MASTER OF SCIENCE
REPRODUCTIVE HEALTH

THE INTERRELATIONSHIP BETWEEN ABNORMAL VAGINAL DISCHARGE, GENITAL HYGIENE AND SEXUAL HABITS ONG WOMEN OF REPRODUCTIVE AGE GROUP IN IBADAN, NIGERIA.

Iacane BAMPOQUE
PAU-UI-0788

REPRODUCTIVE HEALTH SCIENCE

A common clinical problem among women of reproductive age group is AVD with multiple aetiologies. Genital infections have also been known to be the most common health problem seen in women in the reproductive age group, and Nigeria, being the biggest nation of the African continent, has a gigantic sexual health problem, including HIV/AIDS. The study investigated the connection between abnormal vaginal discharge (AVD), genital hygiene, and sexual behaviour among women of reproductive age group in Ibadan Nigeria. A quantitative design was adopted in the study, where a questionnaire was administered to a sample of women of reproductive age group. The survey sought to explore the prevalence of abnormal vaginal discharge, the hygiene practices adopted by the respondents, and how these relate with their sexual habits. Data were collected using a structured questionnaire designed to capture information on socio-demographic characteristics and experience of abnormal vaginal discharge, genital hygiene practices and sexual behaviours. Completed questionnaires were collected, and data were analysed using SPSS version 25.0. Descriptive statistics, such as frequencies and percentages, were used to summarize the data while inferential statistics, including chi-square tests and correlation analysis, were conducted to explore associations between abnormal vaginal discharge, genital hygiene, and sexual habits. A total of 355 women of reproductive age responded to the questionnaire. The results showed that about 40% of participants had past history of AVD, and 21.4% are presently experiencing it. However, 59.2% of them never sought medical help, mainly due to stigma and social hurdles. About 84% used only water for genital cleansing while 35.1% of respondents lacked formal knowledge on genital cleanliness. Abnormal discharge was substantially correlated with poor genital hygiene habits but not sexual habits ($p=0.002$). This study confirmed that AVD is quite common in Ibadan and is dependent on sociocultural, economic and educational factors.

Key Words: abnormal vaginal discharge, genital hygiene, sexual habits.

HEALTHCARE PROVIDERS' KNOWLEDGE AND ATTITUDES TOWARD ABORTION CARE AT THE UNIVERSITY COLLEGE HOSPITAL, IBADAN, NIGERIA

Makelele M'yisa Amos, MD
PAU-UI-0789

REPRODUCTIVE HEALTH SCIENCE

Unsafe abortion is a major contributor to maternal morbidity and mortality in Sub-Saharan Africa, where over 70% of abortions are classified as unsafe. In Nigeria, restrictive abortion laws and entrenched sociocultural norms shape healthcare providers' knowledge, attitudes, and willingness to provide abortion care. This study assessed healthcare providers' knowledge, attitudes, and practices regarding abortion care at University College Hospital, Ibadan, using a mixed-methods approach. The quantitative surveys assessed knowledge levels among the providers, and qualitative interviews identified underlying attitudes and barriers to providing services. The findings of this study showed that 62.9% of providers demonstrated adequate clinical knowledge of abortion care, although notable gaps remained. While 86.4% supported access to safe abortion under specific conditions, personal, religious, and ethical beliefs significantly influenced their willingness to provide services. Additionally, institutional challenges and concerns about legal repercussions further disrupted the provision of services. The study reveals the necessity for tailored training programs, policy advocacy, and community engagement to address gaps in abortion care knowledge and address the influence of personal beliefs. These interventions are essential to reducing unsafe abortion rates and improving maternal health outcomes in Nigeria.

Key Words: Abortion care, Maternal health, Healthcare workers, Unsafe abortion

KNOWLEDGE, ATTITUDE, AND PRACTICE OF STATUTORY RAPE AND ITS MANAGEMENT AMONG HEALTH WORKERS IN EMERGENCY WARDS IN IBADAN, NIGERIA

MILLION TEKLAY SOLOMON
(PAU-UI-0790)

REPRODUCTIVE HEALTH SCIENCE

Statutory rape, defined as engaging in sexual relations with an individual below the legal age of consent, remains a pervasive issue worldwide, particularly among female teenagers. Despite its prevalence, it is often underreported due to inadequate legal and institutional measures. This study examines the knowledge, attitudes, and practices (KAP) of healthcare workers in emergency wards in Ibadan, Nigeria, focusing on institutional and demographic disparities. A cross-sectional study was used, and 198 healthcare workers from hospital emergency rooms participated. Structured questionnaires and in-depth interviews were used for the mixed-method data collection. A two-sample t-test showed statistically significant differences in KAP scores between doctors and nurses on statutory rape and its care. The knowledge, attitude, and practice of doctors and nurses about statutory rape and its care were compared using a two-sample t-test. The t-tests reveal statistically significant differences in KAP scores between the two groups. Each p-value for the Knowledge, Attitude, and Practice (KAP) scores is below the standard significance threshold of 0.05, indicating that the groups being compared differ meaningfully across all KAP dimensions. The mean KAP scores for doctors consistently exceed those of the Nurses, suggesting that doctors may possess a higher overall KAP (mean difference=.0771041 $t(196) = 3.7200$, $p=0.0003$). Furthermore, ANOVA was used to compare KAP scores among three hospital staff. A significant difference in KAP ratings was found between hospitals, $F(2, 195) = 28.96$, $p < 0.0001$. Healthcare workers at UCH had significantly higher KAP scores than those other hospitals (difference = 0.16, $p < 0.001$); based on the data, we reject the null hypothesis (H_0) and accept the alternative hypothesis (H_1). The study therefore, highlights disparities in KAP levels among healthcare workers handling statutory rape cases, emphasizing the need for targeted interventions, capacity-building initiatives, and strengthening institutional frameworks and training programs.

Key Words: Statutory rape, minor, age consent, knowledge, attitude, practice and management, cultural and societal barrier.

KNOWLEDGE AND ATTITUDE OF WOMEN ON POLYCYSTIC OVARY SYNDROME AS A CAUSE OF INFERTILITY IN WOMEN ATTENDING OUTPATIENT CLINICS IN KIGALI, RWANDA

Winny Clemence UWIDUTATSE
PAU-UI-0791

REPRODUCTIVE HEALTH SCIENCE

Polycystic ovary syndrome (PCOS) is a prevalent endocrine condition mostly affecting women of reproductive age and is a major factor for infertility. The knowledge and awareness of PCOS is low, generally in Rwanda. This study assessed the knowledge, attitude, and perception of Rwandan women on PCOS and its adverse impact on infertility. A cross-sectional study was conducted among 400 women who attended outpatient clinics at the University Teaching Hospital of Kigali (CHUK). Data was collected using structured interviews with a validated questionnaire. Descriptive statistics and chi-square tests were performed to examine the relationship between socio-demographic variables and knowledge, as well as attitudes toward PCOS. In total, it was found that only 36.3% of the respondents know about PCOS, while 60.8% have never heard of it. Marital status ($X^2 = 5.628$, $p = 0.018$), education level ($X^2 = 4.309$, $p = 0.039$), and household income ($X^2 = 4.255$, $p = 0.039$) were significantly associated with knowledge of PCOS. Furthermore, attitude toward PCOS was significantly influenced by age ($X^2 = 5.128$, $p = 0.024$), education level ($X^2 = 5.319$, $p = 0.013$), household income ($X^2 = 4.371$, $p = 0.021$), and place of residence ($X^2 = 4.092$, $p = 0.042$). 75.3% of respondents agreed that increasing awareness of PCOS might reduce infertility, while only 3.3% said the current awareness efforts are adequate. The study highlights a considerable gap in knowledge and awareness of PCOS among Rwandan women, thus necessitating the need for appropriate educational interventions. Sociodemographic factors of marital status, academic level, and income seem to be crucial in cultivating awareness about PCOS. Improving these disparities through community-based awareness programs and inclusion in reproductive health services will contribute to the early diagnosis and management of PCOS, thereby enhancing reproductive health outcomes in Rwanda.

Key Words: Polycystic Ovary Syndrome (PCOS), Infertility, Knowledge and Awareness, Rwandan Women

ASSESSMENT OF CONTRACEPTIVE SERVICES FOR ADOLESCENTS IN THE BURUNDIAN FAMILY WELFARE ASSOCIATION AND THE YOUTH-FRIENDLY CENTRES IN BUJUMBURA, BURUNDI

Ines NSHIMIRIMANA
PAU-UI-0792

REPRODUCTIVE HEALTH SCIENCE

Many sexually active adolescents throughout the world do not have access to modern contraception or Sexually Transmitted Infections (STI) protection, which can result in unintended births. This study evaluated the quality, accessibility, and effectiveness of contraceptive services provided to sexually active adolescents in Burundi's ABUBEF settings and youth-friendly centres in Bujumbura, Burundi. A mixed-methods study design with cross-sectional study and in-depth interviews was used, which recruited 25 healthcare providers and 25 adolescents for in-depth interviews and self-administered questionnaires to 287 adolescents and 43 healthcare providers. SPSS version 25 was used to analyse the quantitative and thematic content for qualitative data. Knowledge of contraceptive methods is inadequate among 77% of the adolescents surveyed. Use of contraceptive services by adolescents is low (13.59%). Training for adolescent contraception services were deemed inadequate by 62.79% of providers. Adolescents' sexual experience ($p < 0.001$), knowledge about contraception ($p < 0.001$), fear of side effects ($p < 0.001$), and lack of support/encouragement ($p = 0.011$) influenced their use of contraceptive services. However, service utilization is negatively impacted by poor knowledge of contraceptive options. Barriers including lack of support and encouragement and fear of adverse effects may be the cause of this. On the provider side, lack of privacy/confidentiality ($p = 0.022$) and limited availability of contraceptive methods ($p = 0.018$) are factors influencing the provision of services to adolescents. The lack of support from parents, the community, and healthcare providers, as well as the fear of side effects, prevent adolescents from using contraceptive services. Teachers, parents, and healthcare professionals are essential in helping adolescents learn about sexual and reproductive health.

Key Words: Contraceptive service delivery, adolescent, healthcare providers, access to contraceptives.

ADOLESCENT'S KNOWLEDGE AND PERCEPTIONS OF SEXUAL AND REPRODUCTIVE HEALTH RIGHTS AND ACCESS TO SERVICES IN THE GAMBIA

Binta JALLOW
PAU-UI-0793

REPRODUCTIVE HEALTH SCIENCE

Adolescence, a universal stage of human growth and development, spans the ages of 10 to 19. In the Gambia, the sexual and reproductive health (SRH) of adolescents is a substantial apprehension. They constitute 32% of the Gambia's population, with many engaging in unhealthy and risky behaviours. Hence the aim of this research is to determine adolescents' depth of knowledge and perceptions on their SRH rights and access to services in the Gambia. An analytical cross-sectional study was conducted among adolescents in two senior secondary schools. The collected data were entered into SPSS version 26 for data processing. Binary logistic regression and chi-square tests were performed to determine the factors associated with knowledge, perceptions and access to SRH services among adolescents. The significance level was $p<0.05$ at 95% confidence intervals (CIs). The results are presented as adjusted odds ratios. The mean age among the 424 participants was 17.1 years. With respect to understanding of adolescent SRH rights participants reported a low level of knowledge, and only 43.9% acknowledged having ever heard of ASRH/R. The majority of the participants reported a lack of information as their major perceived barrier in accessing ASRH services (41.5%). The study revealed that knowledge was significantly correlated with the school of participants (AOR=0.587, 95% CI: 0.355-0.971, p= 0.038). Similarly, perceived comfort in discussing ASRH was significantly linked to the participants' age, grade, school, nationality, family type and parent's level of education. The perceived barrier in accessing SRH services was associated with age and school (AOR=0.253, 95% CI: 0.107-0.601, p 0.002), and access to ASRH services was also significantly linked to age, family type and school of the participants. The participants had little knowledge about ASRH/R. Public health interventions aimed at enhancing adolescents' knowledge, perceptions, and access to ASRH services will significantly reduce unsafe sexual practices within Gambian communities.

Key Words: Adolescents, knowledge, perspectives, sexual and reproductive health rights

THE INFLUENCE OF CULTURAL PRACTICES AND SOCIOECOMIC FACTORS ON TEENAGE PREGNANCY ACROSS SELECTED PRIMARY HEALTH CARE CENTRES IN AKINYELE LOCAL GOVERNMENT AREA, IBADAN, NIGERIA

Agness SHIMILIMO
PAU-UI-0794

REPRODUCTIVE HEALTH SCIENCE

Teenage pregnancy is a major contributor to maternal and child mortality and to the vicious cycle of health and poverty worldwide and thus, requires urgent intervention. Approximately 21 million teenagers aged 15-19 years and 2 million teenagers under the age of 14 years give birth annually, with 95 % of these births occurring in developing countries. Nigeria has one of the highest teenage fertility rates in Sub-Saharan Africa however, determinants of teenage pregnancy are not well studied. Therefore, this study aimed to identify the influence of cultural practices and socioeconomic factors on teenage pregnancy across selected primary health centres in Akinyele LGA, Ibadan Nigeria. Cross section study design was used. Data were collected via a structured interview guide from pregnant teenagers, teenage mothers and married teenagers aged 13-19 years across selected primary health care centres in Akinyele local government through administering a questionnaire. The study explored the influence of cultural practices and socioeconomic factors on teenage pregnancy. Data collected was summarize in excel and transferred into Statistical Package for the Social Sciences (SPSS) version 27 for analysis. Frequency distribution was generated for all categorical variables, means, standard deviation, median and inter-quartile range were determined for all continuous variables. Chi square was used to test for the significance of categorical variables. With p value less than 0.05. Multiple logistic regression was used to identify the socioeconomic and cultural factors associated with teenage pregnancy. Over half of the respondents were either married or cohabiting, contributing to early pregnancies. Religion and peer pressure significantly impact teenage pregnancies, with most respondents reporting limited discussions about sex and contraceptives in their families. Economic hardships and lack of job opportunities also play critical roles, as the majority believe that family socioeconomic status affects teenage pregnancy. A substantial portion of respondents sees teenage pregnancy negatively, while community support for teenage mothers remains low.

Key Words: Teenage, Adolescent, Pregnancy, Cultural practices, Socio-Economic factors

PREVALENCE, PATTERN AND CORRELATES OF TECHNOLOGY-FACILITATED GENDER-BASED VIOLENCE AMONG YOUNG PEOPLE IN SOUTH-WEST NIGERIA

Costly Abosede Aderibigbe-Saba
PAU-UI-0795

REPRODUCTIVE HEALTH SCIENCE

The increased digital technology use among adolescents and young people has led to the emergence of Technology-Facilitated Gender-Based Violence (TFGBV)., This research examines adolescents and young people's understanding of TFGBV, its prevalence and pattern in Southwest Nigeria, and its effects. This is a cross-sectional study which employed a quantitative research design using online and offline questionnaires administered to young people between 15 and 24 years old. The study gathered data from online social media surveys and physical questionnaires distributed in schools and communities across six Nigerian states: Osun, Oyo, Ekiti, Ondo, Ogun and Lagos. A total of 1,261 study participants were enrolled. All research procedures followed ethical guidelines covering informed consent and confidentiality. Data analysis was done using SPSS version 25. Survey results showed that 20.40% of respondents experienced TFGBV. Facebook (55.2%), WhatsApp (55.2%), and Instagram (15.9%) were the commonest social media platforms used. Of the respondents, 56.9% knew about TFGBV, while females (587%), rural residents (61.1%), student participants (59.8%), and those with tertiary education (62.4%) reported higher awareness. The most frequently reported abuses were cyberbullying (46.7%), receiving unsolicited images (40.6%), online sexual harassment (33.0%), and hacking of personal accounts (15.5%). These abuses were seen on Facebook, WhatsApp, and Instagram among 55.2%, 55.2% and 15.9% of respondents, respectively. The main psychological effects of TFGBV included anger (42.4%), fear (28.4%), and anxiety (25.7%). The main coping strategies were ignoring the abuse (35.0%), blocking perpetrators (29.1%) and deleting social media accounts (17.5%). TFGBV reporting was low (37.70%) because many respondents did not know where or to whom to report; survivors distrusted authorities, while some believed incidents were not severe enough to warrant attention. The research shows that a high level of digital engagement is associated with increased TFGBV threats. It calls for protective policies, awareness initiatives, and better reporting systems to safeguard adolescents and young people online.

Key Words: Digital, Adolescents, Young people, and Technology-Facilitated Gender-Based Violence.

ASSESSMENT OF POST-ABORTION CONTRACEPTIVE COUNSELLING AND PRACTICES AMONG HEALTHCARE PROVIDERS IN MFOUNDI, CENTER REGION, CAMEROON.

Aicha Celess DONGMO MEGNIDONG
PAU-UI-0796

REPRODUCTIVE HEALTH SCIENCE

Post-abortion contraception when administered before women are discharged from health facilities, is highly effective in preventing unintended pregnancies and subsequent abortions. We aimed to assess the proportion of health care providers providing contraceptive counselling and methods during post-abortion care in the Mfoundi division, Centre region, Cameroon and to identify the characteristics of healthcare providers associated with these practices. A hospital-based cross-sectional study was conducted among 332 healthcare providers involved in post-abortion care from 21 health facilities (10 private and 11 public). Using a non-probabilistic sampling method, two-thirds of participants were from public facilities and one-third from private facilities. Data were collected via a pretested structured questionnaire, analysed using SPSS 23.0. Multinomial logistic regression was used to determine associated factors ($p < 0.05$). Participants included midwives (44.6%), nurses (27.7%), general practitioners (9.6%), junior residents (6.9%), obstetricians/gynaecologists (4.9%), and senior residents (4.2%). We found that 81.63% provided post-abortion contraceptive counselling among which 33.1% offered contraceptive methods before hospital discharge from the hospital. Age between 20-39 years (OR 4.6, $p = 0.009$) Training on post-abortion care (PAC) (OR 4.5, $p = 0.002$) and family planning (OR 3.8, $p < 0.001$) were significantly associated with counselling. Factors influencing contraceptive provision during PAC included the non-availability of contraceptives (OR 0.18, $p < 0.001$), awareness of the importance of contraceptives during PAC (OR 2.6, $p <= 0.001$), being an obstetrician/gynaecologist (OR 1.3, $p = 0.012$), training in family planning (OR 3.8, $p = 0.003$), and the availability of protocols in the service (OR 2.8, $p < 0.001$). This study highlights the need for strategies to increase the quality of post-abortion care, particularly the availability of contraceptives and the constant training of all the staff.

Key Words: Post-abortion Care, Contraceptive counselling, Family planning services, Contraceptive provision, Health care personnel.

DOCTOR OF PHILOSOPHY
REPRODUCTIVE HEALTH

EVALUATION OF COMMON SALT AND MONOSODIUM GLUTAMATE INTAKE IN THE PATHOPHYSIOLOGY OF TESTOSTERONE-INDUCED BENIGN PROSTATIC HYPERPLASIA IN ADULT MALE WISTAR RATS

BELLO IDRIS IDOWU
PAU-UI-0498
REPRODUCTIVE HEALTH

Benign prostatic hyperplasia (BPH) is a urological disease affecting men worldwide and a frequent factor for symptoms related to the lower urinary tract. Numerous factors, such as oxidative stress, reduced apoptosis and inflammation are associated with the development of BPH. Common salt and monosodium glutamate (MSG) are common food additives used to provide salty and umami tastes, respectively. Their intake promotes oxidative damage and systemic inflammation and can increase the risk of developing BPH. This study assessed the impact of common salt and MSG consumption on the pathophysiology of testosterone-induced BPH. This was an experimental study conducted over 60 days. Seventy male Wistar rats were randomized into seven groups of ten Wistar rats each and allowed to acclimatize to the laboratory setting for two weeks. The animals were placed on one of the seven diets__ free of MSG and salt (control), low MSG, standard MSG, high MSG, low salt, standard salt and high salt__ for 60 days. On day 33, testosterone (30 mg/kg body weight) was injected into the Wistar rats daily for 4 weeks to induce BPH. After a 12-hour fast on day 60, the Wistar rats were sacrificed to collect blood for serum PSA analysis and to excise the prostate for biochemical, molecular and immunohistochemical (IHC) studies. Each group's mean and standard deviation were computed and compared for significant differences with one-way ANOVA followed by a post hoc test (Tukey HSD) at $p < 0.05$. The groups fed MSG diets and salt diets had higher concentrations of IL-8, IL-6, and COX-2 activity ($p < 0.05$) compared with the control. The results of the IHC analysis revealed that the expression of COX-2 in prostatic tissues was moderate in the group fed a high-salt diet, whereas it was weak in the other groups. There were no statistically significant differences in prostate weight, serum PSA level and the expression of IGF-1, IL-1β, TGF-β, IL-17 and PGE2 in the prostatic tissues of the groups. The expression of the BCL-2 gene increased multiple fold in the groups fed salt diets and MSG diets. Similarly, the expression of the VEGF gene was upregulated in the group fed a low-MSG diet but decreased multiple fold in the other groups compared with the control group. The groups fed standard and high-salt diets had a significantly elevated NO levels compared with the control group, while iNOS expression was positive in all the groups. In all the groups, the activities of GPx and catalase and the concentrations of H2O2 and NADPH were not significantly different. However, SOD activity was significantly greater in MSG diet groups and in the low- and high-salt diet groups ($p < 0.05$) than in the control group. Histological evaluation revealed greater prostatic hyperplasia in the MSG and salt diet groups than in the control group. Rat feed supplemented with MSG and common salt increased inflammation and oxidative stress, but inhibited angiogenesis and apoptosis in prostate tissues. These findings suggests that the pathophysiology of testosterone-induced BPH was potentiated by the intake of these salts.

Key Words: Pathophysiology, Benign Prostatic Hyperplasia, Testosterone, Inflammation, Oxidative stress, Common salt, Monosodium Glutamate

NON-PENILE VAGINAL SEXUAL BEHAVIOUR AND ASSOCIATED HEALTH RISKS AMONG YOUNG ADULTS IN TWO TERTIARY INSTITUTIONS IN THE CENTRAL SENATORIAL DISTRICT OF PLATEAU STATE, NIGERIA

JULIANA RUME
PAU-UI-0584
REPRODUCTIVE BIOLOGY

Sexually transmitted infections (STIs) remain a major public health concern among young adults in tertiary institutions because of high-risk of unprotected sex. Some of the complications of STIs include life-threatening ectopic pregnancy, infertility in both male and females and chronic pelvic pain. Non-penile Vaginal Sexual behaviours (NPVS), including oral sex, anal sex, solo and mutual masturbation are associated with STIs. However, empirical evidence in literature on NPVS and STI among young adults in Northern Nigeria is scarce. Sexual script theory guided this study to explore pattern of NPVS, and its associated health risk among young adults in tertiary institutions in Plateau State, Nigeria. This was a mixed method study that involved focus group discussions (FGD), in-depth interviews (IDI) and a cross-sectional study among students of tertiary institutions in Plateau state, Nigeria. Qualitative study participants, were purposively selected while cross-sectional study participants were gotten by a time location sampling technique. Cross-sectional study sample size was 425 using Cochrans formula. Data were collected through a structured, pretested, self-administered questionnaire with a reliability coefficient (Cronbach's alpha = 0.86). Blood samples were collected from all quantitative study participants and serological test for STIs, HIV, HBV, HPV and CT were conducted. Ethical clearance was obtained before the study was conducted and a written informed consent was obtained from each participant. Thematic analysis was employed on qualitative data. Quantitative data were analysed using STATA 15.0. Chi-square tests and logistic regression were used to identify factors associated with history of NPVS and STI outcomes. Findings from FGD and IDI showed that participants had special and local terminologies that were used to describe NPVS behaviours. Participants engaged in different NPVS behaviours and were aware of some associated health risks. In the cross-sectional study, the mean age of participant was 23.3 years SD (2.8), majority were females 302 (71.1). Approximately 71.5% (304) had ever engaged in vaginal sex, 8.9% (38), 20.5% (87), 25.4% (108), 28.2% (120), 36.9% (157), had ever used a sex toy, engaged in anal sex, mutual masturbation, self-masturbation, and oral sex respectively. Curiosity was the most commonly mentioned motivation for engaging in NPVS. Among STI awareness, Chlamydia trachomatis was notably low 46 (12.5). Serological testing revealed prevalence rates: HIV 2 (0.5%), HBV 57(13.5%), HPV166 (39.1%), and CT 205 (55.4%). While none of the NPVS behaviours was associated with CT and HPV, self-masturbation and use of sex toys significantly increased odds of HBV infection (AOR = 15.44, 95% CI: 1.32–180.32, p = 0.029), and (AOR = 10.26, 95% CI: 1.10–95.32, p = 0.041). Participants not aware of the HBV vaccine were 98% less likely to test positive for HBV compared to those aware of the vaccine (AOR = 0.02, 95% CI: 0.002–0.15, p < 0.001). Tertiary institution students engage in NPVS behaviours which exposes them to STIs, but have low STI awareness. It is recommended that a youth-focused sexual education programmes and free STI screening campaigns should be encouraged among tertiary institutions and a policy to integrate some training into school curriculum should be encouraged.

Key Words: Non-penile vaginal sexual behaviour**,** sexually transmitted infections**,** Risk factors, young adults.

PREVALENCE, DETERMINANTS AND PREGNANCY OUTCOMES OF UNDER-NUTRITION AMONG WOMEN ATTENDING ANTENATAL CLINIC IN PUBLIC HOSPITALS IN IBADAN, NIGERIA

OCHEJA SAMUEL ENEMAKWU
PAU-UI-0172
REPRODUCTIVE HEALTH SCIENCE

Undernutrition is one of the greatest public health challenges affecting pregnant women in Africa with associated adverse pregnancy outcomes. Regular review and update of available data for appropriate intervention is necessary. The study was to determine the prevalence, determinants, and pregnancy outcomes of under-nutrition in pregnancy among women attending ANC in the selected health care facilities in Ibadan, Nigeria. A cross-sectional facility-based study was conducted among 1,162 randomly selected second trimester pregnant women who attended antenatal clinics in selected public hospitals in Ibadan, Nigeria. A prospective cohort follow-up was done for 771 women (undernourished 193 vs nourished 578) out of which 636 women (undernourished 158 vs. nourished 478) completed the study. Data was collected using a structured questionnaire. Nutritional status of the pregnant women was assessed by the measurement of the left mid-upper arm circumference (MUAC). Measurement was taken at the mid-point between the shoulder blade and the olecranon process to the nearest 0.1cm. MUAC measurement less than 23cm was regarded as undernourished while 23cm and above was regarded as normal. Minimum diversity for women (MDDW) at individual level, was measured by using the Food and Nutrition Technical Assistance III Project (FANTA) tool. SPSS version 25 was used for analysis. Descriptive and inferential analysis were done and result presented in tables, charts and graphs. The mean age of participants was 28.4years (±5.8) and average gestation age was 22.0 weeks (±4.2). The overall prevalence of undernutrition was 19.7% and a low minimum dietary diversity score was observed in 25.2%. The level of undernutrition and adverse pregnancy outcomes varies across the level of health care with the primary health care (PHC) having the highest. Mother's age, being married and parity were predictors of undernutrition. In this study, undernutrition contributed to the prevalence of adverse pregnancy outcomes such as anaemia (51.4%), postpartum haemorrhage (14.6%), low birth weight (35.2%), preterm birth (24.1%) and still birth (5.8%). One in five of all pregnant women was found to be undernourished the main predictors were, maternal age, marital status and parity. Undernutrition in pregnancy contributed to adverse pregnancy outcomes such as maternal anaemia, postpartum haemorrhage, low birth weight, prematurity, and still birth. All health stakeholder which includes the government, health workers and individual pregnant women therefore need to join hands together to prevent and control undernutrition before and during pregnancy.

Key Words: Maternal undernutrition, pregnancy, maternal outcomes, neonatal outcomes, Ibadan.

UNINTENDED PREGNANCY: MAGNITUDE, FACTORS, AND ADVERSE MATERNAL AND NEWBORN OUTCOMES AMONG WOMEN OF REPRODUCTIVE AGE IN BURUNDI

BONFILS NAHAYO
PAU-UI-0712

REPRODUCTIVE HEALTH SCIENCE

Unintended pregnancy is a serious public health concern in both industrialised and developing countries. Every year, unintended pregnancies affect 74 million women worldwide who reside in low- and middle-income countries. The unintended pregnancy rate in Burundi was 43%, and the pregnancy-related mortality rate was 334 maternal deaths per 100,000 live births for the 7 years preceding DHS-III, 2016-2017. Studies conducted on unintended pregnancy and its adverse maternal outcomes in Burundi are very limited. The study aims to determine the magnitude, factors associated with unintended pregnancy, and adverse maternal and newborn outcomes in Burundi. It is a mixed study design that uses both quantitative and qualitative methods. A prospective cohort follow-up of 841 pregnant women (15-49 years old) attending ANC was conducted for the quantitative component. The variables were measured via standardised data collection tools. We used an adapted version of the Pregnancy Risk Assessment Monitoring System (PRAMS) questionnaire as the data collection tool for our prospective cohort study to make data recording and analysis easier. Focus Group Discussion (FGD) and In-Depth Interview (IDI) were conducted for the qualitative component of the study. Recording was used for data collection using tape recording. For the quantitative study, all the data collected were cleaned and analysed using the IBM SPSS version 25.0. The univariate, binary and multivariate logistic regression analyses were performed. To account for within-subject correlation and evaluate the impact of various known factors that might affect the study's outcome, generalised estimating equations (GEE) were employed. A p-value of < 0.05 on a binary logistic regression was considered to declare statistical significance. The goodness of fit of the final model was tested by the Hosmer-Lemeshow p-value > 0.05. Data were analysed using the thematic content analysis approach using ATLAS software for the qualitative component of the study. The overall magnitude of unintended pregnancy was 29.1% among women of reproductive age attending ABUBEF clinics. Our study revealed that unintended pregnancy was a common occurrence among women who attended ANC in ABUBEF clinics. Unintended pregnancy was significantly associated with income, parity, ANC attendance, lack of knowledge about emergency contraception, and not using protective measures. Additionally, this study documented the association between specific outcomes for the mother and the newborn and the mother's intention to become pregnant. This study found that unintended pregnancy is associated with preeclampsia, preterm birth and LBW. Therefore, these high-risk groups might receive additional attention. Reducing the frequency of unintended pregnancies requires increasing women's access to maternal health services and sexual and reproductive health rights education.

Key Words: ANC, unintended pregnancy, maternal and newborn outcomes, reproductive health age, Burundi.

Word count: 476

ASSESSMENT OF SUPPORT SERVICES FOR WOMEN OF REPRODUCTIVE AGE EXPERIENCING PERINATAL DEATHS IN NAIROBI, KENYA.

EMILY WANJA KABURU
PAU-UI-0716

REPRODUCTIVE HEALTH SCIENCE

Perinatal mortality is a key indicator of maternal and newborn healthcare quality and access. Despite its significance, there is limited research on the availability and adequacy of support services for women experiencing perinatal loss in Kenya. This study explored the support services available for women of reproductive age (15–49 years) who experienced perinatal loss in Nairobi, Kenya. Specific objectives included: (1) exploring the experiences of women with perinatal deaths; (2) determining available support services; (3) identifying factors that influence access to support services; (4) identifying patterns of socio-demographic factors associated with perinatal deaths; and (5) assessing the relationship between demographic characteristics and support services received by women of reproductive age experiencing perinatal death in Nairobi Kenya. A cross-sectional mixed-methods design was used. Quantitative data were collected from 453 women who experienced perinatal death within the previous three years, against a target of 480, with a response rate of 95%. Data collection also involved 15 Community Health Volunteers (CHVs), 3 Community Health Assistants (CHAs), 3 health facilities, and 3 focus group discussions (FGDs). Quantitative data were collected electronically using Open Data Kit (ODK) and analyzed using SPSS Version 20 through univariate, bivariate, and multivariate analyses. Qualitative data were collected through key informant interviews and FGDs, and then analyzed thematically and triangulated with quantitative findings. Three qualitative themes emerged: (1) psychosocial challenges (emotional trauma and grief, reproductive pressure, broken relationships, abuse, and familial stigmatization), (2) healthcare experiences, and (3) stigma and cultural influences (societal stigma and cultural norms). Women often experienced blame, discrimination, and emotional trauma linked to cultural beliefs around perinatal loss. Formal support from health facilities and community health structures was limited, while informal support from family and friends was robust. Serious concerns were raised about the quality of care, the competence of healthcare personnel, and the overall management of health services. Marital status, education level, age, and income had a significant impact on access to support services. Women experienced discrimination, stigma, abuse, and trauma. These challenges are rooted in the widespread societal belief that women are solely to blame for perinatal loss. Additionally, factors that negatively influenced support services were more common compared to those that positively influenced them. Support services from formal health systems were inadequate for women; however, informal social networks provide essential emotional support. Perinatal deaths cut across all demographics, but the trend was more conspicuous among married women. There is a pressing need to develop comprehensive support mechanisms that include policy guidance, trauma-informed care, health worker training, stigma reduction, and community-based support structures.

Key Words: Perinatal Loss, perinatal mortality, perinatal death, Stillbirths, Neonatal deaths, perinatal support services, women of reproductive age, Nairobi

SELF-CARE INTERVENTIONS FOR SEXUALAND REPRODUCTIVE HEALTH IN RWANDA: PERSPECTIVES OF COMMUNITY PHARMACISTS AND PHARMACY-BASED SERVICE USERS: A MIXED METHOD STUDY

NDAYISHIMYE SAMUEL
PAU-UI-0714

REPRODUCTIVE HEALTH SCIENCE

Self-care interventions for sexual and reproductive health (SRH) empower individuals to make their own decisions about contraception, test for sexually transmitted diseases, manage abortion and self-sample for human papillomaviruses. The role of community pharmacists in promoting access to and the use of self-care interventions has been underutilized by governments and policymakers, despite their being the most easily accessible healthcare providers to the public and their flexible working schedules. This study aims to evaluate the extent of the availability of self-care products for SRH and explore the perceptions and attitudes of both community pharmacists and users of pharmacy-based SRH services. A cross-sectional mixed-method design employing both qualitative and quantitative methods to provide more understanding of the utilisation of self-care tools and equipment for SRH services in Rwanda was used to collect data from community pharmacies across the country. All the pharmacists working in community pharmacies who consented to participate in this study were recruited. The data were analysed using IBM SPSS Version 25 and NVivo for quantitative and qualitative data, respectively. Univariate analysis was used to generate frequencies and means of the sociodemographic characteristics of the participants, whereas bivariate analysis and multivariate analysis were used to measure the associations between the outcome variables and explanatory variables. Data were considered statistically significant at a P value < 0.05. Rwandan community pharmacies had widespread availability of SRH products in extent ranging from 82.3% to 97.3% except for ovulation tests, which were less prevalent at 28.4%. Community pharmacists had confidence and positive attitudes in dispensing them, while users of pharmacy-based SRH services appraised community pharmacy services for easy accessibility, privacy, affordability and fast service delivery. However, the lack of private consultation rooms and limited in-service training of community pharmacists has hindered effective service delivery.

Key Words: Self-Care Interventions, Reproductive Health, Sexual Health, Community Pharmacist, Rwanda

Word Count: 294

INTEGRATION OF CERVICAL CANCER SCREENING INTO PRIMARY HEALTH CARE SERVICES: STATUS, UPTAKE, OPPORTUNITIES, AND CHALLENGES IN PUBLIC HEALTH CENTERS IN ETHIOPIA

RAHEL NEGA KASSA PAU-UI-0713 REPRODUCTIVE HEALTH SCIENCE

Cervical cancer continues to be a significant public health issue in Ethiopia. Integrating cervical cancer screening (CCS) services into primary health care services is being used as a key solution to increase service utilization and reduce morbidity and mortality among women. However, evidence on the status of integration of CCS into primary health care services is very limited. Hence, this study aimed to assess the integration of CCS into primary health care services, uptake of screening among women, the opportunities for, and challenges to, the delivery of the integrated service in public health centers in Ethiopia. Framework by Jonna Briggs Institute was employed to design the scoping review. A mixed study design using quantitative and qualitative methods was employed for the primary research. A multi-centered cross-sectional study design was adopted for the quantitative part of the research while qualitative descriptive study design was employed for the qualitative part. The study involved 35 health centers (HCs) and 1368 sexually active women aged 30 to 49 visiting primary health care services at HCs in Addis Ababa, Ethiopia. The qualitative research included 44 study participants. CCS service availability and readiness at the health centers were determined and analyzed using descriptive analysis. The study utilized Kruskal-Wallis H-test to compare CCS service readiness across different sub-cities. Facility- and individual-level data were linked to check the relationship between the readiness of the HCs for CCS services and service utilization. Integrated CCS service utilization among eligible women was evaluated. A multivariable logistic regression model was utilized to determine factors associated with integrated CCS service utilization at a p-value < 0.05. Findings were presented using adjusted odds ratios (AOR) with 95% confidence interval. A directed content analysis was utilized for the qualitative study using NVIVO software. Facilitators and barriers to integrating CCS services were presented based on the socioecological model. The scoping review identified that most (40%) of CCS service was integrated in HIV clinic. The overall acceptance of integrated CCS services among women was also found to be high. This study revealed that 94.7% of healthcare facilities offer CCS services, with 77.1% ready to provide service. The Kruskal-Wallis H-test showed no significant difference (p=0.5) in readiness scores across sub-cities. Only 15.6% (95% CI 13.7-17.6) of women utilized the CCS that was integrated into the primary health care services that they initially sought. Integrated CCS service utilization was 63% less likely among women who visited HCs ready to deliver the service than those who visited HCs not ready enough. Being single and divorced, attending higher education, being in the richest wealth index, having favorable attitude towards CCS were associated with utilization of CCS, while preference of a specific gender of HCPs, and failure to service recommendation were associated with non-utilization of CCS. Misconceptions about CCS, lack of knowledge, lack of regular supervision, and assessment of the integration course were some of the qualitatively identified barriers to running the program. Most public HCs in Addis Ababa were ready for integrated CCS service provision, but the utilization of the service among eligible women attending these HCs was low. Lack of service recommendation, poor knowledge of, and unfavorable attitude towards CCS among women, marital status, education, wealth, and preferred gender of HCPs were associated with service utilization. Health care providers should actively recommend the service during consultations, emphasizing its importance for early detection. Refreshing training programs for HCPs should also be designed. The service should be advocated by influencers like survivors to dispel myths and misconceptions. Monitoring and evaluation systems should be implemented, while support groups should be established for women to share experiences and encourage one another. A

supportive environment in clinics where women feel comfortable discussing their concerns about CCS will promote utilization of the readily available service.

Key Words: Integration, cervical cancer screening, availability, readiness, primary health care services, uptake, Ethiopia

PREVALENCE, ASSOCIATED FACTORS, AND QUALITY OF CARE FOR MATERNAL MENTAL ILLNESS IN FORMAL AND INFORMAL HEALTH CARE SETTINGS IN SOUTH-WESTERN UGANDA

Nakidde Gladys PAU-UI-0586 REPRODUCTIVE HEALTH SCIENCE

Maternal mental illnesses (MMIs), particularly depression and anxiety, are major contributors to maternal and child morbidity and mortality. Improving maternal and child mental health outcomes requires that maternity care providers expand their services to include identification and management of MMIs during the antepartum and postpartum periods. This study aimed to assess the prevalence of perinatal depression and anxiety, identify associated factors, and evaluate the quality of care provided for MMIs in both formal and informal settings in southwestern Uganda. A multistage mixed-methods design was employed to obtain both quantitative and qualitative data. The study was conducted in selected primary and referral health facilities and surrounding communities. Participants included pregnant and postpartum women, women who had recovered from MMIs, family caregivers, healthcare providers, and complementary and alternative medicine (CAM) practitioners. Depression was assessed using two validated tools: the Edinburgh Postnatal Depression Scale (EPDS), which evaluates self-reported symptoms over the past week, and the Patient Health Questionnaire-9 (PHQ-9), which assesses depressive symptoms over two weeks. Anxiety was assessed using the Generalized Anxiety Disorder 7-item scale (GAD-7), and the EPDS anxiety subscale (EPDS-3A). The quality of care was assessed through facility evaluations using the Assessment of Chronic Illness Care (ACIC) tool, women's perspectives on the quality of care, care experiences of women who had recovered from MMIs and health worker performance in identifying and managing MMIs, and interviews with stakeholders. Among 517 women aged 15.0 to 34.9 years, the prevalence of perinatal depression was 10.6% (EPDS) and 36.4% (PHQ-9). Antepartum depression was reported at 33.1% (PHQ-9) and 9.9% (EPDS), while postpartum depression was 40.9% (PHQ-9) and 10.8% (EPDS). For anxiety, the overall prevalence was 1.7% (GAD-7) and 9.1% (EPDS-3A), with antepartum anxiety at 1.0% (GAD-7) and 10.2% (EPDS-3A), and postpartum anxiety at 3.0% (GAD-7) and 7.4% (EPDS-3A). There was a strong association between perinatal depression and anxiety. Several factors were associated with perinatal depression. Stressful life events, and a history of mental illness, were significant predictors in antepartum and postpartum periods. For anxiety, significant associations were found with a history of mental illness and being in a polygamous marriage. Postpartum anxiety shared these predictors, suggesting consistent vulnerabilities. The study revealed serious gaps in the quality of care. Health facility assessments showed that over 82% lacked the capacity to manage MMIs, as indicated by low ACIC scores. Only 33.3% of women who screened positive for MMIs were identified by health workers, with just 27.1% receiving psychological interventions and only 8.3% receiving medication. Notably, 52.1% of the affected women did

not perceive themselves as ill, complicating detection and care. Healthcare providers reported several barriers to effective MMH care, including staff shortages, lack of training, and communication challenges. Many women and caregivers attributed MMIs to nonmedical causes like witchcraft, ancestral spirits, or family disputes, which influenced care-seeking behaviors. Consequently, while hospitals were often the first point of care, many women later sought help from informal providers, such as religious leaders or traditional healers. Approximately 10% of perinatal women in southwestern Uganda experience depression, and 2% experience anxiety. Antepartum and postpartum periods carry different burdens, with shared predictors like a history of mental illness and stressful events playing a crucial role. The findings underscore the association between depression and anxiety, highlighting the need for integrated screening approaches. Despite the prevalence, quality of care remains inadequate due to poor detection, insufficient service delivery, and limited recognition by affected women. Cultural beliefs and social perceptions further complicate access and continuity of care, prompting women to alternate between formal and informal care systems. The study calls for urgent capacity-building initiatives for healthcare providers, particularly in mental health screening and management. Moreover, it emphasizes the importance of raising community awareness about MMIs to promote early detection and reduce stigma thereby improving maternal mental health outcomes in this setting and similar contexts.