ ); women with higher knowledge were more likely to adhere. Age was the only socio-demographic factor significantly associated with adherence (AOR = 0.911,  $p < 0.05$ ), with younger women showing better uptake and adherence. Health system factors were also strongly associated with adherence (AOR = 2.155,  $p < 0.05$ ). Qualitative findings revealed that education, area of residence, and individual beliefs strongly influence uptake and adherence. Pregnant women with higher education and living in urban areas were noted to have higher uptake and adherence level. Major barriers included misconceptions that preventive drugs are unnecessary when asymptomatic, fear of side effects, late ANC initiation, and lack of spousal support. Health-system challenges such as inadequate staff training, absence of Directly Observed Therapy (DOT), and weak follow-up mechanisms further limited adherence. Despite these gaps, most health workers demonstrated good knowledge of IPTp-SP, strong confidence in counselling, and positive attitudes toward malaria prevention. High awareness of IPTp-SP among pregnant women does not necessarily translate into optimal uptake or adherence. Uptake is shaped by educational, behavioural, and health-system factors. Strengthening DOT implementation, ensuring free and regular SP supply, continuous capacity building for healthcare workers, and targeted health education for older pregnant women are critical to improving IPTp-SP compliance and reducing malaria burden in pregnancy.



# Determinants of Hepatitis B Vaccine Uptake Among Senior Secondary School Students in Abuja Municipal Area Council, Federal Capital Territory, Nigeria

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## ABSTRACT

**Background:** Hepatitis B is a significant public health challenge in Nigeria, with adolescent vaccination rates remaining low despite its preventable nature. Understanding factors influencing vaccine uptake is critical for effective interventions. This study examined the determinants of hepatitis B vaccine uptake among senior secondary school students in Abuja Municipal Area Council (AMAC), Federal Capital Territory, Nigeria.

**Objectives:** The study aimed to determine hepatitis B vaccination status, assess risk perception of infection, evaluate knowledge about the vaccine, and identify socio-demographic characteristics, barriers, and facilitators influencing uptake among students.

**Methods:** A cross-sectional survey was conducted among 198 senior secondary school students in AMAC. Data on vaccination status, knowledge, risk perception, and socio-demographic factors were collected and analysed using chi-square tests and logistic regression to identify associations and predictors of vaccine uptake.

**Results:** Only 12.6% of the students reported having received the hepatitis B vaccine. Knowledge levels were categorized as good ( $\geq 70\%$ ), moderate (50–69%), and poor ( $< 50\%$ ), with 46.0% of students demonstrating good knowledge. Risk perception was fairly evenly distributed across low (29.3%), moderate (28.8%), and high (28.8%) categories. Chi-square analyses indicated significant associations between uptake and factors such as gender, awareness of the vaccine, and knowing someone with hepatitis B, whereas other sociodemographic characteristics showed no significant relationships, likely due to wide confidence intervals. Multivariate logistic regression further confirmed that vaccine awareness (AOR = 3.85,  $p = 0.011$ ) and knowing a family member (AOR = 5.60,  $p = 0.007$ ) or friend (AOR = 4.85,  $p = 0.027$ ) with hepatitis B substantially increased the likelihood of vaccination. The most commonly reported barriers to vaccination were lack of parental permission (23.0%) and fear of side effects (21.0%), while major facilitators included parental support (26.1%) and the availability of free vaccinations within schools (24.1%).

**Conclusion:** Low vaccine uptake highlights the need for targeted interventions. Recommendations include school-based vaccination programs, parental education campaigns emphasizing vaccine safety and personal stories of hepatitis B's impact, and community advocacy to address barriers and leverage facilitators, enhancing uptake among AMAC students.



# Assessment of Tuberculosis Risk Factors and Infection Control Practices in Health Facilities within Abuja Municipal Area Council

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## ABSTRACT

Tuberculosis remains a major public health challenge in Nigeria, and health facilities represent important environments where transmission is more likely, particularly in the face of inadequate infection prevention and control. This paper presents an assessment of TB infection control practices and facility-based risk factors that influence TB transmission among health facilities in AMAC, Abuja. Assessment included critical components of TB-IPC: ventilation, overcrowding, availability of PPE, and staff training. A cross-sectional descriptive design was used in 28 health facilities across AMAC, of which 17 were primary facilities, 9 were secondary facilities, and 2 were tertiary. Information was collected using a structured checklist. Data were analysed using descriptive statistics, chi-square tests, and correlation analysis. ANOVA was used to test various hypotheses at the 95% confidence level, where  $p < 0.05$ . Results indicated that 67.9% of the facilities had a written TB-IPC plan, 64.3% had provided staff training on TB-IPC, and 42.9% reported having N95 respirators available. All the facilities had designated sputum collection areas and basic cross-ventilation, while only 28.6% had powered ventilation systems or UVGI. By Chi-square test, there was a significant association of TB transmission risk with facility level,  $p = 0.001$ ; overcrowding,  $p = 0.001$ ; availability of a written TB-IPC plan,  $p = 0.006$ ; staff training,  $p = 0.010$ ; N95 respirator availability,  $p = 0.001$ ; and use of PPE,  $p = 0.001$ . The same was not observed in the case of adequate ventilation, where  $p$  was 0.413. There was a strong negative correlation between the risk of TB transmission and the overall TB-IPC score,  $r = -0.7774$ ,  $p = 0.001$ , meaning that good IPC practices greatly reduce the risks of transmission. By ANOVA, there was a significant difference in TB-IPC scores between primary and secondary facilities,  $p < 0.001$ , and between primary and tertiary facilities,  $p < 0.001$ . Commonly reported challenges included low patient trust in primary health centres, congestion, staffing shortages, inadequate PPE supplies, and the burden of co-infections. Overall, the study comes to a conclusion that in AMAC health facilities, TB transmission risk is significantly influenced by IPC measures: consistent use of PPE, regular staff training, and written TB-IPC plan availability. Primary health facilities were found to present the highest risk of transmission because of patient overload and scarcity of resources. Strengthening TB-IPC implementation, that is, continuous training for staff, ensuring reliable PPE supply, improving ventilation systems, and enhancing facility-level TB-IPC planning, is needed for the reduction of TB transmission within health facilities in AMAC.



# **Awareness, Perception and Prevalence of Female Genital Mutilation Among Women of Childbearing Age (15–49 years), in UKE Community, Karu Local Government Area of Nasarawa State**

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## **ABSTRACT**

The term Female Genital Mutilation (FGM) describes procedures of total or partial removal of external female genitalia or other intentional injury to the female genital organs for non-medical reasons. The research design was descriptive cross-sectional survey with a quantitative approach which enabled the researcher to assess the awareness, perception and prevalence of female genital mutilation among women of childbearing age (15–49 years), in Uke Community, Karu Local Government Area of Nasarawa State. This research study found out that the age of the mothers did not significantly influence female genital mutilation practice, likewise the occupation of the women under study. However, ethnicity of the childbearing age women with their level of education were having a significant influence on their practices of female genital mutilation. Based on the findings of this study it was recommended that There should be a continuous awareness and campaign programs on the effects of Female Genital Mutilation on the Victims. The government should foster partnership with non-governmental organizations that focuses on the eradication of Female Genital Mutilation to eradicate the practice. In conclusion the data obtained shows a significant level of poor attitudes towards female genital mutilation due to some misconceptions and it was also revealed that there are several complications associated with Female Genital Mutilation which includes painful sexual intercourse, transmission of sexually transmitted infection and lack of sexual desires.

**Keywords:** Awareness, Perception, Prevalence, Practice, Female Genital Mutilation



# Knowledge and Perception of Mothers on the Use of Banked Human Breast Milk for Feeding of Infants: A Cross-Sectional Study Among Mothers Attending Two Selected Health Facilities in AMAC, Abuja

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## ABSTRACT

**Background:** The burden of inadequate breastfeeding presents a significant global public health challenge, profoundly affecting child survival, growth, and development, contributing to high infant mortality and morbidity, particularly in developing countries like Nigeria. Banked Human Breast Milk also called donor breast milk serves as the best recommended alternative of feeding methods when a mothers' own milk is unavailable, yet its acceptance is often limited by knowledge gaps and other factors. In Abuja, there is a paucity of data on the awareness and perception of mothers regarding Banked human breast milk in Abuja, Nigeria.

**Aim of this study:** To assess the knowledge and perception of mothers attending two selected healthcare facilities in AMAC, Abuja on the use of BHBM milk for infant feeding.

**Methodology:** A descriptive cross-sectional study design was utilized to test 299 mothers attending two selected health facilities in AMAC, Abuja. The study utilized a multistage sampling technique with random sampling and proportionate sampling to select participants. The collected data was analyzed using statistical Package for Social Sciences (SPSS).

**Results:** The majority of mothers (50.2%) were aged 26–33 years, educational attainment was notably high, as 89.3% had a tertiary education, 2.7% primary educational level, 6.7% secondary education, while only 1.7% had no formal education. 61.5% reported having heard of BHBM, while 27.1% had not. The overall knowledge of mothers on Banked human breast milk was moderately high, 56.5% of mothers demonstrated good or very good knowledge. Perceptions of mothers were largely positive, with 67.5% having a favorable view. 61.9% of mothers were willing to donate and 70.2% mothers were willing to use banked human breast milk if medically necessary. The main barrier to the use of banked human breast milk was safety concerns with 61.7%. Tertiary education level and religion (Christian) were found to be significant predictors of good knowledge, which education was the main significant predictor of positive perception. The findings of this study also revealed that healthcare providers were the primary source of information and the most influential factor in decision making.

**Conclusion/Recommendation:** This study revealed a fertile ground for the introduction of banked human breast milk services in AMAC, Abuja, characterized by a reasonably aware, positively inclined, and willing population of mothers. The high regard for healthcare professionals presents a powerful channel for intervention. However, this potential is conditional upon effectively addressing the significant knowledge gaps and concerns regarding safety and trust. The journey towards the successful integration of BHBM into the infant feeding landscape of Abuja will hinge on a concerted, transparent, and healthcare provider-led strategy that prioritizes education and trust-building.

**Keywords:** Banked Human Breast Milk (BHBM), Mothers, Knowledge, Perception, Willingness



# Health Systems Resilience and Emergency Preparedness: A Study of Primary Healthcare Facilities' Capacity to Respond to Disease Outbreaks in Selected Wards in AMAC

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## ABSTRACT

**Background:** Primary Healthcare Centres (PHCs) are Nigeria's frontline defence against infectious disease outbreaks, but their resilience remains uncertain. This study assessed the emergency preparedness and resilience of PHCs in the Abuja Municipal Area Council (AMAC) to respond to such threats.

**Methodology:** A cross-sectional, mixed-methods study was conducted across 11 purposively selected PHCs. Quantitative data were collected via a structured checklist aligned with the WHO health systems building blocks. Qualitative data were gathered through in-depth interviews with health workers. Data analysis employed descriptive statistics and thematic analysis.

**Results:** Significant preparedness gaps were identified. A critical infrastructure deficit was found, with only one facility (9.1%) possessing a functional isolation area. All facilities reported insufficient staffing, cited as the primary constraint to surge capacity. Less than half (45.5%) had an up-to-date emergency plan, and no facility had conducted simulation drills. Surveillance relied entirely on paper-based systems, and only 54.5% of facilities reported always submitting timely returns. While vaccine supply chains were robust, over half of the facilities (54.5%) reported limited emergency medication stocks. Qualitative findings highlighted overwhelming staff burnout, unreliable utilities, and systemic financial constraints.

**Conclusion:** PHCs in AMAC exhibit low resilience and are critically underprepared for disease outbreaks. Vulnerabilities span all core health system components, especially infrastructure, human resources, and information systems. Comprehensive measures including infrastructure investment, staff recruitment, digital surveillance, and strengthened supply chains are essential to transform these facilities into a resilient frontline for health security.

**Keywords:** Health Systems Resilience, Emergency Preparedness, Primary Healthcare, Disease Outbreaks, Health Workforce, Infrastructure, Surveillance, Abuja Municipal Area Council (AMAC)



# Gambling Prevalence, Determinants and Association with Anti-Retroviral Therapy Adherence Among Adolescents Living with HIV in Abuja

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## ABSTRACT

**Background:** Gambling, classified as a behavioural addiction in DSM-5, poses a public health challenge among adolescents, particularly those living with HIV (ALHIV), where it intersects with mental health disorders, substance use, and barriers to antiretroviral therapy (ART) adherence. In sub-Saharan Africa, where adolescent HIV prevalence remains high (approximately 1.01 million aged 15-19 years globally per UNICEF 2023), limited data exist on gambling's prevalence, determinants, and impact on ART outcomes in urban ALHIV cohorts. This study addresses this gap by examining gambling patterns and their association with ART adherence in Abuja, Nigeria.

**Methods:** A cross-sectional study was conducted from August to September 2025 among 140 ALHIV (aged 10-19 years) accessing care at purposively selected secondary and tertiary facilities in the Federal Capital Territory. Multistage sampling (purposive area council selection, random facility balloting, consecutive enrolment) yielded a sample adjusted for 10% non-response. Data were collected via interviewer-administered semi-structured questionnaires incorporating the Problem Gambling Severity Index (PGSI), Patient Health Questionnaire-9 (PHQ-9)/Generalized Anxiety Disorder-7 (GAD-7), AUDIT-C, and self-reported adherence ( $\geq 95\%$  doses in past 30 days). Bivariate ( $\chi^2$ /Fisher's exact) and multivariate logistic regression analyses were performed using SPSS v27, with  $p < 0.05$  denoting significance.

**Results:** Gambling prevalence was 32.1%, with 48.8% at moderate-to-high PGSI risk; sports betting (15.7%) and online gambling (12.9%) predominated. Bivariate analyses linked gambling to alcohol use ( $\chi^2=10.607$ ,  $p=0.003$ ) and smoking ( $\chi^2=5.232$ ,  $p=0.037$ ); multivariate regression confirmed alcohol as a determinant (adjusted OR=0.275, 95% CI: 0.071-1.056,  $p=0.034$  for non-use vs. hazardous). Sociodemographic showed no associations. ART adherence was suboptimal (40.7% good), but no significant link emerged with gambling status ( $\chi^2=0.731$ ,  $p=0.463$ ) or PGSI category ( $\chi^2=3.690$ ,  $p=0.282$ ).

**Conclusion:** Elevated gambling prevalence among urban ALHIV underscores modifiable risks like substance use, yet without direct ART adherence disruption. Integrated screening (PGSI/AUDIT-C) in HIV clinics is recommended to achieve UNAIDS 95-95-95 targets and SDG 3, with longitudinal studies needed for causality.



# Assessment of Problematic Social Media Use and Its Effect on Mental Health Among Adolescents in Selected Secondary Schools in Jos North L.G.A, Plateau State

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## ABSTRACT

**Introduction:** The pervasive integration of social media into daily life has transformed adolescent interactions, identity formation, and emotional development globally. However, the design of these platforms, cantered on maximising engagement, has led to a rise in Problematic Social Media Use (PSMU), characterised by addiction-like behaviours. International research has established a strong link between PSMU and adverse mental health outcomes, including depression and anxiety, particularly during the vulnerable period of adolescence. While social media use is rapidly increasing in Nigeria, there is a critical lack of localised, empirical data on this relationship, especially in Northern regions like Plateau State.

**Objective:** This study aimed to fill this gap by assessing the Problematic Social Media Use (PSMU) and its effect on mental health among in-school adolescents in Jos North Local Government Area, Plateau State, Nigeria.

**Methodology:** A cross-sectional study design was employed, recruiting 336 adolescents aged 14-19 years from Senior Secondary classes (SS1-SS3) in six selected public and private schools in Jos North LGA. A multistage sampling technique was used to ensure a representative sample. Data were collected in five sections: socio-demographics, social media use patterns, the 9-item Social Media Disorder Scale (SMD-9) to assess PSMU (with a score of  $\geq 5$  indicating high PSMU), the Patient Health Questionnaire-9 (PHQ-9) for depression, and the Generalised Anxiety Disorder-7 (GAD-7) for anxiety.

**Results:** The study found universal social media use (100%) among respondents, with Facebook (62.5%), WhatsApp (56.3%), and TikTok (54.8%) being the most popular platforms. A significant 32.4% of adolescents were classified as having High PSMU. The mental health assessment revealed a substantial burden, with 31.6% of adolescents reporting moderate-to-severe depressive symptoms (PHQ-9  $\geq 10$ ) and 18.5% reporting moderate-to-severe anxiety symptoms (GAD-7  $\geq 10$ ). Bivariate analysis showed that age and type of school were significantly associated with PSMU. However, multiple logistic regression identified age as the only significant independent predictor, with older adolescents (17-19 years) having 2.36 times higher odds of high PSMU compared to their younger (14-16 years) peers (AOR=2.36; 95% CI: 1.37–4.06;  $p=0.0019$ ). Crucially, strong and significant associations were found between high PSMU and worse mental health outcomes, with a clear dose-response relationship observed for anxiety severity ( $p < 0.0001$ ).

**Conclusion and Recommendations:** The study concludes that problematic social media use is highly prevalent among in-school adolescents in Jos North LGA and is significantly associated with increased levels of depression and anxiety. These findings underscore an urgent public health concern.



# Assessing the Impact of Male Partner Involvement on Maternal Health Service Utilization: A Case Study of Taraba State, Nigeria

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## ABSTRACT

Maternal mortality remains a major public health challenge globally, particularly in sub-Saharan Africa where over 99% of maternal deaths occur. Nigeria alone contributes nearly 20% of global maternal deaths, underscoring the urgency of improving maternal and child health outcomes. Male partner involvement (MPI) has been increasingly recognized as a key determinant of maternal health service utilization; however, its level of implementation and impact remain poorly understood in many parts of the country. This study was conducted to assess the influence of male involvement on maternal health service utilization in Taraba State, Nigeria, focusing on antenatal care (ANC), skilled birth attendance, and postnatal care (PNC). The study adopted a community-based cross-sectional mixed-methods design, conducted across the three senatorial districts of Taraba State. A multistage sampling technique was used where a structured interviewer administered questionnaire for quantitative data and KII and FGD for qualitative data were administered. Quantitative data were entered electronically via Open Data Kit (ODK) and analyzed using descriptive and inferential statistics, including chi-square and logistic regression, to establish associations between male involvement and maternal health service utilization. Qualitative data were transcribed, coded, and thematically analyzed to provide contextual understanding. Findings revealed that male involvement in maternal health was generally low across the study population. Only 38% of respondents demonstrated high involvement, 37% moderate, and 25% low. The study established a strong positive association between male participation and maternal health service utilization. Women whose partners showed high engagement were significantly more likely to attend  $\geq 4$  ANC visits (78.9%) compared to those with low involvement (40.3%). Similarly, higher male involvement correlated with greater skilled delivery (68%) and PNC attendance (64%). The predominant forms of male participation included financial support (60%), involvement in birth preparedness (42%), ANC attendance (38%), family planning discussions (34%), and postnatal care (30%). Major barriers identified included cultural norms (40%), lack of awareness (30%), financial constraints (20%), and distance to facilities (10%). Education, occupation, and household income of male partners significantly influenced their level of involvement ( $p < 0.05$ ). Qualitative findings highlighted that traditional beliefs, religious perceptions, and limited male-friendly health services reduced participation, while awareness campaigns, spousal communication, and supportive health workers enhanced it. The study concludes that male partner involvement is crucial to improving maternal health service utilization in Taraba State, as higher male engagement led to increased attendance at antenatal, skilled delivery, and postnatal care services. However, cultural norms and systemic barriers continue to limit full participation.



# Prevalence and Awareness of Hypertension Among Residents of Karu Local Government Area, Nasarawa State, Nigeria

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## ABSTRACT

Hypertension remains one of the most prevalent non-communicable diseases globally and a major contributor to cardiovascular morbidity and mortality. Despite its preventable nature, awareness, treatment, and control rates remain low in low- and middle-income countries, including Nigeria. Nasarawa State, situated in the North-Central region, continues to experience a high burden of hypertension, yet community-level data on prevalence and awareness is still limited. This study assessed the prevalence and awareness of hypertension among adult residents of Karu Local Government Area (LGA), Nasarawa State, Nigeria. A descriptive cross-sectional study was conducted among 352 adult residents of Karu LGA selected through multistage random sampling. Data were collected using a structured, pretested questionnaire adapted from the WHO STEPwise approach and analysed using IBM SPSS version 25 and R software. Blood pressure was measured according to standard procedures. Descriptive statistics were used to summarize the data, while chi-square tests and multivariate regression identified associations between sociodemographic factors, awareness, and prevalence. Among the 352 respondents, 26.7% had been previously diagnosed with hypertension, and 19.9% were on medication. Overall, 55.1% demonstrated good knowledge of hypertension, while 44.9% had poor knowledge. Although 77.8% had checked their blood pressure before, regular monitoring and adherence to medication were low. The study revealed a positive association between educational level and awareness of hypertension ( $p < 0.05$ ). High salt intake, physical inactivity, and stress were common modifiable risk factors identified. Hypertension remains a significant public health issue in Karu LGA, with moderate awareness but low control and preventive practices. Strengthening community-based health education, promoting regular blood pressure screening, and improving access to hypertension care at primary health facilities are essential for effective prevention and control.



# Health Equity and Access: Workplace Stress and Burnout Among Low-Income Essential Workers in Some Selected Establishments within Abuja Municipal Area Council-Federal Capital Territory, Nigeria

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## ABSTRACT

**Introduction:** This study investigates the critical intersection of health equity, access to care, workplace stress, and burnout among low-income essential workers in Abuja Municipal Area Council (AMAC), Nigeria. This research aimed to assess the prevalence of stress and burnout, evaluate the level of healthcare access, and explore the relationship between these variables within this vulnerable population.

**Aims:** To assess the impact of stress and burnout on low-income essential workers and evaluate access to health services.

**Methodology:** This study employed a multistage sampling technique to select participants from the population of low-income essential workers in Abuja Municipal Area Council, Federal Capital Territory, Nigeria. A descriptive cross-sectional survey design was employed, with data collected from a sample of 350 low-income essential workers (including nurses, administrative assistants, security personnel, and cleaners) across three selected public hospitals in AMAC. A structured questionnaire, incorporating adapted versions of the Perceived Stress Scale (PSS-4) and the Maslach Burnout Inventory (MBI), was used for data collection. Data were analyzed using descriptive and inferential statistics (T-test and Chi-Square).

**Results/Findings:** The findings reveal a public health crisis. A majority of workers reported high levels of perceived stress (54.3%) and alarming rates of burnout, with 60.0% experiencing high emotional exhaustion and 48.6% high depersonalization. These adverse mental health outcomes were strongly linked to poor work conditions, particularly overwhelming workloads and long hours. The study uncovered profound health inequities, with 71.4% of workers lacking health insurance and 64.3% finding healthcare services unaffordable, citing high cost as the primary barrier to access. Inferential analysis confirmed a statistically significant relationship between poor healthcare access (lack of insurance and unaffordability) and higher levels of stress and burnout ( $p < .05$ ).

**Conclusion/Recommendation:** The study concludes that low-income essential workers in AMAC are trapped in a vicious cycle of high occupational stress and inequitable access to healthcare, which mutually reinforces each other. Urgent, multi-pronged interventions are recommended, focusing on expanding subsidized health insurance coverage, enforcing healthier work conditions by employers, and implementing robust workplace mental health support systems. Addressing these systemic failures is crucial for ensuring the well-being of this vital workforce and achieving true health equity.



# An Assessment of Food Hygiene Practices and Associated Health Risks Among Students and Food Vendors on the Campus of Father Adasu University, Makurdi, Benue State

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## ABSTRACT

**Background:** Food hygiene is a critical determinant in public health, particularly in institutional settings where large populations rely on informal food vendors. In Nigeria, university campuses face heightened risk of food borne illness due to poor regulatory oversight. Limited infrastructure and low awareness among food handlers and consumers. This study assessed food hygiene practices and associated health risks among students and food vendors at Father Adasu University, Benue State, Nigeria.

**Methods:** A Descriptive cross-sectional study design was used with a total of 302 students and 37 vendors surveyed using questionnaires and focus group discussions. Data were analysed using frequency counts, percentages, and graphs, while Chi-square and logistic regression were applied to test hypotheses at a 0.05 confidence level.

**Results:** Awareness of food hygiene was high among students (99.3%) and vendors (89.2%), but actual practices were inconsistent. Only 43.2% of vendors reported regular use of gloves, 54.1% ensured proper utensil sanitation, and 48.6% stored food under safe conditions. Among students, 15.2% reported food-related illness, while 30.8% were uncertain of the source. Chi-square analysis showed no statistically significant association between vendor hygiene practices and students' food-related illness ( $\chi^2 = 2.41$ ,  $p > 0.05$ ). Logistic regression indicated that handwashing before food handling ( $p = 0.031$ ), access to clean water ( $p = 0.024$ ), and utensil hygiene ( $p = 0.017$ ) significantly predicted reduced illness risk. Key barriers included lack of facilities (70.3%), weak enforcement, and financial constraints.

**Conclusion:** Stricter monitoring, improved hygiene infrastructure, and continuous vendor training are essential to safeguard student health and strengthen food safety culture on campus.

**Keywords:** Food Hygiene, Food Vendors, Campus Health, Food Safety, Public Health



# Knowledge, Attitude and Practice Toward Prevention of Nosocomial Infections Amongst Medical Laboratory Scientists in Selected Public Hospitals in FCT Abuja

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## ABSTRACT

Nosocomial infections remain a major public health challenge, particularly in developing countries where healthcare systems face constraints in infrastructure, staffing, and resources. Medical laboratory scientists play a critical role in preventing and controlling such infections due to their constant exposure to infectious materials and direct involvement in diagnostic processes. This study assessed the knowledge, attitude, and practice (KAP) of medical laboratory scientists toward the prevention of nosocomial infections in selected public hospitals in the Federal Capital Territory (FCT), Abuja. A cross-sectional descriptive design was employed, and data were collected using a structured questionnaire administered to 82 medical laboratory scientists, of which 70 were completed and returned, yielding a response rate of 85.4%. Both descriptive and inferential statistical methods were applied in the analysis. The findings revealed that the respondents demonstrated high levels of knowledge regarding nosocomial infections, including their causes, risk factors, and preventive measures. Almost all participants correctly identified major transmission routes, acknowledged the importance of hand hygiene, vaccination, and biosafety precautions, and recognized the need for continuous training. Despite this high knowledge, gaps were observed in attitudes and practices. While most respondents expressed positive attitudes toward PPE use and exposure reporting, many did not view infection prevention as part of their professional responsibility. Similarly, while adherence to basic practices such as hand washing and sharps disposal was strong, weaker compliance was recorded in areas such as consistent use of biosafety cabinets, reporting of occupational exposures, and completion of Hepatitis B vaccination. Pearson correlation analysis showed no statistically significant relationships between knowledge, attitude, and practice, suggesting that systemic and institutional factors such as infrastructure, workload, and managerial support are stronger determinants of behavior than knowledge alone. The study concludes that while medical laboratory scientists in the FCT possess excellent theoretical knowledge of nosocomial infections, this does not consistently translate into safe practices. To strengthen infection prevention and control, the study recommends mandatory continuous training, universal Hepatitis B vaccination, provision of adequate protective equipment, effective reporting systems, and stronger managerial commitment to infection control policies. Addressing these systemic barriers will enhance compliance, protect healthcare workers, and reduce the burden of nosocomial infections, thereby improving patient safety and healthcare outcomes in Nigeria.



# Assessment of Digital Advocacy Strategies for Enhancing Family Planning Awareness and Uptake Among Nigerian Youth in The Federal Capital Territory

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## ABSTRACT

Family planning (FP) is a cornerstone of reproductive health and a proven strategy for reducing maternal and child mortality. In Nigeria, despite the rapid growth of digital technology and social media use, FP uptake among youths remains suboptimal. My study explored how digital advocacy influences FP awareness and service uptake among youths in the Federal Capital Territory (FCT), addressing a critical gap in youth-centred health communication. A cross-sectional descriptive design was adopted, integrating quantitative and qualitative approaches. Data were collected from 422 respondents across Abuja Municipal and Bwari Area Councils, as well as online participants, using pre-tested questionnaires and key informant interviews. Quantitative data were analyzed with descriptive statistics and Chi-square tests in SPSS (version 27), while qualitative responses underwent thematic analysis. Findings revealed high awareness of FP methods, largely driven by digital platforms such as WhatsApp, Instagram, and Facebook. Among respondents, condoms (32%) and pills (21%) were the most commonly known methods, followed by natural methods (18.4%), injections (16%), IUDs (10%), implants (1.7%), and surgical options (0.9%). Despite this awareness, only about two-thirds reported using any FP method. Although Chi-square tests indicated no statistically significant association between digital advocacy exposure and FP uptake ( $p > 0.05$ ), respondents who frequently engaged with digital content demonstrated more positive attitudes and stronger intentions to use contraceptives. Qualitative insights highlighted the appeal of digital campaigns for their accessibility and anonymity, but also noted challenges such as misinformation and cultural resistance. The study concludes that digital advocacy is important for raising awareness and shaping favourable perceptions, even if actual uptake remains constrained by socio-cultural and service-related barriers. It recommends that reproductive health programs strengthen youth-focused digital campaigns, integrate credible online counselling, and partner with social media influencers to deliver accurate, relatable content. These strategies can help bridge the gap between awareness and action, advancing Nigeria's progress toward universal access to reproductive health services.



# Assessment of Nutrition Knowledge and Food Choices Among Bingham University Students, Karu

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## ABSTRACT

This study examined the relationship between nutrition knowledge and food choices among undergraduate students of Bingham University, Karu. A descriptive cross-sectional research design was employed, involving 388 students selected through multi stage sampling. Data were collected using a structured self-administered questionnaire covering socio-demographic characteristics, nutrition knowledge, sources of nutrition information, factors influencing food choices, and the relationship between nutrition knowledge and dietary behaviors. The data were analyzed using SPSS version 27, applying descriptive and inferential statistics. Findings revealed that 85% of the respondents understood the concept of a balanced diet, while 85.4% were aware of the health risks associated with excessive sugar consumption. Furthermore, 72.3% could correctly identify dietary protein sources, although 62% lacked knowledge about the role of dietary fiber in preventing constipation. The most common sources of nutrition information were social media (97%) and online platforms (97.7%), while only 30% of respondents obtained nutrition education from formal academic courses. Nutritional value (88.6%) and food price (74.5%) were the most significant factors influencing food choices, whereas cultural background had a minimal impact. Although 63.5% of respondents indicated that their nutrition knowledge guided their dietary decisions, 83.1% admitted to rarely reading food labels, highlighting a persistent gap between knowledge and practice. The study concludes that while students exhibit a generally high level of nutrition awareness, practical and environmental barriers hinder the translation of knowledge into consistent healthy food choices. It recommends structured nutrition education programs, campus-based awareness campaigns, and policies promoting affordable and healthy food options for students.



# Relationship between Actual Working Hours and Patient Load in a Selected Tertiary Healthcare Facility in Gwagwalada, Abuja

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## ABSTRACT

This study examined the relationship between actual working hours, patient load, and their influence on stress and job satisfaction among healthcare workers in the tertiary healthcare facility in Gwagwalada, Abuja. A total of 322 healthcare workers participated, comprising mostly nurses (53.7%) and doctors (37.3%). Data were collected using a structured questionnaire and analyzed with descriptive statistics (frequency, percentage, mean, and graphs) as well as inferential statistics (Chi-square and logistic regression) at a 0.05 level of significance. Findings showed that the majority of respondents worked long hours, with 39.1% reporting 41–50 hours per week and 31.1% working more than 50 hours. Over half (50.9%) attended to more than 15 patients per shift, while 94.7% perceived staff numbers as inadequate. Nearly all (98.8%) worked rotational shifts, and 87.3% reported an increase in workload in the past year. Stress levels were considerably high, with 90% of respondents experiencing emotional stress at least sometimes, and 33.5% experiencing it very often. About 49.1% had high stress levels, while 47.8% reported moderate job satisfaction. Chi-square analysis revealed a significant association between patient load and stress ( $\chi^2 = 46.208$ ,  $p = 0.001$ ), and between working hours and stress ( $\chi^2 = 18.382$ ,  $p = 0.001$ ). Logistic regression indicated that high patient load significantly reduced the odds of a manageable workload (OR = 0.163,  $p = 0.001$ ), while increased workload markedly predicted higher stress and reduced job satisfaction (OR = 0.364,  $p = 0.001$ ). The findings demonstrate that heavy workloads and extended working hours are major predictors of stress and declining job satisfaction among healthcare workers. The study recommends improved staff recruitment, workload redistribution, and institutional stress management programs to enhance job satisfaction and promote healthcare workers' well-being.



# **Assessment of Knowledge, Perception and Awareness of Rhesus Factor and Its Clinical Implications Among Female Workers in Bingham University, Karu Campus**

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## **ABSTRACT**

This study assessed the knowledge, perception, and acceptance of Rhesus (Rh) factor treatment among female staff of Bingham University, Karu Campus, Nasarawa State. The study adopted a descriptive cross-sectional design involving 270 distributed questionnaires, of which 192 were correctly completed and analyzed, yielding a 71.1% response rate. Data were analyzed using descriptive statistics, Chi-square, and logistic regression tests. Findings revealed that 90.6% of respondents had heard about the Rh factor, and 71.9% knew their own Rh status. However, only 50% knew the correct timing for Rhogam administration, with 34.4% demonstrating good knowledge, 42.7% fair, and 22.9% poor knowledge. The majority (91.1%) perceived Rh incompatibility as a serious health problem, 86.6% agreed that Rhogam prevents complications, and 80.2% believed it is safe. Despite this, only 31.3% considered the cost affordable, and 53.9% indicated that cultural or religious beliefs could influence acceptance. Although only 14.6% had previously received Rhogam, 83.9% expressed willingness to take it if required. Multivariate analysis showed that educational level and job category were significant predictors of good knowledge ( $p < 0.05$ ), while marital status, education, knowledge, and perception significantly influenced acceptance ( $p < 0.05$ ). The study concludes that while general awareness and perception toward Rhogam are high, detailed knowledge and utilization remain moderate. It recommends continuous health education, subsidization of Rhogam, and culturally sensitive advocacy programs to improve maternal and neonatal health outcomes among women of reproductive age.

**Keywords:** Rhesus Factor, Rhogam, Knowledge, Perception, Acceptance, Maternal Health



# Effects Of Adherence to Treatment and Socio-Economic Factors on Treatment Success Rates Among Adult TB Patients in Secondary Health Facilities in Akwanga, Nasarawa State

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## ABSTRACT

**Introduction:** Tuberculosis (TB) remains a major public health concern in Nigeria, with treatment adherence being a critical determinant of therapeutic success. Despite advances in diagnosis and treatment, socioeconomic barriers continue to affect patients' ability to complete therapy. This study assessed the effects of adherence to treatment and socioeconomic factors on treatment success rates among adult TB patients in secondary health facilities in Akwanga, Nasarawa State. The study aimed to determine the level of adherence among patients, identify socioeconomic challenges influencing adherence, and evaluate their relationship with treatment outcomes.

**Methodology:** A descriptive cross-sectional research design was adopted. Data were collected from adult TB patients using a structured questionnaire incorporating the 8-item Morisky Medication Adherence Scale (MMAS-8) to assess adherence levels. Socio-demographic and socioeconomic variables such as age, gender, education, employment, income, transport cost, and social support were also obtained. Data were analyzed using descriptive and inferential statistics, including chi-square tests to determine associations between adherence, socioeconomic factors, and treatment success.

**Results:** Findings showed that most respondents were aged 30–39 years (31.5%), and males constituted 58.0% of participants. The majority were unemployed (34.6%), and 24.1% had no formal education, indicating socioeconomic vulnerability. Adherence assessment revealed that 63.6% demonstrated high adherence, 14.2% moderate adherence, and 22.2% low adherence. Financial constraints were identified as major barriers, with 57.4% of respondents citing transport costs and 64.2% reporting food-related financial difficulties. Social support significantly influenced adherence, with 72.8% of patients who had family or community support achieving higher treatment completion rates ( $p = 0.004$ ). Overall, 84.0% of respondents completed treatment successfully, meeting the WHO target of  $\geq 85\%$ , while 16.0% relapsed or failed treatment. There were significant associations between adherence and treatment success ( $p = 0.005$ ), financial hardship and incomplete treatment ( $p = 0.019$ ), and social support and treatment completion ( $p = 0.004$ ).

**Conclusion:** The study revealed relatively high adherence and treatment success rates among TB patients in Akwanga; however, socioeconomic barriers such as poverty, unemployment, and transport costs continue to hinder optimal treatment outcomes. Social support was found to be a key facilitator of adherence and recovery. Strengthening socioeconomic interventions, promoting community-based support systems, and integrating social welfare schemes into TB care are essential for improving adherence and achieving sustained treatment success in the region.

**Keywords:** Tuberculosis, Adherence, Socio-Economic Factors, Treatment Success, Akwanga



# Evaluation of the Impact of Comprehensive Sexuality Education (CSE) on the Sexual and Reproductive Health of Adolescents in Garki FCT, Abuja

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## ABSTRACT

**Introduction:** Nigeria faces a critical adolescent sexual and reproductive health (SRH) crisis, characterized by high rates of unintended pregnancy, HIV/AIDS, and gender-based violence. Comprehensive Sexuality Education (CSE) is recognized globally as a key intervention to address these challenges. However, its implementation and impact within the Nigerian context, particularly in urban centers like Abuja, remain inconsistent and under-evaluated. This study aimed at evaluating the impact of CSE on the knowledge, attitudes, and behaviors related to the sexual and reproductive health of adolescents in Garki, Federal Capital Territory (FCT), Abuja.

**Methodology:** A cross-sectional mixed-methods research design was employed, combining quantitative surveys with qualitative focus group discussions and interviews. A total of 200 in-school adolescents (aged 13-17) from public, private, and faith-based secondary schools in Garki were selected via a multi-stage sampling technique. Quantitative data were collected using structured questionnaires and analyzed with SPSS version 26, employing descriptive statistics, Chi-square tests, and ANOVA. Qualitative data from parents and teachers were analyzed thematically.

**Results:** The study revealed a significant positive correlation between exposure to CSE and improved SRH outcomes. Adolescents with full CSE exposure had a markedly higher mean knowledge score (4.5/5.0) compared to those with no exposure (1.8/5.0). A strong statistical association was found between CSE exposure and behavioral compliance ( $\chi^2$  test,  $p < 0.001$ ), with 77.8% of fully exposed adolescents being compliant with safe SRH practices, versus only 10% in the non-exposed group. Qualitative findings identified key barriers to CSE effectiveness, including cultural and religious resistance, teacher discomfort, and persistent adolescent hesitancy stemming from a gap between knowledge and the confidence to act.

**Conclusion:** The study concludes that Comprehensive Sexuality Education is a decisive and effective intervention for improving adolescent SRH knowledge and promoting safer behaviors in Abuja. To maximize its impact, it is recommended that policymakers enforce the standardized implementation of the Family Life and HIV Education (FLHE) curriculum, invest in robust teacher training, and integrate skills-based modules to bridge the confidence gap among adolescents. Furthermore, community sensitization programs are crucial to foster a supportive environment for adolescent SRH education.



# Knowledge, Attitude, and Utilization of Primary Healthcare Services Among Family Members of Karu Local Government Area, Nasarawa State

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## ABSTRACT

Primary Health Care (PHC) is globally acknowledged as a cornerstone for achieving equitable and effective health systems worldwide. It represents the first level of contact individuals, families, and communities have with the healthcare system and offers a broad range of promotive, preventive, curative, and rehabilitative services. Introduced globally through the 1978 Alma-Ata Declaration, PHC was envisioned as a strategy to attain “Health for All” by the year 2000 through universal, community-based, and affordable health services. To assess the knowledge, attitude, and utilization of primary healthcare services among family members in Karu Local Government Area, Nasarawa State. This research is cross-sectional qualitative research which involves about 401 participants, a well-structured questionnaire was issued out and collected, analysis was done after data entry and cleaning was done using SPSS Version 26, Chart where used and test of relationship was done to determine the confidence interval and level of significance. The findings show that 62.3% of respondents had good knowledge of primary healthcare services, more than half of the respondents (55.5%) showed a positive attitude towards PHC services. When it comes to utilization 60.1% reported using a PHC facility in the past 12 months. The results shows that knowledge and socio-demographic has a relationship which insignificant while attitude and socio-demographic data shows a relationship in which only household income showed a statistically significant relationship ( $p=0.015$ ). In conclusion, while general awareness of PHC services among community members is high, knowledge, attitude and utilization levels remain moderate. Many respondents have heard of PHC centers but do not fully understand their purpose as the first level of care. Attitudinal and behavioral outcomes are further influenced by barriers such as distance, long waiting times, inadequate facilities, and cultural beliefs. Although PHC centers are intended to serve as the cornerstone of Nigeria’s healthcare delivery system, these findings reveal persistent gaps in public perception, accessibility, and service quality across all regions.



# The Role of Health Policy in Enhancing Health Security: A Case Study of Nigeria's National Action Plan for Health Security (NAPHS)

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## ABSTRACT

Nigeria's National Action Plan for Health Security (NAPHS) is an important framework focused on boosting the country's ability to prevent, detect and respond to public health threats. But, rolling out this plan has hit some major snags, creating a big gap between what the plan aims to achieve and what is actually happening on the ground. This situation really highlights the need for a study to see how effective the plan is. The main goal of this study is to figure out how the National Action Plan for Health Security (NAPHS) affects Nigeria's overall health policies and its ability to bounce back from health threats. We took a mixed-methods approach for this research to get a well-rounded view. The quantitative part included a survey with 100 different stakeholders from the health sector, which included the federal and state policymakers, NGOs, international partners, and those on the frontline. On the qualitative side, we conducted 30 in-depth interviews with senior leaders in Nigeria's health security scene. For the numbers, we used descriptive statistics, and for the qualitative insights, we went with thematic analysis. The findings paint a bit of a complicated picture regarding the implementation of NAPHS. While the plan aligns very well with global standards, like the International Health Regulations (IHR 2005), there is a huge awareness gap. A whopping 91% of federal stakeholders are quite familiar with it, but only 20% of people at the local level know what is up. The tangible progress we have seen mostly comes from areas where partners have jumped in with support. For instance, 70% of those surveyed pointed to success in disease surveillance, and 65% noted improvements in laboratory capacity. But when it comes to core health system functions, like developing the workforce, not so much as only 25% saw any real progress. The biggest hurdles were the lack of funding, which 85% of respondents mentioned, and poor coordination between sectors, noted by 75%. Leaders in the qualitative interviews echoed these challenges, calling NAPHS an "unfunded mandate" caught in a "cycle of panic and neglect." Plus, they pointed out that the integrated "One Health" approach is still mostly a dream rather than a reality. To wrap it up, this study shows that NAPHS is a crucial step for Nigeria's health security framework. But, its potential to really change things is very limited due to a lack of sustainable funding and scattered governance. For the plan to actually work, we need to make health security a priority with dedicated budgets and clear mandates for collaboration. To tackle these key issues, the study suggests setting up a National Health Security Fund and creating a formal One Health Steering Committee.



# Assessment of the Knowledge, Perception, Attitude, and Utilization of Reproductive Health Care Services Among Women of Child-Bearing Age in Bwari Area Council

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## ABSTRACT

Reproductive health is still a very important part of public health and human development. It affects the survival of mothers and children, gender equality, and the health of society as a whole. In Nigeria, especially in peri-urban areas like the Bwari Area Council, women of reproductive age still have health problems that could be avoided because they don't know enough about them, or don't use the reproductive health services (RHS) that are available to them. This study evaluated the knowledge, perception, attitude, and utilization of reproductive healthcare services among women of childbearing age in the Bwari Area Council, Federal Capital Territory, Abuja. A descriptive cross-sectional research design was utilized, sampling 226 women aged 15–49 years through stratified random sampling. Data were gathered via a semi-structured questionnaire and analyzed utilizing SPSS version 25. The results showed that 77.5%, representing 155 of the people who answered, had heard of RHS. The most well-known parts were family planning and antenatal care. People generally had a good opinion of reproductive health care, with 87.5% (175) saying the services were helpful. However, 53 person that is 26.5% still thought that family planning leads to promiscuity. Only 53 (26.5%) of respondents had ever used any reproductive health service, which means that use stayed low. They said that cost, distance to facilities, cultural restrictions, and spousal disapproval were all reasons why they didn't use these services. The chi-square analysis revealed significant correlations between educational level and perception ( $p = 0.013$ ), income and perception ( $p = 0.044$ ), and knowledge and utilization ( $p = 0.002$ ). Women possessing advanced education and elevated income demonstrated a greater propensity to utilize RHS. The study finds that even though people in the Bwari Area Council are generally aware of and have a good opinion of RHS, they don't use them very often because of economic, cultural, and systemic barriers. It suggests that community health education be improved, services be subsidized, men be encouraged to get involved, and health workers be trained to provide care that is respectful and culturally sensitive. These results help with policy and programmatic efforts to reach Sustainable Development Goal 3.



# Assessment of Mortality Rate in Federal Teaching Hospital, Lafia

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## ABSTRACT

**Introduction:** Hospital mortality remains a vital indicator of healthcare quality and system performance. Despite progress in healthcare delivery, tertiary hospitals in Nigeria continue to record high in-hospital deaths due to a combination of infectious, non-communicable, and preventable conditions. This study assessed the patterns, causes, and trends of hospital mortality at the Federal University Teaching Hospital (FUTH), Lafia, from 2020 to 2024, with the aim of identifying key determinants and guiding strategies for mortality reduction.

**Methodology:** A retrospective descriptive study design was employed, utilizing hospital mortality records spanning five years (2020–2024). Data were extracted from admission and death registers across major wards, including medical, surgical, obstetric, pediatric, and intensive care units. Variables analyzed included age, sex, causes of death, comorbidities, length of hospital stay, and availability of equipment and treatment. Mortality rates were calculated per 1,000 admissions, and findings were compared with national and international benchmarks.

**Results:** The overall hospital mortality rate at FUTH Lafia during the study period was 1.91% (19.1 deaths per 1,000 admissions). Mortality was highest among patients aged 45–64 years (25.6%) and  $\geq 65$  years (23.7%), reflecting the growing burden of non-communicable diseases (NCDs). Infants (<1 year) accounted for 19.6% of deaths, indicating persistent pediatric and neonatal health challenges. Male deaths predominated (54.8%), consistent with patterns seen in other African settings. The leading causes of death were sepsis (17.1%), stroke (15.3%), and HIV/AIDS complications (12.0%), while trauma (10.6%) and obstetric complications (8.9%) contributed substantially to the mortality burden. Common comorbidities included hypertension (28.4%) and diabetes mellitus (18.6%), underscoring the interplay between infectious and chronic disease burdens. Most deaths occurred in the medical ward (38.5%), followed by the ICU (17.2%), paediatric (16.8%), and obstetric wards (14.6%). Nearly 60.9% of deaths occurred within the first three days of admission, suggesting late presentation and inadequate emergency response capacity. Equipment and treatment adequacy were suboptimal, only 27.8% of deaths occurred where facilities were adequate, compared to 48.3% inadequate and 23.8% not available. Despite an annual increase in the number of deaths, the mortality rate per 1,000 admissions declined slightly from 19.9 in 2021 to 18.1 in 2024, indicating modest improvements in case management.

**Conclusion:** The mortality profile at FUTH Lafia underscores Nigeria's dual burden of infectious and non-communicable diseases, compounded by trauma and obstetric emergencies. The predominance of early inpatient deaths and inadequate resource availability highlight systemic weaknesses in emergency care and critical care infrastructure. Addressing these challenges requires strengthened emergency preparedness, expanded intensive care capacity, improved infection control, and integrated management of NCDs. Sustained investment in hospital infrastructure, timely referral systems, and staff capacity building are essential for reducing preventable in-hospital deaths and improving patient survival outcomes.



# Prevalence, Attitudes, and Willingness Towards Tuberculosis Testing Among the Market Women of Karu Local Government Area, Nasarawa State, Nigeria

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## ABSTRACT

**Introduction:** Tuberculosis (TB) is a major public health challenge in Nigeria, caused by *Mycobacterium tuberculosis*. It primarily affects the lungs and spreads through airborne transmission. Market women in Karu are highly vulnerable due to overcrowded workspaces, poor ventilation, limited healthcare access, and lack of health education. Stigma and misconceptions around Tuberculosis can discourage healthcare-seeking behavior. Understanding the prevalence, attitudes, and willingness towards Tuberculosis testing among market women is crucial for informing targeted interventions. This study aimed to: Assess prevalence of suspected Tuberculosis cases among market women. Explore market women's attitudes toward Tuberculosis. Assess willingness to be tested for Tuberculosis. Identify barriers to Tuberculosis diagnosis and treatment. Recommend strategies to improve awareness, screening, and Tuberculosis uptake.

**Methodology:** A descriptive cross-sectional survey was conducted among 423 market women using interviewer-administered questionnaires. Masaka Market was randomly selected from 10 markets in Karu LGA, Nasarawa State, through simple random sampling. Data analysis involved descriptive statistics and chi-square tests to identify associations between key variables.

**Results:** Prevalence (TB Diagnosis/Testing): Only 4.3% had been diagnosed; 8.7% had ever been tested. Attitudes: 51.1% had positive attitudes; 48.9% expressed stigma and shame. Willingness to Test: 73.3% were willing, rising to 78.3% if testing was free. Only 30% would test without symptoms; 35.2% were willing to pay.

Barriers: High cost (76.4%), fear of discrimination (70%), and stigma (91.3%).

Influences: Age and education significantly affected attitude ( $p = 0.011$ ,  $p = 0.016$ ). Conclusion: Low formal Tuberculosis diagnosis despite high Tuberculosis related symptoms. Stigma, financial barriers, and limited access were major challenges to testing.

**Recommendations:** Intensify Tuberculosis education, reduce stigma, and offer free/subsidized diagnostic services to improve early detection and lower Tuberculosis burden.



# **Knowledge, Attitude and Practice Regarding the Risk of Cardiovascular Disease Among Traders in an Urban Market in Jos North, Plateau State**

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## **ABSTRACT**

**Introduction:** Cardiovascular disease risk factors are majorly divided into two types: modifiable and non-modifiable. These factors increase the likelihood of having cardiovascular diseases, which are detrimental to the heart and blood vessels. The cardiovascular diseases commonly known include coronary artery disease, cerebrovascular diseases (such as stroke and transient ischemic attacks), peripheral artery disease, rheumatic heart disease, congenital heart disease, deep vein thrombosis, and pulmonary embolism.

**Methodology:** A descriptive cross-sectional research was employed. Questionnaires were administered to a sample size of 174 traders on Rwang Pam Street in Terminus market, Jos. Data was analysed using SPSS and Microsoft excel and was presented in tables and charts. The Chi Square test was used to determine statistical significance between categorical variables at a level of less than 0.05 (<0.05).

**Results:** The majority of our traders (90.8%) did not have any pre-morbid cardiovascular diseases and 75.9% had no family history of cardiovascular diseases. About three-quarters (77.6%) had good knowledge of risk of cardiovascular diseases while less than half (44.3%) demonstrated a positive attitude towards its prevention. About two-third (63.2%) of the study respondents have good practices towards the prevention of acquiring Cardiovascular Diseases. Our study also highlights that 51.7% of the traders have a normal body mass index. However, 28.2% are overweight and 12.1% are obese. A minor percentage were underweight.

**Conclusion:** The study shows that the majority of traders have good knowledge though this does not reflect in their attitudes as more than half of the respondents have a negative attitude. In addition, about two-third of the respondents have good practices whereas 36.8% have poor practices towards the prevention of cardiovascular diseases.



# Prevalence and Pattern of Substance Use Among Clinical Medical Students in Tertiary Institutions in Plateau State

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## ABSTRACT

**Introduction:** Substance use disorder has become a global concern with increasing prevalence across the world. According to the World Health Organization (WHO), it is the harmful or hazardous use of psychoactive substances, including alcohol, nicotine, and illicit and prescription drugs. These substances can lead to dependence and various adverse effects, impacting mental, emotional, physical, and behavioral health and can result in long term consequences. Clinical medical students, due to academic stress, peer influence, and easy access to substances, are particularly vulnerable, highlighting the need to study their prevalence and usage patterns.

**Methodology:** A descriptive cross-sectional study was conducted among clinical medical students in two tertiary institutions in Plateau state using an adapted, structured self-administered questionnaire through quantitative method of analysis. 348 participants were proportionally selected using multistage stratified random sampling. Prevalence was defined as the proportion of respondents, currently using substances, while pattern was assessed by type, frequency and context of use (e.g. academic stress, peer influence, social). Data was cleaned in Microsoft Excel and analyzed with SPSS. Results were represented in tables and charts, and chi-square tests assessed associations, with significance set at  $p \leq 0.05$ .

**Results:** From 348 validated participants, the overall prevalence of substance use was 14.9% comprising 14.4% single users and 0.6% multiple users. Most were female (62.1%) and aged 21-25 years. Academic stress, peer influence and long study hours were the main associated factors. Negative effects were reported, with mental health and physical health most impacted (5.5%).

**Conclusions:** Higher education involves a period of adjustment and new experiences, showing the importance of the study highlights the urgent need for proactive substance use intervention and policy adjustments in tertiary institutions to address the challenges faced by medical students.

**Keywords:** Substance Use, Prevalence, Patterns, Associated Factors, Clinical Medical Students



# The Effects of Social Media on the Mental Health of Bingham University Students

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## ABSTRACT

**Background:** Social media is now a major part of student life, providing platforms for communication, entertainment, and academic support. However, concerns have emerged over its excessive use and potential psychological effects. This study assesses the impact of social media use on the mental health of undergraduate students at Bingham University.

**Objectives:** The study aims to examine the main purposes of social media use, the average time spent on it, related mental health outcomes, and key factors influencing engagement. **Methods:** A descriptive cross-sectional study was conducted among undergraduate students in the Faculties of Allied Health Sciences and Law at Bingham University, Karu Campus. A total of 412 students were selected through multistage sampling. Data were collected using structured, self-administered questionnaires. Sample size was calculated using Cochran's formula and adjusted for non-response. Data analysis was performed using SPSS, and chi-square tests were used to determine associations (significance at  $p \leq 0.05$ ). **Results:** 43.8% of students reported spending 4–6 hours on social media daily, while 33.3% spent over 6 hours. WhatsApp, Instagram, and Facebook were the most used platforms. Most students (69.8%) used social media mainly for entertainment; only 11.0% used it for academics. Mental health assessment showed 63.0% were highly affected, experiencing anxiety, low self-esteem, sleep issues, and academic distraction. 80.6% reported interference with study time. Age and academic level were significantly associated with mental health effects ( $p < 0.05$ ); gender and department were not. 86.2% acknowledged that social media affects mental health.

**Conclusion:** While social media supports connection and engagement, excessive use negatively impacts mental health. Digital literacy, healthier usage habits, and university mental health support are recommended, especially for younger and lower-level students.



# **Assessment of the Level of Burnout, Types of Coping Mechanisms and their Determinants Among Clinical Medical Students in Bingham University Teaching Hospital**

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## **ABSTRACT**

**Background:** The World Health Organization recognizes burnout as an occupational phenomenon that affects anyone, regardless of profession or phenomenon. Burnout is defined in ICD-11 as a syndrome conceptualized as resulting from chronic workplace stress that has not been successfully managed. It is characterized by three dimensions: feelings of energy depletion or exhaustion; increased mental distance from one's job, or feelings of negativism or cynicism related to one's job; and reduced professional efficacy.

**Aim:** To evaluate the rate of burnout, the coping methods used and the reasons behind them among clinical medical students in Bingham University Teaching Hospital

**Methodology:** A descriptive cross-sectional research was employed. 239 students at Bingham University Teaching Hospital were given questionnaires. SPSS was used to analyze the data, which was then shown in tables and charts. Statistical significance between categorical variables was tested using the chi-square test, with a significance level set at  $p \leq 0.05$ .

**Results:** Prevalence of burnout is 10.8%. 42.5% of respondents have high levels of emotional exhaustion, while 15.3% show high levels of cynicism. However, 1.5% of respondents show low levels of professional efficacy. 83.6% use problem-focused mechanisms, while 89.6% make high use of emotion-focused mechanisms. Amongst academic-related stressors, a majority of respondents showed high levels of stress (87.3%). Of those surveyed, 25% reported significant levels of stress from interpersonal stressors, 35.4% from teaching-learning stressors, 35.4% from drive and want stressors, and 39.6% from stressors connected to group activities. Stressors connected to drive and desire, stressors related to group activities, marital status, and academic year are all significantly associated with burnout.

**Conclusion:** This study assessed the level of Burnout, type of coping mechanisms and their determinants, among Clinical medical students revealed that Burnout is prevalent among Medical students, with 42.5% high emotional exhaustion and 15% cynicism. However, 98.5% maintained high professional efficacy showing resilience, most students make use of positive coping mechanism especially problem-focused and emotion-focused strategies such as active coping and positive reframing. Despite a moderate burnout level, the students adaptive coping indicates proactive stress management.

**Recommendations:** For the students to seek support and manage their time well. The university needs to provide a positive environment for learning and to establish a counselling and wellness centre. Parents need to be role models to their children to emulate effective ways of coping with situations. The government can integrate mental health education into the academic curriculum.



# Understanding Antibiotic Use and Antimicrobial Resistance: A Study of Knowledge, Attitude and Practice Among Bingham University Students

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## ABSTRACT

**Background:** Antibiotics play a crucial role in treating bacterial infections; however, the misuse and overuse of these drugs have accelerated the rise of antimicrobial resistance (AMR), posing a global public health threat. However, the problem was not the antibiotics themselves as they remained one of the most effective weapons against diseases; in fact, the problem lied in the drugs' use, Overusing antibiotics or using them irrationally can easily result not only in the emergence of resistant bacterial strains but also in adverse reactions and can also result in an economical burden on the national health system. Antimicrobial Resistance can result from many factors, such as poor public knowledge and attitude towards antibiotics, easy access to antibiotics in many places and lack of awareness policies on appropriate antibiotic usage. University students, as emerging leaders and potential health influencers, represent a critical population in shaping future antibiotic stewardship. Yet, their knowledge, attitudes, and practices (KAP) regarding antibiotic use and Antimicrobial Resistance remain under-explored in many Nigerian institutions, including Bingham University.

**Aim:** This study aimed to assess the knowledge, attitude, and practice of Bingham University students toward antibiotic use and antimicrobial resistance, and to identify key gaps that may contribute to the spread of AMR within this population.

**Methodology:** A descriptive cross-sectional survey was conducted among 416 students selected using a multistage sampling from various faculties within Bingham University. Data were collected using a structured self-administered questionnaire divided into four sections: demographics, knowledge, attitude, and practice. The responses were analyzed using descriptive statistics and presented in frequency tables, percentages, and pie charts.

**Results:** The study found 55% of students had good antibiotic knowledge while 45% showed poor understanding; 62% displayed positive attitudes versus 38% with negative attitudes; and 54% practiced safe antibiotic use compared to 46% engaging in risky behaviors. Health students significantly outperformed non-health peers in knowledge (82% vs 28%), attitudes (78% vs 47%), and practices (69% vs 39%) (all  $p < 0.001$ ). Students aged 21-25 scored significantly higher across all measures (knowledge:66%, attitudes:70%, practices:58%) than younger peers (all  $p < 0.05$ ), while gender and academic level showed no significant associations.

**Conclusion:** The study concludes that although students possess a basic awareness of antibiotic use and AMR, misconceptions and unsafe practices are prevalent. It recommends curriculum integration of AMR education, student-led health campaigns, and stricter university-level regulation of antibiotic access to improve antibiotic stewardship and reduce resistance.



# Impact of Food Price Increments on the Well-being of Bingham University Students

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## ABSTRACT

**Introduction:** Food price inflation is a growing concern globally, with vulnerable groups such as university students being disproportionately affected due to limited financial resources. Bingham University, located in Karu, Nigeria, has witnessed rising food costs, which has significantly impacted students' nutritional intake, mental health, and academic performance. This study investigates how rising food prices affect the well-being of Bingham University students. It focuses on the impact on food choices, financial stability, stress levels, and academic performance. The findings highlight a strong link between increased food costs and student hardship, calling for university intervention to ease the burden.

**Objectives:** The objective of the study is to examine how food inflation influences students' dietary choices among Bingham University students. The research also focuses on how the sudden economic shift impacted Bingham University students' financial and emotional well-being, as well as the relationship between food prices and Bingham University students' academic and mental performance.

**Methodology:** A cross-sectional survey was carried out using stratified multistage sampling across five faculties. Data was gathered through structured questionnaires, both online and in person. Descriptive statistical tools were used to identify key patterns and associations.

**Results:** Most students (90.4%) noticed food price increases, with 78.7% viewing them as excessive. As a result, 51.4% reported eating less, and 70.4% admitted skipping meals due to financial stress. About 58.7% said the situation affected their academic performance, while 73.8% experienced mood or energy level changes. Coping strategies included budgeting (52.7%), eating cheaper, less nutritious foods (38.4%), and seeking help from peers.

**Conclusion:** The rise in food prices is adversely affecting students' nutrition, mental health, and academic outcomes. Although some coping mechanisms exist, they are inadequate. The study recommends immediate institutional support such as food subsidies and expanded student welfare programs.



# A Cross-Sectional Study of Knowledge of Anti-Microbial Resistance Among Health Workers Providing Primary Care in Public Primary Healthcare Facilities in Jos North LGA

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## ABSTRACT

**Introduction:** Antimicrobial resistance (AMR) is the resistance of microorganisms (bacteria, viruses, fungi, and parasites) to an antimicrobial drug to which the organism was originally sensitive and/or effective for the treatment of infections. Primary HealthCare is the first level of contact for individuals, families, and communities with the national health system, bringing health as close as possible to where people live and work, and it constitutes the first element of a continuing healthcare process. The declining effectiveness of antimicrobials is driven by multiple factors, many of which can be addressed through a well-functioning primary health care.

**Methods:** This was a cross-sectional descriptive study carried out among 172 public primary health care facility workers. This study will be conducted in public PHC centers across Jos North LGA, in Plateau State, Nigeria. Data was collected using self-administered questionnaires

**Results:** The study showed that among 172 participants, 111 (64.5%) had a poor understanding of antimicrobial resistance, 48 (27.9%) had an inadequate understanding, and 13 (7.6%) had a good understanding of antimicrobial resistance.

**Conclusion:** The study found that the majority of health workers had a poor understanding of AMR, and only a few were found to have adequate knowledge. The main source of knowledge about AMR among health workers was clinical practice, and factors such as gender and professional designation were relevant. Females and nurses/midwives were found to possess higher knowledge of AMR among participants, but this association was not statistically significant.

**Keywords:** Antimicrobial Resistance, Primary Healthcare, Health Workers, Knowledge, Training, Empirical Prescription, Clinical Practice, Nigeria



# **Knowledge and Attitude of Comprehensive Sexuality Education Among Adolescents in Senior Secondary Schools in Plateau State, Nigeria**

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## **ABSTRACT**

**Introduction:** Comprehensive sexuality education is a curriculum-based process of teaching and learning about the cognitive, emotional, physical and social aspects of sexuality. It aims to equip children and young people with knowledge, skills, attitudes and values that will empower them to: realize their health, well-being and dignity; develop respectful social and sexual relationships; consider how their choices affect their own well-being and that of others; and, understand and ensure the protection of their rights throughout their lives. Some problems associated with lack of adequate knowledge on CSE include: Teenage pregnancy, Unsafe abortion and its related mortality, Sexually transmitted diseases, School desertion and eventually, Poverty perpetuation.

**Aim:** To ascertain the knowledge and attitude of comprehensive sexuality education among senior secondary school adolescents in Plateau state, Nigeria.

**Methodology:** This was a cross-sectional descriptive study involving 460 senior secondary school adolescents from 5 selected secondary schools in Jos North and Jos South LGA's, Plateau State. Data was collected using a researcher-designed handwritten questionnaire administered to participants and analysis was done using IBM SPSS 20 and Microsoft Excel.

**Results:** The respondents of this study had a good knowledge (99.0%) and attitude (98.5%) towards comprehensive sexuality education with the sources of information for new questions concerning comprehensive sexuality education being Parents (60.9%), Friends (9.6%), Teachers (8.5%), Internet (5.7%) with 15.4% admitting to not having any sources to ask questions. There was statistical significance between who the participants live with and their knowledge ( $p=0.041$ ) and attitude ( $p=0.000$ ) towards comprehensive sexuality education.

**Conclusion and Recommendation:** Overall, it was determined that the respondents' knowledge and attitude was good. But there are still certain aspects that need to be improved. Therefore, it is necessary to maintain and enhance parental understanding of comprehensive sexuality education and to enhance its implementation. Teachers, parents, community and religious leaders and health workers all have a role in passing suitable instruction on topics relating to sexuality that would bolster the foundation of adolescents.

**Keywords:** Comprehensive Sexuality Education, Adolescent, Jos, Plateau State, Nigeria



# Barriers and Facilitators of Health Service Utilization Among Young Adults in Bingham University

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## ABSTRACT

**Introduction:** Health service utilization is essential for the well-being and academic success of university students, yet many young adults faced challenges accessing healthcare. This study investigates the barriers and facilitators that influence students' used of health services at Bingham University, Karu. Despite the availability of a university medical center, utilization patterns remain inconsistent due to various perceived and institutional obstacles. The study aimed to: Access the barriers that restrict students in Bingham University from properly utilizing health services in Bingham University. Identify the facilitators that enable students to access and utilized health services in the university. To explore the demographic factors (age, sex and level) and its roles in influencing health service utilization.

**Methodology:** A descriptive cross-sectional survey was conducted among 333 undergraduate students selected through multistage sampling across faculties and levels. A structured, self-administered questionnaire captured quantitative data. Data analysis was done using SPSS version 27, and statistical tests such as Chi-square were employed to explore associations between variables.

**Results:** Findings revealed that 76.3% of students had accessed the school clinic, while 79.0% reported facing barriers such as long waiting times (42.9%), inadequate medical staff (35.4%), and limited operating hours (27.6%). Facilitators included shorter wait times (59.5%), availability of medical staff (50.2%), and improved service quality (41.7%). Significant associations were found between utilization and factors like financial status, service awareness, and accessibility ( $p < 0.001$  for each).

**Conclusion:** Although a majority of students were aware of and had accessed health services, systemic barriers continue to hinder optimal utilization. To improve service use, the university must invest in staffing, infrastructure, and health education. Addressing these issues will enhance students' health outcomes and academic productivity.



# Knowledge, Attitude and Practice of Bingham University Students of Physical Activity on Mental Health Benefits

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## ABSTRACT

**Introduction:** Physical activity (PA) significantly improves mental health by reducing symptoms of depression, anxiety, and stress. Despite strong evidence supporting this link, university students often face academic, social, and environmental pressures that hinder regular participation. Understanding students' knowledge, attitudes, and practices (KAP) toward PA and its mental health benefits is crucial for designing effective campus interventions.

**General Objective:** To assess the KAP of Bingham University undergraduates regarding PA and its mental health benefits, and identify barriers and facilitators to participation.

**Methodology:** A descriptive cross-sectional design was used. A structured questionnaire was administered to 405 students selected through multistage sampling. Data on socio-demographics, PA knowledge, attitudes, practices, and perceived barriers were collected and analysed using descriptive statistics and chi-square tests.

**Results:** Most students (76.5%) believed PA improves mental health, with 41.5% believing it helps very frequently. Walking or jogging (48.6%) was most common, followed by gym workouts and team sports. However, 12.6% reported no PA engagement. Major barriers were lack of facilities (18%), motivation (13.1%), and time (10.9%). Although attitudes toward PA were generally positive, practice was inconsistent. Peer encouragement and facility access significantly influenced participation.

**Conclusion:** Awareness of PA's mental health benefits is high among Bingham students, but consistent practice remains low. Addressing barriers such as inadequate facilities, time constraints, and low motivation is essential. Universities should invest in recreational spaces, encourage group activities, and implement student-led wellness programs to bridge the gap between knowledge and practice, supporting student mental well-being.



# Knowledge, Attitude and Practice of the Use of Contraceptives Among Female Students in Bingham University, Karu, Nasarawa State

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## ABSTRACT

**Background:** Contraceptives, primarily used by women aged 15–49 years, include methods, substances, or procedures designed to prevent pregnancy and improve reproductive health. They are crucial in reducing unintended pregnancies, lowering maternal and newborn mortality, and enhancing reproductive outcomes. In Nigerian higher institutions, contraceptive use remains a concern as unintended pregnancies can lead to unsafe abortions and disrupt academic and career progress. Despite their importance, many female students hold negative attitudes or have limited knowledge due to misconceptions, past experiences, and socioeconomic factors.

**Methodology:** A descriptive cross-sectional study was conducted using a three-stage multistage sampling technique. A total of 316 female students at Bingham University participated by completing a standardized self-administered questionnaire (paper and electronic), achieving a 100% response rate. Data were analyzed using Microsoft Excel and SPSS version 27.

**Results:** Respondents demonstrated good knowledge of contraceptives, especially condoms (85.4%) and pills (62.7%). Attitudes were generally positive, with 68% considering contraceptive use very important and over half viewing it as morally acceptable. However, 31% reported feeling pressured to use them, indicating social influence. Despite high awareness, usage was low: only 25.3% had ever used contraceptives, while 74.7% had never used any method.

**Conclusion:** Female students at Bingham University exhibited high awareness and generally positive attitudes toward contraceptives but low utilization. The institution's faith-based environment and delayed sexual debut may partly explain this gap. Focused educational interventions, improved counseling, and addressing misconceptions are essential to bridge the knowledge–practice, divide and strengthen responsible reproductive health behaviors.

**Keywords:** Knowledge, Attitudes, Practices, Female Students, Contraceptives



# Anthropometric Measurement, Dietary Habit and Economic Status of Undergraduate Students of Bingham University, Karu, Nasarawa State

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## ABSTRACT

**Introduction:** Human body composition can be evaluated using anthropometric measurements, which are a set of quantitative measurements of the bone, muscle, and adipose components. This study is necessary because students may not receive broad, adequate and essential education on dietary habits due to economic issues, leading to unhealthy eating habits. These measurements are crucial because they serve as diagnostic tools for obesity which increases the risk of non-communicable disease such as diabetes mellitus, cardiovascular disease, hypertension etc. Studies has shown undergraduate university students are at risk of developing unhealthy lifestyle habits, including poor dietary habits and inadequate physical activity, which can negatively impact their anthropometric measurements and overall health. At Bingham University, Karu, there is a need to better understand how the three factors, body measurements, diet, and finances interact. This study explores the current status of undergraduate students to guide health promotion efforts and support better academic and life outcomes.

**Methodology:** A descriptive cross-sectional study design was employed to assess the anthropometric measurements, dietary habits, and economic status of undergraduate students at Bingham University, Karu. The study population consisted of full-time undergraduate students across seven randomly selected faculties. Using multistage sampling techniques, 402 participants were selected. Data collection involved the use of structured, self-administered questionnaires divided into sections on socio-demographics, dietary habits, and economic status, alongside direct measurements of height and weight using a stadiometer and weighing scale to compute Body Mass Index (BMI).

**Results:** The study analysed data from 402 undergraduate students of Bingham University. The majority of respondents were female (86.6%), aged between 20–29 years (71.9%), and primarily of Christian faith (97%). BMI assessment revealed that 48.3% had a normal weight, 24.8% were overweight, 24.4% were obese, and 2.5% were underweight. Dietary patterns indicated that 88.8% consumed only 1–2 servings of fruits and vegetables daily, while 95.3% frequently skipped meals, especially breakfast, primarily due to lack of time (64.2%). Fast food consumption was common, with 59.7% consuming it 1–2 times per week. Eggs (39.8%) and meat (39.3%) were the most preferred protein sources. Economically, 92.3% relied on parents or guardians for financial support, with most students receiving monthly stipends between ₦101,000–₦200,000. However, 62.7% felt their allowance was insufficient to meet basic needs. Only 24.4% engaged in income-generating activities. Chi-square analyses showed no statistically significant associations between BMI and variables such as age, gender, ethnicity, religion, height, or department ( $p > 0.05$ ).

**Conclusion:** The study highlights a student population marked by financial dependency, irregular and nutrient-poor dietary habits, and early signs of overweight and obesity. These findings underscore the need for targeted public health interventions, including nutrition education, affordable healthy food options, and expanded financial support schemes to improve student well-being and academic outcomes.



# Evaluation of Health Literacy Levels Among Bingham University Students

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## ABSTRACT

**Background:** Health literacy is a critical determinant of health outcomes, especially among young adults navigating complex health information ecosystems. University students, despite their educational exposure, often face challenges in comprehending and applying health information effectively.

**Objectives:** This study aimed to assess the health literacy levels of undergraduate students at Bingham University and to explore associated sociodemographic factors, information sources, and perceived barriers to health comprehension and maintenance.

**Methods:** A descriptive cross-sectional survey was conducted among 428 undergraduate students selected using a multi-stage random sampling technique to ensure proportional representation. Data were collected via a structured, self-administered questionnaire measuring functional, communicative, and critical health literacy, along with demographic data, information sources, confidence levels, and perceived barriers. Descriptive and inferential statistics were analyzed using SPSS version 27.

**Results:** Findings revealed that 54.7% of students had low health literacy. The internet, social media, and healthcare professionals were the most common sources of health information. Although 48.6% reported high confidence in understanding health information, 77.8% experienced occasional or frequent comprehension difficulties. Most students (91.1%) recognized the importance of mental health, and 65.7% had participated in health education programs. Financial constraints (39.7%) and busy schedules (22.7%) were primary barriers to maintaining health. Gender was the only sociodemographic variable significantly associated with health literacy ( $p = 0.024$ ), with female students demonstrating higher literacy levels.

**Conclusion:** Despite broad exposure to health information, a significant proportion of students at Bingham University exhibited low health literacy and reported difficulty understanding health content. Embedding health literacy education into university curricula, promoting access to credible information sources, and implementing gender-sensitive interventions are recommended to address these gaps and enhance students' health outcomes.

**Keywords:** Health Literacy, University Students, Information Sources, Gender Differences, Health Education, Nigeria



# Knowledge, Attitude, and Practices of Hand Hygiene Among Students of Bingham University, Karu Local Government Area, Nasarawa

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## ABSTRACT

Hand hygiene is universally acknowledged as one of the most effective strategies in preventing the spread of infectious diseases, especially in institutional and communal settings such as universities. Despite its proven efficacy, compliance with proper hand hygiene practices among the youth, particularly students in higher institutions, remains inconsistent. This study investigated the knowledge, attitude, and practices of hand hygiene among students of Bingham University, Karu Local Government Area, Nasarawa State. **Methodology:** A descriptive cross-sectional survey was conducted among 267 undergraduate students conducted using a multistage sampling technique across various faculties and academic levels. Data were collected using a validated, self-administered questionnaire structured in four sections and analyzed using descriptive statistics (frequency and percentage) and chi-square test. **Results:** The findings revealed that 97.0% of respondents were aware of hand hygiene as a preventive measure against infections, with 89.1% recognizing its importance in daily routines. However, only 46.4% were aware of the WHO-recommended 20-second handwashing duration. Attitude towards hand hygiene was largely positive, with 82.4% strongly agreeing on its necessity. In contrast, actual practice was suboptimal, as only 24.0% regularly used hand sanitizers when soap and water were unavailable, and 57.3% reported washing hands only 1–2 times daily. Key barriers to effective hand hygiene included forgetfulness (70.4%), busy academic schedules (55.1%), and inadequate facilities (37.5%). **Conclusion:** The study concluded that while knowledge and attitude toward hand hygiene are high among students, there is a gap in consistent practice. It recommended improved infrastructural support, integration of hand hygiene education into student orientation, and the promotion of behavioral change interventions to improve compliance.

**Keywords:** Hand Hygiene, Knowledge, Attitude, Practice, Infection Prevention



# **An Assessment of the Challenges Faced by Bingham University Students Living with Sickle Cell Disease**

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## **ABSTRACT**

Sickle Cell Disease (SCD) is a genetic blood disorder that significantly affects the academic, emotional, and social well-being of students in Nigerian universities. This study investigates the specific challenges faced by students living with SCD at Bingham University, Nigeria. Methodology: using a descriptive cross-sectional design, data were collected from 100 diagnosed undergraduate students through a structured, self-administered questionnaire. Results: Findings revealed that a majority of students experienced emotional distress (85%), frequent health crises (82%), academic difficulties (79%), and social stigma (72%). Additionally, 80% of respondents reported experiencing at least one crisis in the past six months, with pain, fatigue, and shortness of breath being the most common symptoms. Although many students relied on regular medication (93%), hydration (91%), and medical care (89%) to manage their condition, awareness of support systems remained low. SCD had a clear impact on academic performance through absenteeism and reduced classroom participation. Conclusion: The study concludes that students with SCD require greater institutional support, including flexible academic policies, enhanced health services, anti-stigma campaigns, and formal support groups to improve their academic and personal outcomes.



# Knowledge and Attitude on Modern Contraceptive Methods Among Students of Bingham University, Karu, Nasarawa State

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## ABSTRACT

**Introduction:** Modern contraceptives has made remarkable progress in the field of public health as they support in reducing unwanted pregnancies and maternal mortality. They involve hormonal contraceptives, intrauterine devices, barriers methods, emergency contraceptives, and permanent methods. This study examined the knowledge and attitude towards modern contraceptive methods among Bingham University students.

**Methodology:** A quantitative, descriptive, cross-sectional approach was use to explore the knowledge and attitudes of undergraduate students concerning modern contraceptives at Bingham University, Nigeria. A sample of 250 participants was obtained through multi-stage sampling and data was collected over 9months using a self-administered questionnaire. Knowledge and attitude data, alongside demographic variables, were analyzed using descriptive statistics and relevant software (SPSS version 27), Chi-square tests was used, the significance level at  $p \leq 0.05$ . Ethics approval was obtained and informed consent administered to all participants.

**Results:** Study findings showed that 59.2% of participants had good knowledge about modern contraceptive methods. The majority of participants learned about contraceptives from unofficial sources like peers, school, and social media (34%), with just 40% having obtained information from healthcare providers. Most participants had positive attitude (69.6%) towards contraceptives and 30.4% had negative attitude towards contraceptives. From our chi-square analysis, knowledge and age were significantly connected ( $P = 0.046$ ), especially with older students between the ages of 19 and 22 having superior knowledge. Chi-square tests showed no statistically significant association between gender, religion, or faculty and knowledge or attitude scores.

**Conclusion:** Study's findings showed that although students showed a good degree of knowledge and positive attitudes toward modern contraceptive methods, there are significant gaps in accurate knowledge and enduring misconceptions, especially regarding fertility and side effects. To improve knowledge, dispel myths, and encourage students to make educated contraceptive decisions, these findings highlights the necessity of reproductive health education, greater participation from medical professionals, and culturally sensitive interventions.



# Knowledge, Attitude, and Practice of Oral Health Hygiene Among Undergraduates in Bingham University, Karu, Nasarawa, Nigeria

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## ABSTRACT

**Introduction:** Oral health is an essential component of general health and quality of life, enabling individuals to eat, speak, and socialize without discomfort. Despite this, oral hygiene is often neglected amongst university students due to various personal and systemic factors or barriers. This study investigates the knowledge, attitude, and practice (KAP) of oral health among undergraduates at Bingham University, Karu, and identifies the barriers that hinder the maintenance of proper oral hygiene.

**Methodology:** This descriptive cross-sectional study was conducted among 375 undergraduate students at Bingham University. Data were collected using a structured, self-administered questionnaire. Responses were analyzed using IBM SPSS version 25. Chi-square tests were applied to assess associations between demographic variables and KAP outcomes.

**Results:** Among the respondents, 48.3% exhibited moderate knowledge of oral health, 40.8% had good knowledge, and 10.9% had poor knowledge. Most of the students had a positive attitude towards oral health (94.4%). Although the participants had good knowledge, their practice was poor (70.0%). The primary barriers identified were the cost of dental care (42.1%), time constraints (33.1%), forgetfulness (31.7%), limited access to dental facilities (27.7%), fear of procedures (26.1%), and lack of knowledge (24.5%).

**Conclusion:** This study revealed generally moderate to good oral health knowledge and positive attitudes among Bingham University undergraduates. However, actual oral hygiene practices were flawed. The gap between knowledge/attitude and practice is widened by personal and structural barriers. Addressing these challenges through integrated oral health education, improved access to care, and behavioral interventions is essential for enhancing oral hygiene outcomes among university students.



# Breast Self-Examination: Knowledge, Attitude, and Practice Among Female Traders in Auta Balefi

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## ABSTRACT

**Introduction:** Breast cancer is the most prevalent malignancy among women in Nigeria, contributing to 22.7% of all new cancer cases and 18.1% of cancer-related deaths, with an age-standardized mortality rate of 25.5 per 100,000, the highest in Africa. Early detection through breast self-examination (BSE) is a low-cost, accessible method critical for improving survival rates in resource-limited settings like Nigeria, where delayed presentation and late-stage diagnosis are significant challenges. Female traders in semi-urban markets, such as those in Auta Balefi, Karu Local Government Area, Nasarawa State, face unique barriers to healthcare access due to socio-economic, cultural, and logistical constraints. Despite the importance of BSE, there is limited data on its knowledge, attitudes, and practices (KAP) among this population. This study aims to assess the KAP of BSE among female traders in Auta Balefi to identify gaps and inform targeted interventions for breast cancer awareness and early detection, contributing to Nigeria's public health efforts to reduce breast cancer morbidity and mortality.

**Methodology:** A descriptive cross-sectional study was conducted among 403 female traders aged 18 years and above in Auta Balefi, Karu Local Government Area, Nasarawa State, Nigeria. Participants were selected using a systematic random sampling technique. A structured questionnaire, was used to collect data on socio-demographic characteristics, knowledge, attitudes, and practices of BSE. Data were analyzed using IBM SPSS version 23, with results presented as percentages in tables and charts.

**Results:** The results showed that 49.1% of the participants had good knowledge on breast self-examination, although 53.1% reported to not have been taught how to perform BSE. 63.8% of participants had a positive attitude towards BSE with 70% of them agreeing that BSE should be carried out regularly among women. 65% of the respondents had a good practice of BSE although only 19.6% performed BSE monthly. Education level, religion, and number of children significantly influenced BSE practice, with higher education and 1–5 children linked to better engagement, aligning with findings from studies in Nigeria, Ethiopia, and Malaysia.

**Conclusions:** These results highlight the need for targeted, culturally sensitive health education programs to enhance BSE skills and adherence. Recommendations include integrating BSE training into market-based outreach, using reminder tools (e.g., SMS, calendars), and leveraging community health workers to address knowledge gaps and barriers, ultimately improving early breast cancer detection and reducing mortality in resource-limited settings like Auta Balefi.



# Assessment of Household Food Security Among Market Traders in Jos North, Plateau State

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## ABSTRACT

In many developing countries including Nigeria, household food security is still of the utmost importance as access to sufficient and healthy food is influenced by many kinds of socioeconomic factors. Contrary to popular beliefs that market traders who are important in the distribution food always have access to it, this might not be the case as problems with food accessibility, affordability and availability may arise in their households. This study was aimed at assessing the components of household food security which included access, availability and utilization of food as well as factors influencing household food security among market traders in Jos north, Plateau state. This study was a cross-sectional descriptive study using a multistage sampling technique. A self-administered questionnaire and focused group discussions (FGD) were conducted for quantitative and qualitative data collection respectively. The study involved 267 participants, 148 (55.5%) were male while, 119 (44.6%) were female. About half of the participants 130 (48.7%) were food secure, 7 (2.6%) were mildly food secure, 30 (11.2%) were severely food insecure, and about 100 (37.5%) did not fit into any of these categories. Results for food utilization showed that 233 (87.3%) have good carbohydrate utilization, 114 (42.7%) have good protein utilization and 248 (92.9%) have good fruit and fiber utilization. Majority of respondents have moderate food availability 264 (98.9%). Test of association between household food insecurity access prevalence and factors affecting food security showed statistical significance occupation ( $\chi^2$  (2, N=267) = 52.474,  $p < 0.001$ ), for level of education ( $\chi^2$  (2, N=267) = 41.581,  $p = 0.014$ ), average monthly income ( $\chi^2$  (2, N=267) = 47.286,  $p < 0.001$ ), accommodation ( $\chi^2$  (2, N=267) = 8.783,  $p = 0.032$ ), difficulties ( $\chi^2$  (2, N=267) = 50.404,  $p < 0.001$ ). Test of association between household food availability and factors affecting food security showed statistical significance occupation ( $\chi^2$  (2, N=267) = 26.279,  $p < 0.001$ ), for level of education ( $\chi^2$  (2, N=267) = 32.962,  $p < 0.001$ ), accommodation ( $\chi^2$  (2, N=267) = 10.248,  $p = 0.001$ ), difficulties ( $\chi^2$  (2, N=267) = 15.404,  $p = 0.001$ ). Test of association between household fruit and fibers and factors affecting food security showed statistical significance source of income ( $\chi^2$  (2, N=267) = 41.581,  $p = 0.014$ ) Findings revealed that about half of the respondents were food secure and majority of respondents reported moderate food availability and good food utilization. The factors found to have influenced food security were occupation of household head, level of education of breadwinner, average monthly income and difficulties faced by the household like hike in food prices and insecurity.



# The Ripple Effect of Sickle Cell Anaemia: Examining the Social and Economic Impacts on the Individuals, their Families and Communities in Jos North LGA, Plateau State, Nigeria

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## ABSTRACT

**Introduction:** Sickle Cell Anaemia (SCA) is a hereditary blood disorder with significant social and economic consequences for affected individuals, their families, and communities. Understanding these ripple effects is critical for reducing stigma, improving care access, and guiding supportive policies.

**Methods:** A descriptive cross-sectional study was conducted among 285 individuals with SCA and their families, recruited from Bingham University Teaching Hospital, Jos University Teaching Hospital, and Plateau Specialist Hospital in Jos North, Plateau State, using a non-probability first-seen-first-recruited approach. Data were collected via interviewer-administered questionnaires and analysed using descriptive and inferential statistics.

**Results:** Respondents were 78.2% female and 21.8% male; 70.2% were under 18 years, and 29.8% over 18. Most were Christians (70.2%), followed by Muslims (28.4%) and others (1.4%). Average monthly income was significantly associated with household economic burden and social stigma ( $p < 0.05$ ). Over half (54.7%) reported difficulty meeting basic needs, 64.2% feared having more children, and 48.4% experienced substantial income loss from caregiving. Among respondents  $<18$  years, 50.5% reported limitations in school activities and 17.4% reported bullying. For those  $>18$  years, 52.3% experienced career limitations, 65.1% found it difficult to get a suitable romantic partner, and 36.0% said others perceived them as having spiritual problems.

**Conclusion:** SCA's impact extends far beyond clinical symptoms, significantly influencing household stability, economic security, and social integration. Effective interventions must combine medical management with community education, stigma reduction, caregiver support, and policies ensuring affordable healthcare access.



# **Study on the Prevalence, Patterns, and Determinants of Anxiety Disorders Among Adolescents in Secondary Schools in Jos, North Plateau State**

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## **ABSTRACT**

**Introduction:** Anxiety disorders are the most common mental illness worldwide affecting 301 million people. Adolescence is a critical period for emotional and psychological development making them more susceptible to mental illnesses including anxiety disorder and also making them prone to negligence.

**Methodology:** A multi-stage sampling technique was conducted with 270 participants between ages 13 to 19 who were administered a structured interviewer-administered questionnaire. Data was cleaned with Microsoft excel and analyzed using SPSS version 25.0 and was represented with tables and charts. Chi-square tests were used to assess the relationships between anxiety levels and determinants and also state statistical significance among categorical variables with level of significance taken at  $p < 0.05$ .

**Results:** The overall prevalence of significant anxiety disorder was 16%. The various patterns of anxiety disorder were assessed and panic disorder emerged the highest(36%). About 98% of participants had multiple anxiety disorder patterns with only 2% emerging with a single anxiety pattern. Academic stress and financial stress were found to be the highest determining factors of anxiety disorder among gender, age, family structure, bullying, safe environment, parental support and life events.

**Conclusion:** This study highlights the urgent need for proactive mental health intervention and policy adjustments in the educational sector to address the mental health challenges faced by adolescents.



# Quality of Sleep and Daytime Sleepiness and Their Association with Academic Performance of Students in Bingham University

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## ABSTRACT

**Introduction:** Sleep is a fundamental biological process essential for cognitive function, emotional regulation, and academic performance. This study assessed the quality of sleep and daytime sleepiness and examined their association with academic performance among undergraduate students of Bingham University, Karu Local Government Area, Nasarawa State.

**Methods:** A descriptive cross-sectional study was conducted among 416 students selected via multistage sampling across various faculties. Data were collected using the Pittsburgh Sleep Quality Index (PSQI) and the Epworth Sleepiness Scale (ESS) and analyzed using SPSS version 27.

**Findings:** Descriptive statistics revealed that 36.6% of respondents had poor sleep quality, with 28.6% reporting excessive daytime sleepiness. Additionally, 46.4% of students usually went to bed between 10 PM and 11:59 PM, while 47.8% reported sleeping for 6–8 hours per night. Regarding sleep latency, 37.7% took 11–30 minutes to fall asleep, and 14.5% experienced sleep latency over an hour. Furthermore, 34.8% experienced nighttime awakenings once weekly, and 24.6% reported waking up three or more times per week. In terms of academic performance, 39.4% of respondents had a CGPA between 3.50–4.49, while 19.3% achieved a CGPA of 4.50–5.00. A strong positive correlation ( $r = 0.85, p < 0.05$ ) was found between good sleep quality and academic performance, while a strong negative correlation ( $r = -0.82, p < 0.05$ ) was observed between excessive daytime sleepiness and academic achievement.

**Conclusion:** The study concluded that poor sleep quality and excessive daytime sleepiness are prevalent and significantly impact students' cognitive and academic functioning.

**Recommendation:** It recommends awareness campaigns on sleep hygiene, provision of mental health support, and the restructuring of academic schedules to encourage healthier sleep habits.

**Keywords:** Sleep Quality, Daytime Sleepiness, Academic Performance, Undergraduate Students, Bingham University



# Knowledge and Perception of Healthcare Providers in Tertiary Health Institutions in Plateau State Towards the Use of Artificial Intelligence in Making Medical Diagnosis

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## ABSTRACT

**Introduction:** Artificial Intelligence (AI) refers to technology that allows machines to perform tasks in a manner associated with intelligent beings. In our current world, there is a dire need to analyse complex medical data and images at a lesser time but with greater accuracy, which makes AI an important tool for health care providers. We aimed to explore the knowledge and perception of tertiary healthcare providers in Plateau State, regarding the application of AI in healthcare diagnostics.

**Methodology:** A descriptive cross-sectional study was conducted among 235 healthcare professionals in all three tertiary institutions in Plateau State via a self-administered online questionnaire. Data was analysed using IBM SPSS Version 25 and Microsoft Excel and was presented in tables and charts. Chi square test was used to test statistical significance between respondents' perception scores and their sociodemographic data with level of significance taken at  $<0.05$ .

**Results:** This study involved 235 participants, the largest percentage of participants, with 41.7% were those between the ages of 30 to 39 years old, and the group which formed the least percentage of participants, with 12.4%, were from the ages above 50 years. 68.1% had good knowledge while 10.6% had poor knowledge. Years in practice was statistically significantly correlated with perception ( $p = 0.048$ ) with practitioners who had more than 20 years of practice recording the highest good perception score (27.8%)

**Conclusion:** Majority of the participants in this study had good knowledge about artificial Intelligence and were also receptive of the idea of integrating AI into healthcare. We believe the healthcare providers of Plateau State are ready and willing to adopt AI into their profession if the tools are made available and adequate training is provided on how to best utilise these tools and we highly recommend that Artificial Intelligence-related topics should be added into the medical school and health education curriculum to begin the training process early.

**Keywords:** Knowledge, Perception, Artificial Intelligence, Medical Diagnosis, Healthcare Providers



# Students' Satisfaction with Health Services Provided at the Bingham University Health Care Center

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## ABSTRACT

**Introduction:** Student satisfaction is a critical indicator of healthcare quality, especially within university-based health centers tasked with supporting academic performance and student well-being. Despite the presence of a functional health facility at Bingham University, anecdotal reports from students suggest gaps in service delivery, including poor provider-patient communication, long waiting times, and unsanitary clinic environments. This study assessed the level of satisfaction among students with health services provided at the Bingham University Health Care Center and identified factors influencing their perceptions.

**Methodology:** A descriptive cross-sectional design was adopted using multistage sampling to select 422 students from the Nursing and Computer Science departments across 200 to 400 levels. Data were collected through structured, self-administered questionnaires and analyzed using SPSS version 27. Descriptive statistics were used to summarize responses, and Chi-square tests determined associations between satisfaction levels and independent variables such as communication, environment, waiting time, and socio-demographic factors.

**Results:** Findings revealed that although 82.2% of students had utilized the health center, only 20.5% were satisfied with provider communication, while 20.4% expressed satisfaction with the clinic environment. Waiting time satisfaction was similarly low at 22.3%. Significant associations were found between satisfaction and communication ( $\chi^2 = 73.86$ ,  $p < 0.0001$ ), physical environment ( $\chi^2 = 23.81$ ,  $p = 0.0025$ ), gender ( $\chi^2 = 10.92$ ,  $p = 0.0043$ ), academic level, and department. However, waiting time ( $p = 1.0000$ ) and age ( $p = 0.0795$ ) did not significantly influence satisfaction.

**Conclusion:** In conclusion, student satisfaction with the university health center was generally low, primarily due to poor communication and environmental hygiene. The study recommends improved staff training, better infection control, digitized administrative systems, and enhanced student engagement to foster a patient-centered culture and increase satisfaction.

**Keywords:** Student Satisfaction, Health Services, Communication, Waiting Time, Environment, Bingham University



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