

**Interpretation:** This population experienced very high rates of intimate partner violence and depression, and they were strongly associated. Interventions to reduce IPV may lower the burden of depression among adolescent girls and young women.

**Source of Funding:** Evidence for HIV Prevention in Southern Africa (EHPSA) and Mott MacDonald.

**Abstract #:** 1.005\_WOM

### Availability of Essential Drugs and Services for Children and Pregnant Women in the Barakese Sub-District of Ghana

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**Background:** Forty seven percent of the population in Ghana lives in rural areas; centralization of the health system in urban and cities has resulted in the provision of limited health services in most rural communities. Vast disparities exist between the infant, under-five and maternal mortality rates between urban and rural communities. The World Health Organization (WHO) has defined a set of essential medications to prevent the most common complications of the puerperium and infancy and that are critical to best outcomes. We set out to evaluate the availability of the WHO essential health service and drugs for pregnant women and child under-five years in the rural Barekese sub-district.

**Methods:** A cross-sectional survey of the WHO essential drugs and health services in the Barekese sub-district of Ghana was conducted in July 2016. Pharmacy and clinical staff were verbally interviewed and all recorded medications were inspected and tracked by trained interviewers. Data was collected using mobile tablets.

**Findings:** We visited 19 total sites with pharmacy services. There were a total of 18 medications for children under five assessed and 25 for essential maternity care. Ten towns were visited that had pharmacy, Community Health Compounds, maternity homes, and Clinic services. One hospital located close but not within the sub-district was assessed as many residents access care at this location.

In the Barekese sub-district, 20% of essential medications for maternal care are unavailable in the locations surveyed and 22% were unavailable for children. Six of 19 locations survey offered maternal delivery services, 4 of 10 communities had delivery services.

Locations providing maternity home services had more of the essential medications available. Within the locations with maternity care facilities had from 20–44% of the recommended maternity care medications and 33–78% of the recommended child medications. St. Patrick's Hospital had 56% of maternal medications and 50% of child medications available.

**Interpretation:** Essential medications for women and children under five as defined by the WHO are lacking in the rural Barekese sub-district. To reduce infant and under-five mortality rate as well as maternal mortality rate attention should be paid by the Ghana Health System to ensuring full access to medications for best outcomes.

**Source of Funding:** None.

**Abstract #:** 1.006\_WOM

### 'Victims' and 'Perpetrators' of Intimate Partner Violence among Young Persons in a high HIV Burden Rural Community in Western Kenya, 2014

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**Background:** Intimate partner violence (IPV) can lead to sexually transmitted infections, including HIV. We set out to assess the prevalence of IPV among young persons in Siaya County, a high HIV burden county.

**Methods:** A large cross-sectional bio-behavioural HIV sero-prevalence survey was conducted among persons 13 years and older in Siaya County, western Kenya in 2014. Our analysis was limited to persons aged 15–24 years who had been sexually active in the past year. Participants were described as 'IPV-victims' or 'IPV-perpetrators' if they had been physically hurt by, or had physically hurt, their sexual partner in the past year respectively. Logistic regression was used to describe factors associated with being IPV-victims and IPV-perpetrators.

**Findings:** Of 1959 participants interviewed, majority were aged 20–24 years (84%), female (60%), had secondary level education (68%), single (51%), employed (54%), had  $\geq 3$  lifetime sex partners (48%), had one sex partner in the past year (86%), did not use condom at last sex (57%), had been tested for HIV in the past year (68%) and, self-reported a negative HIV status (97%), had not taken alcohol at last sex (97%) used mind-altering substances in the past year (98%) or ever been forced to have sex (6%). A minority reported partners who had, taken alcohol at last sex (4%), and had used mind-altering substances in the past year (3%).

147 (6%) were IPV-victims; they were significantly more likely to, be female (OR 6.6 95% CI 3.0–14.3), married, (OR 3.2 95% CI 1.9–5.6), to have ever experienced sexual violence (OR 3.2 95% CI 1.9–5.5) and to have partners who consumed alcohol before last sex (OR 3.2 95% CI 1.2–8.7) or used mind-altering substances (OR 2.4 95% CI 1.1–4.9).

78 (3%) were IPV-perpetrators; they were significantly more likely to, be employed (OR 1.8 95% CI 1.0–52.4) and, have lower level of education i.e. primary level education compared to tertiary education (8.9 95% CI 1.5–52.4). The relationship between male gender and IPV perpetration did not achieve statistical significance (OR 2.3 95% CI 0.9–5.4,  $p=0.06$ ).

**Interpretation:** Different intersectional risks for HIV exist among young women. Multi-sectoral approaches to address IPV are called for.

**Source of Funding:** U.S. Centers for Disease Control and Prevention (CDC) Grant Number 5419GH000041.

**Abstract #:** 1.007\_WOM

### Patterns in Personal and Home Care Products along Pregnancy in Puerto Rican woman from the Northern Karst Region: The Role of Socio-Demographic Characteristics

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**Background:** A diversity of Personal and Home Care Products have been developed along the years, with the purpose of making our lives convenient and pleasant. Nonetheless, a concern has emerged in the scientific community for the study of chemicals substances used in personal and home care products regarding their potential for developmental health risks; specially in vulnerable populations such as pregnant woman. The purpose of this study was to describe the pattern of personal and home care products used by Puerto Rican woman along pregnancy and the role played by socio-demographic characteristics in their usage.

**Methods:** Usage patterns of personal and home care products were collected through the Product Use Questionnaire at three different times during pregnancy for a cohort of 651 pregnant women who participated in the 'Puerto Rico Testsite for Exploring Contaminants Threats'. Product Use Questionnaire acquires information of the use of products during the last 48 hours. We described the use and thorough STATA V13 we split groups of personal and home care products commonly used.

**Findings:** Meaningful results were shown in terms of determinants of health. Selected products were constantly used over time while other products declined with advancing pregnancy.

**Interpretation:** This is the first study that tracks personal care products across pregnancy in Puerto Rico, and evaluates socio-demographics characteristics as determinants of health. This information it's the first step into an exposure assessment and in the future could be useful for regulatory agencies when setting safety guidelines for product use.

**Source of Funding:** PROTECT P42ES017198.

**Abstract #:** 1.008\_WOM

### **Uptake of Post-abortion Care (PAC) Services and Acceptance of Post-Abortion Contraception in Remote Areas of Puntland, Somalia**

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**Program/Project Purpose:** Abortion-related morbidities account for 7.9% of the burden of maternal death globally. In humanitarian settings, access to post-abortion care (PAC) services are extremely limited. Improving access to PAC and post-abortion contraception for crisis-affected women is crucial for preventing maternal mortality and morbidity.

Puntland, Somalia has high maternal mortality, extremely low modern contraceptive prevalence, and limited access to PAC services, despite high rates of unsafe abortion.

In 2013, Save the Children (SCI) introduced a comprehensive program in Puntland using task-shifting and capacity-building of mid-level service providers to administer PAC services via manual vacuum aspiration (MVA) and Misoprostol in low-resourced crisis settings. PAC implementation was complemented by improvements in infrastructure, supply chain management, and community mobilization.

Our programmatic research documents results and learning from the implementation of PAC services in a protracted crisis in Puntland, where conservative Muslim culture can create barriers to the accessibility of PAC.

**Structure/Method/Design:** Working within four government health facilities serving a population of 87,704, a high proportion IDPS, SCI sought to test if their comprehensive PAC model could generate demand for and effectively deliver high quality PAC services in a conservative humanitarian setting.

All clients who accessed PAC services at SCI supported facilities from January 2013 to December 2015 were included in this analysis.

**Outcome & Evaluation:** The average number of monthly PAC clients increased by 90% between 2013 and 2015 (from 20 to 38). Among all PAC clients, 98% were counseled for post abortion contraception and 88% accepted a method before discharge; this is beyond the global standard of 80%.

Our data shows that comprehensive PAC services can be implemented in an unstable and conservative setting where abortion and modern contraception are often stigmatized by communities, health workers and policymakers. The steady increase in PAC service utilization at the supported health facilities shows that through a well-implemented program model, acceptance and uptake of PAC can increase even in protracted humanitarian settings.

**Going Forward:** Further regression analyses will be conducted to determine if there are differences in PAC use and post-abortion contraception uptake by age.

Due to the success of this program, advocacy will continue at a national level to ensure that quality PAC services are more widely available.

**Source of Funding:** None.

**Abstract #:** 1.009\_WOM

### **An Ultra-Low Cost Uterine Balloon Tamponade Package Saves Lives among Women with Advanced Shock from Uncontrolled Postpartum Hemorrhage in Low Resource Settings**

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**Background:** Advanced shock from uncontrolled postpartum hemorrhage (PPH) is the leading cause of maternal mortality in low- and middle-income countries, with 54,000 deaths in sub-Saharan Africa alone in 2015. First-line treatment for PPH includes administration of uterotonic agents, however, when hemorrhage persists, alternative methods are often employed, including aortic compression, uterine balloon tamponade (UBT), and surgical interventions such as B-Lynch compression sutures and ultimately hysterectomy. In low-resource settings, access to emergency surgical services is often limited or non-existent and many women lose their lives due to uncontrolled hemorrhage.