screening are currently lacking. This study examined the association between risky sexual behavior and cervical cancer in screening among a representative sample of women in Kenya.

**Methods:** This descriptive cross-sectional study utilized secondary data from the 2014 Kenya Demographic and Health Survey to examine 6,126 sexually active women who reported ever hearing of cervical cancer. The main outcomes of interest were self-reported cervical cancer examination, including Papanicolaou (PAP) test or visual inspection with acetic acid (VIA) or with Lugol's iodine (VILI).

Findings: Overall, 20.3% of the study sample reported having cervical cancer examination. Approximately 13.1% of the participants were involved in risky sexual behavior. Significantly lower proportion of women engaged in risky sexual behavior reported having cervical cancer examination (14.4% vs. 21.2%; p=0.001). In the multivariable model, we found a significant interaction between risky sexual behavior and marital status on cervical cancer examination. Among women who were married/living together, risky sexual behavior was negatively associated with cervical cancer examination, independent of confounders such as age, education, household wealth index, parity, type of residence, total life time number of sex partners, age of sexual debut and access to health facilities (Odds Ratio, 95% Confidence Interval) (0.43, 0.24 -0.76; p=0.004). Similarly, married/living together women who were involved in risky sexual behavior were less likely to have visual inspection with VIA or VILI (0.41; 0.19-0.90; p=0.027). However, we were unable to detect any significant association between risky sexual behavior and having PAP test.

**Interpretation:** With increasing rates of cervical cancer in low-resource settings, it is critical to identify populations at increased risk of infection and provide effective screening and follow-up services.

Source of Funding: None.

**Abstract #:** 1.017\_INF

# The Perception and Management of Acute and Chronic Pain in Rural Ghana

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**Background:** This article describes the perception of and management for acute and chronic pain experienced by residents of the Barekese sub district of Kumasi, Ghana. We were interested in understanding what types of pain were experienced by Ghanaians, how it affected their daily lives, and what they did to manage it.

**Methods:** We performed field research in health fairs held in various locations. We also sought to interview participants in their homes in door-to-door interviews. The interviews were performed using a modified form of the "Brief Pain Inventory" (Cleeland 1991) which is used widely to assess pain. The interviews were subsequently coded for interpretation of the data.

**Findings:** A myriad of types and intensities of pain are pervasive throughout the Barekese sub district regardless of any specific demography. Of the 618 participants interviewed, 63.84% reported

experiencing acute or chronic pain in the past 24 hours. The most reported locations of pain were the lower back (27.95%), head (11.79%), and abdomen (10.51%). Additionally, 49.75% reported experiencing pain that moderately or severely interfered with their enjoyment of life. Furthermore, 83.16% of those experiencing pain used some form of intervention for relief of pain.

**Interpretation:** As there have been very few articles to address an understanding of pain experienced by Ghanaians, more research is needed to further identify the overarching national problems of pain amongst Ghanaians. Published research has also contributed little to assessing realistic access to pain management in the form of medical or pharmaceutical intervention.

Source of Funding: University of Utah.

**Abstract #:** 1.018\_*INF* 

### High Ambient Temperatures as A Cause of Neonatal Fever? Investigating the Association Between Environmental Temperature and Newborn Body Temperature

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**Background:** Fever in newborns is highly concerning for serious infections, prompting clinicians to perform a workup and initiate antibiotic treatment. High environmental temperatures during summertime may be associated with non-infectious temperature elevation in newborns, yet little is known about the prevalence of fever during that season.

Our goal was to determine the prevalence of elevated body temperatures of asymptomatic infants <3 mo during routine exams in high ambient temperatures during summer in India.

**Methods:** The study took place in Mota Fofalia Pediatric Center, in Gujarat, India and included randomly selected infants <3mo who received routine (non sick) newborn care in the postnatal ward or during routine post-hospitalization health checkups the home of the child. During encounters the following measurements were taken: weight, heart rate, ambient temperature of the room, rectal temperature, and presence of danger signs. Infant's vaccination and mother's infection status were abstracted from the medical record. Reporting is descriptive.

**Findings:** 81 environmental and body temperature measurement pairs were obtained in 41 children: female: 20 (49%); mean age: 7 days (range: 0-42 days). The average environmental temperature was 35.9°C (Range: 34.4-40.4°C); the mean rectal temperature in infants was 37.6°C (Range: 36.9-39.8). 14/41 (34%) of children were measured febrile >38°C with 19/81 (24%) of rectal temperatures elevated at 38.0°C or above (Range: 38.0-39.8°C). Ambient temperatures in febrile vs. afebrile measurements were not significantly different (36.1°C vs 35.8°C; p>0.2). Febrile vs afebrile children did not differ with regards to age, birth weight, and vital signs (p>0.1). None of the 41 children exhibited signs of systemic infection; 2/41 infants received systemic antibiotic therapy: one febrile for maternal fever, one afebrile for conjunctivitis). All children were well and alive after 1 week.

**Interpretation:** Elevated body temperatures in asymptomatic infants less than 3 mo of age are common in high environmental temperatures. Further studies are needed to determine the clinical implications on this finding.

**Source of Funding:** None.

Abstract #: 1.019\_INF

## Knowledge and Perception of Self Medication by the People in Mbarara Municipality

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**Background:** Self Medication (SM) is one of the key factors contributing to Antobiotic resistance. In 2012, the prevalence of antimicrobial SM in developing countries was 38.8%. A study done in 2014 showed that 75.7% of the people in Northern Uganda practice SM. WHO recommends both dispensing and using of antibiotics only when prescribed by a certified health professional.

**Methods:** This cross sectional study was conducted among adults aged 18 years and above attending any of the four randomly selected community Pharmacies for antibiotics in Mbarara Municipality in May, 2015. Participants were interviewed using an interviewer-administered questionnaire. Data was collected on socio-demographic characteristics, knowledge on SM, presenting symptoms and reasons for SM. Data was analysed by computing frequencies, percentages for variables, and running descriptive statistics on all variables. Ethical approval was sought from the Faculty research and ethics committee of Mbarara University of Science and Technology.

**Findings:** The mean age of the 104 participants was 32.4 years, 48 males and 56 females. 87 (83.6%) had no prescriptions, 76 (73.1%) had ever participated in SM, 18 (17.3%) never had SM and 2 (1.9%) were not sure. The majority, (57.2%) reported to have at least some knowledge about SM. There were significant relationships among the knowledge about drug, level of education, severity of illness and income with SM. The commonly self-medicated antibiotics were Amoxicillin (47.7%) and Metronidazole (30.5) and Cotrimoxazole (11.1%). Majority of the participants (79.2%) did not know the phenomena of potential for anti-biotic resistance with SM. They also perceived SM as being more beneficial as compared to the risks.

**Interpretation:** Many people have insufficient knowledge about SM, especially the risks. Massive sensitization should be done by the Ministry of health and community pharmacies should be involved in this campaign. National Drug Authority should enforce strict laws on drug outlets in such a way that antibiotics are not dispensed without prescription. Cost effective drugs should be made available in public health facilities and be accessible by the patients.

**Source of Funding:** None.

Abstract #: 1.020\_INF

## Age of Menopause and Menopausal Symptoms in HIV Infected Women

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**Program/Project Purpose:** Of the 37 million persons living with HIV globally, 52% are women. Combination antiretroviral therapy (cART) has resulted in reductions in HIV-associated morbidity and mortality dramatically improving life expectancy. Most HIV infections occur early in reproductive life with the potential to impact reproductive health and aging. For women with HIV this infection appears to accelerate menopause, leading to adverse hypoestrogenic consequences.

**Structure/Method/Design:** A PubMed review of articles and web reports were conducted on menopause and health implications in HIV infected women.

Outcome & Evaluation: Age of natural menopause is determined by demographic (education, race, ethnicity), reproductive (parity, OC use, fibroids), familial, genetic and lifestyle factors (physical activity, weight, diet). Improper treatment of HIV, especially among Ugandan women, also affects age of natural menopause. Menopause among non-HIV-infected white, Hispanic women is on the average 51 years, and that of African American women is 49 years while mean age of menopause in HIV-infected women is 47-48 years. Various hypotheses exist to explain this difference and include the following: 1) viral influence on HPG axis, 2) immune dysregulation as sequela of viral infection 3)Adverse effects of cART and 4) persistent inflammatory state associated with chronic HIV affecting the neuroendocrine axis. Modifiable risk factors such as smoking, nulliparity and low BMI are also associated with lower age of menopause and are commonly reported in women living with HIV (WLHIV). In the general population older age at menopause confers health benefits as a result of protective functions of estrogen. The repercussions of early age of menopause in the HIV infected population are clinically important; this persistent state of hypoestrogenism subsequently confers increased risk for cardiovascular diseases, osteoporosis, infertility, and psychosocial impairment.

**Going Forward:** Menopausal sequela in the HIV infected population often go unrecognized by both healthcare providers and women themselves. Increased health risks secondary to premature menopause can have a tremendous effect on the health of this population in addition to the greater health care system. Focus on identifying those with premature menopause within the HIV infected population with an attempt to mitigate associated health risks should be incorporated into routine HIV care.

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### Perceived Cost Advantages and Disadvantages of Purchasing HIV Self-Testing Kits among Urban Tanzanian Men: An Inductive Content Analysis

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