

CONFERENCE ABSTRACTS

LIVE/ONSITE ABSTRACT PRESENTATION

WA 001

Evaluation of quality and adulteration with Phosphodiesterase-5 inhibitors of eleven popular male sexual-enhancing herbal products on the Ghanaian market

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Background: Herbal medicines, both local and foreign marketed for sexual-enhancing effects are highly patronised in Ghana. Reports of adulteration and their safety are a current concern.

Objective: To evaluate the quality and possible adulteration with Phosphodiesterase-5 inhibitors of some popular male sexual-enhancing finished herbal products in Accra-Ghana.

Methods: A market survey in the Adentan municipality to determine popular male sexual-enhancing finished herbal products was conducted. Four samples each of the products were purchased from four different locations and analysed as follows: packaging and labelling details, visual inspection of product, uniformity of weight of capsules, elemental analysis and detection of synthetic Phosphodiesterase-5 inhibitors in capsule content and shell and drug applicator.

Results: Eleven products were identified thus, a total of forty-four samples were analysed to reveal the following within

products and batches: inconsistencies in packaging design and labelling information, inadequate traceability information, differences in capsule shell colour and content; no weight of capsules and ingredients indicated, 72.5 % failed uniformity of weight test; lead was detected in 63.63% of samples but none were above standard limits, necessary minerals for male vitality detected in appreciable amounts; nine products (81.81%) had one or more of synthetic sildenafil, vardenafil and tadalafil in either capsule content, shell or both.

Conclusion: Majority of the products did not follow standard labelling and packaging requirements and failed uniformity of weights of content. Heavy metal detected were within limits. Majority were adulterated with synthetic Phosphodiesterase-5 inhibitors. Regulatory bodies should enforce stringent actions to ensure products are safe and meet standard quality requirements.

Keywords: Herbal medicines, sexual enhancers, adulteration, Phosphodiesterase-5 inhibitors, quality assurance

WA 002

The assessment of pharmacists' knowledge, attitude, and practice in managing patients with substance use disorders in selected public and private health facilities in Montserrado County, Liberia.

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Background: Pharmacists play a crucial role in providing healthcare interventions for individuals with substance use disorders (SUD). However, there is limited knowledge about their expertise, attitudes, and practices in this field.

Objective: This study aimed to assess pharmacists' knowledge, attitudes, and practices in SUD management. The specific objectives identify capacity gaps and barriers preventing effective pharmacist involvement in SUD management.

Methods: A qualitative research approach was used, incorporating interviews, observation, exit questionnaires, and structured surveys. The questionnaires were based on World Health Organization (WHO) indicators for service provider knowledge, attitudes, and skills.

Results: Findings revealed a significant gap in formal SUD training for pharmacists. Interviews with 30 pharmacists showed that 90% lacked specialized SUD education, consistent with prior research on pharmacy curricula. As a result, 62% rated their SUD management skills as average, and only 7% felt confident in screening for SUD.

Although 90% of participants acknowledged the importance of their role in SUD management, only 13% were familiar with

national guidelines, indicating accessibility issues. Additionally, 63% of pharmacists identified stigma as a key barrier.

Conclusion: Most pharmacists reported feeling unprepared to manage SUD patients but expressed interest in SUD training to improve their knowledge and skills. Addressing these gaps through structural reforms, standardized training, and improved access to resources will enhance pharmacists' contributions to SUD management and improve patient care.

Keywords: pharmacists, substance use disorders, knowledge, attitudes, practice

Recommendation: Accept for Podium presentation.

WA 003

Comparative quality assessment of locally available brands of cefuroxime axetil tablets in north central Nigeria.

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Background: The global market has witnessed an unprecedented increase in substandard and falsified proliferations of medicines. According to the situational data of the World Health Organization which suggest that one of every ten medicines in low- and middle-income countries is substandard or falsified. Furthermore, with the exit of many innovators pharmaceutical manufacturers from Nigeria drug market, there are many predictions of higher tendencies of escalating inflow of substandard and falsified substitutes. However, with the unrelenting efforts of regulatory agency such as NAFDAC, it has also been said that Nigeria drugs market is better than it was many years ago. Therefore, this research is imperative to confirm the vulnerability of Nigeria drugs market to substandard and/or falsified brand of Cefuroxime Axetil 500mg tablet in the North Central part of Nigeria. Especially, now that GlaxoSmithKline (GSK) - the manufacturer of innovator brand, Zinnat, has officially exited Nigeria drug market.

Objective: This study aimed at evaluating and comparing the quality of different brands of locally available Cefuroxime Axetil 500mg tablets marketed in North Central Region of Nigeria.

Methods: Ten different brands of 500mg cefuroxime axetil tablets were randomly purchased from various registered retail pharmacy outlets across North central region of Nigeria. Determination of percentage active content, weight uniformity, hardness test, friability, disintegration test were carried out using standard methods. The difference and similarity factors between innovator brand and other brands were also determined.

Results: All the ten brands (100 %) passed disintegration, dissolution, weight uniformity and assay of active ingredient test. However, only 90% of the sampled brands passed friability test as brand B1 failed. In-vitro release study revealed that 90% of the sampled products could serve as therapeutic substitutes for the innovator brand B5 based on the similarity and dissimilarity factors (f1 and f2) calculated except B3 which fell below the minimum value of 0 with f1 value of - 0.4. This study further highlights the need for manufacturers to build quality into their products during manufacture and also maintain the built-in quality from batch to batch in accordance with the principles of cGMP.

Conclusion: Majority of the brands studied (80%) passed the various tests conducted and could be considered as pharmaceutical equivalents to the innovator brand.

WA 004

Understanding patterns and determinants of polypharmacy in geriatric patients with mental health conditions in Ghana

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Background: Older adults with multiple comorbidities are at increased risk of polypharmacy, leading to adverse drug events, higher hospitalization rates, and increased healthcare costs.

Objectives: This study aimed to assess the prevalence of polypharmacy and inappropriate prescribing among multimorbid elderly patients at Tarkwa Municipal Hospital, Ghana.

Methods: A quantitative, retrospective longitudinal study analyzed 215 older adults with mental health conditions and chronic diseases. Patient data, including age, sex, comorbidities, and medication history, were extracted from hospital records. Prescribing appropriateness was evaluated using the Beers criteria, and statistical analysis examined associations between patient characteristics, polypharmacy, hospitalization, mortality, and inappropriate prescribing.

Results: Polypharmacy was most common (27.1%) among patients aged ≥ 75 years, with 17.8% experiencing hyperpolypharmacy (>10 medications). Following a mental health diagnosis, hyperpolypharmacy increased from 17.8% to 57.4%. Male patients (60%) exhibited significantly higher polypharmacy ($p=0.012$) with increasing comorbidities. Depression ($p=0.0001$), anxiety ($p=0.0003$), and dementia ($p=0.0024$) were significantly linked to inappropriate prescribing.

Conclusion: The study revealed a high prevalence of polypharmacy and inappropriate prescribing among elderly patients at Tarkwa Municipal Hospital, particularly post-mental health diagnosis.

Keywords: Older adults; comorbidities; hyperpolypharmacy; inappropriate prescribing; psychotropics; adverse drug events

WA 005

Evaluation of pharmacovigilance and factors associated with adverse drug reaction reporting among healthcare professionals at military hospitals in Lagos State, Nigeria

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Background: Adverse Drug Reactions remain a significant challenge in global healthcare, contributing to considerable morbidity and mortality. Despite advancements in pharmacovigilance, underreporting by healthcare professionals undermines the effectiveness of Pharmacovigilance systems, including those in Nigeria's military hospitals.

Objectives: This study evaluated pharmacovigilance practices and adverse drug reaction reporting among healthcare professionals in Lagos military hospitals, focusing on knowledge, attitudes, and barriers.

Methods: A descriptive cross-sectional design was employed, surveying 351 healthcare professionals across 31 military hospitals using structured questionnaires. Statistical analysis was performed to identify key trends and associations, with a significance threshold of $p < 0.05$.

Results: The findings revealed that pharmacists were significantly more likely to possess good pharmacovigilance knowledge (Odds Ratio = 4.33, Confidence Interval: 1.43-

13.07, $p = 0.009$), while younger healthcare professionals under 30 exhibited a more positive attitude toward ADR reporting (Odds Ratio = 6.60, Confidence Interval: 1.38-31.49, $p = 0.018$). However, only 40.7% of participants had ever submitted such reports, citing barriers such as inadequate training, time constraints, and limited institutional support. Most HCPs preferred electronic systems for ADR reporting over paper-based methods, highlighting a potential for leveraging digital platforms to improve PV practices.

Conclusion: Pharmacists' strong understanding of pharmacovigilance and younger healthcare professionals' positive attitudes highlight key strengths for improving ADR reporting. However, low reporting rates, driven by training gaps and institutional barriers, demand urgent attention. Additionally, leveraging digital platforms offers a transformative opportunity to improve ADR reporting and enhance medication safety.

Keywords: Pharmacovigilance, Adverse Drug Reactions, Military Hospitals, Barriers to Reporting, Electronic Reporting Systems.

Evaluating the utilization of electronic medical records and telemedicine features in mitigating medication errors in selected medical centres in Lagos State Nigeria

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Background: Medication errors are a major cause of patient harm in healthcare. The integration of Electronic Medical Records and Telemedicine offers a promising solution to mitigate these errors by enhancing medication management, tracking, and communication.

Objective: This study assessed the knowledge, awareness, and utilization of Electronic Medical Records and telemedicine among healthcare professionals in selected medical centers in Lagos State, focusing on their effectiveness in preventing medication errors and improving patient safety.

Methods: A cross-sectional survey was conducted among 334 healthcare professionals (Physicians, Pharmacists, and Nurses) using structured questionnaires. Data were analyzed with chi-square tests to examine relationships between Electronic Medical Records/telemedicine use and medication error reduction, with $p < 0.05$ considered significant.

Results: The study revealed that 94.17% of respondents using EMRs believed they helped identify potential medication errors ($\text{Chi}^2 = 63.29, p < 0.001$), while 94.46% reported reduced error incidence ($\text{Chi}^2 = 126.54, p < 0.001$). Similarly, 96.75% credited telemedicine with enabling timely error interventions ($\text{Chi}^2 = 66.08, p < 0.001$). However, barriers such as high implementation costs, resistance to change, and insufficient training were noted.

Conclusion: Electronic Medical Records and telemedicine are highly effective tools in mitigating medication errors by enhancing patient data management, communication, and timely interventions. To maximize their potential, challenges like financial constraints, workforce training, and adoption resistance must be addressed, ensuring safer, more efficient healthcare delivery.

Keywords: Medication Errors, Electronic Medical Records, Telemedicine, Patient Safety, Healthcare Professionals.