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**Background:** Access to breast cancer screening in China is primarily limited by the shortage of qualified radiologists in primary hospitals. Automated Breast Ultrasound System (ABUS) is a potential method to alleviate current shortages in accessible breast cancer screening. This study aims to evaluate the effectiveness of ABUS by comparing it with Hand Held Ultrasound (HHUS) and Mammography (MAM).

**Methods:** This study takes place at 3 cancer hospitals and 2 general hospitals. Women aged 30–69, who visited breast surgeons, without visible, suspicious signs of breast cancer and had signed Informed Consent Form were eligible for HHUS and ABUS, and women older than 40 also received MAM. All images were interpreted by qualified doctors based on Breast Imaging Reporting and Data System (BI-RADS). Categories 4–5 were considered to be “suspicious” lesions. The consistency rates and Kappa statistics were calculated to assess the reliability of ABUS compared with HHUS or MAM in each age or hospital group. Participants were divided into four groups by the age of ten, and ABUS was compared with MAM in the older groups (>40 years old) only.

**Findings:** By taking unilateral breast as the unit of analysis, we have acquired 1734 results for HHUS and ABUS, and 1108 results for MAM. The consistency rates in each age group between HHUS and ABUS were 95.37%, 95.97%, 96.07% and 92.78%, and the Kappa values were 0.79, 0.88, 0.89 and 0.81, respectively; The consistency rates between MAM and ABUS were 92.12%, 92.41% and 93.89%, and the Kappa values were 0.74, 0.77 and 0.83 respectively. In the cancer hospitals, the consistency rates between HHUS and ABUS or MAM were 95.61% and 93.33%, and the Kappa values were 0.87 and 0.81; while in the general hospitals, the consistency rates were 95% and 90.14%, and the Kappa values were lower (0.71 and 0.55).

**Interpretation:** Reliability was observed when comparisons were made between each age group. ABUS images can be collected by technicians and interpreted by qualified doctors. Considering the absence of qualified radiologists, ABUS may play an important role in general and primary hospitals. Other clinical performance indicators of ABUS, including sensitivity and specificity, need to be further demonstrated.

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**Abstract #:** 1.026\_WOM

### Prevalence of Teenage Pregnancy at Saint-Nicolas Hospital in Saint-Marc, a Community Hospital in Haiti

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**Background:** Teenage pregnancy is a significant public health problem. It affects 10% of births worldwide and has harmful health effects on mothers and newborns. Additionally, it is stigmatized in many countries, resulting negative socioeconomic consequences. Several risk factors have been identified, however none of the

previous studies conducted in the Caribbean explored the role of Carnival. Carnival is often thought to be conduit for unplanned sexual encounters. This study aimed to determine the proportion of teen pregnancy at Saint-Nicolas Hospital (HSN) broadly, and at the different points were the pregnant woman (PW) sought care as well as testing whether the proportion increased during the carnival period.

**Methods:** This cross sectional study included PW seen from October 2013 to September 2014 in HSN for antenatal care, delivery and post abortion care. These women were classified according to the first service received. Teenage pregnancy was defined as pregnancy in a woman under 20 years. Data on their last menstrual period was used to determine the quarter in which the women became pregnant. The carnival period included January to March. Data were extracted from the register, entered into Microsoft excel 2013, and analyzed using Epi Info TM 7 and SPSS 20. We report on proportion of all pregnancies involving teenage pregnancies and used chi-square to test statistical significance of difference in proportions of teenage pregnancies by month of conception and type of service.

**Findings:** Among 5232 registered pregnancies, 12.82% involved a teen pregnancy. This prevalence was 10.54% among the 2391 woman seen in the delivery service, 14.22% among the 2455 seen for antenatal care, and 18.13% among the 386 seen for post abortion care ( $p < 0.0001$ ). Based on the quarter when women became pregnant, proportion of teen pregnancy varied from 13.34% to 14.84% during the carnival period ( $p = 0.97$ ).

**Interpretation:** The proportion of teenage pregnancy among all pregnant women seeking services in HSN is slightly higher than the global average. A larger proportion were teenage pregnancies in the post abortion service than the other two, but there was no association with carnival period. Then, it is important to sensitize the population about it throughout the year.

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**Abstract #:** 1.027\_WOM

### Rates of Viral Suppression among HIV-positive Women in Rural North-central Nigeria

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**Background:** The effectiveness of antiretroviral drugs in prevention of mother-to-child transmission (PMTCT) and suppression of viral load (VL) is well-documented. In addition, viral suppression is in line with the 90-90-90 global strategy of HIV elimination. To determine adherence and effectiveness of PMTCT treatment, we assessed VL in postpartum HIV-positive women enrolled in a large PMTCT implementation research study in rural North-Central Nigeria

**Methods:** Within this prospective cohort study, 497 HIV-positive pregnant women were enrolled from 20 Primary Healthcare Centers (PHCs). Viral load (VL) testing (blood test with lower limit of detection of <20 copies/ml) was performed at 6 months post-partum. Per

WHO guidelines, women with VL <1,000 as suppressed/adherent, while those with VL >1,000 copies/ml were classified as non-suppressed/treatment failure. Wilcoxon ranksum, Spearman's correlation and Kruskal-Wallis were used to test for associations.

**Findings:** Out of 497 enrolled women, 275 (55.3%) presented for VL testing and 234 (85.1%) had their samples collected. Out of 213 (91.0%) available results, 171 (80.3%) were virally suppressed/adherent. ART regimen (EFV vs NVP vs PI) ( $p=0.56$ ), duration on ART ( $p=0.43$ ), employment status ( $p=0.72$ ), educational status ( $p=0.15$ ) were not determinants of suppression. For distance lived from PHC, there was a positive but weak correlation where VL was higher with further distance lived ( $p=0.08$ ).

**Interpretation:** While the target of 90% was not achieved, a substantial proportion of women (80%) were adherent to ART. Only distance lived from facility approached significance as a determinant of suppression/adherence. This is understandable as rural areas often have difficult terrain, and residents are often economically disadvantaged. Additionally, ART regimen did not make a difference in suppression rate, giving EFV vs NVP comparable efficacy in our study cohort. Approximately 20% of women failed treatment; however they were not labeled “non-adherent” due to the possibility of acquired resistance, which was not assessed in this study. While this study demonstrates appreciable treatment success in a cohort of rural women, more robust studies are needed in Nigeria to determine factors associated with ART non-adherence and non-suppression among PMTCT clients.

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**Abstract #:** 1.028\_WOM

### New Narratives in Global Health: Using Stories and Storytelling to Promote Family Planning

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**Background:** The use of stories and storytelling may provide a powerful approach to sharing knowledge, and empirical evidence illustrates that both approaches can impact global health outcomes. Stories and storytelling have the potential to spread knowledge by leveraging a traditional means of communication: the Humans of New York (HONY) initiative suggests that the power of a simple image and a few carefully-chosen words can influence individual knowledge, attitudes, beliefs, and behaviors. The Family Planning Voices initiative aims to document, through photography and interviews, the stories of individuals working to improve access to family planning around the world and share their experiences widely. As there has yet to be a systematic investigation that documents the impact of a storytelling approach in family planning in lower- and middle-income countries, we sought to ascertain the impact of the Family Planning Voices initiative.

**Methods:** An online cross-sectional survey was distributed among practitioners working in family planning in lower- and middle-income countries through various global health list serves. Inclusion

criteria included practitioners working in family planning that were aware of the initiative. Outcomes of interest included the effects of the initiative on knowledge and attitudes, as well as diffusion of information and knowledge application, on family planning global health practitioners.

**Findings:** Approximately 71% of the 355 respondents indicated that the initiative provided them with family planning information that was new to them. In addition, 60% of respondents indicated that the initiative provided them with family planning information that changed their attitudes toward family planning access and needs, while 87% indicated that they talked to a colleague about a story. Approximately 84% of respondents indicated that the initiative prompted them to incorporate new family planning knowledge into their work.

**Interpretation:** Results indicate that the initiative positively impacted knowledge and attitudes toward family planning access, and encouraged knowledge sharing of best practices and discussion about family planning needs within a global health context among family planning practitioners. In this presentation, the feasibility of such an approach to impact global health behaviors will be discussed, as will the process used to create and curate such stories for maximum impact.

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### Global Advocacy for Women: Impact of Simulation-based Training

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**Program/Project Purpose:** Latin America is plagued by high maternal and infant mortality rates, often attributed to limited maternal healthcare provided by traditional birth attendants, or *comadronas*. This led to our development of a simulation-based culturally sensitive educational program specifically for these providers.

**Structure/Method/Design:** A simulation-based culturally-sensitive training program was offered to *comadronas* in Guatemala. The training began with an oral presentation (English, Spanish, and Mayan), emphasizing key points of the normal birthing process and the management of complications such as post-partum hemorrhage (PPH). Visual aids and simulation manikins afforded hands-on opportunities to practice key points. Pre- and post-training surveys were distributed to *comadronas* reflecting on knowledge, opinions of birthing practices, and ability to prevent and manage complications. The surveys consisted of twenty-five questions divided into four sections reflecting on: demographics and current birthing practices, medical knowledge, opinions on the handling of complicated deliveries, and feedback on the learning process.

**Outcome & Evaluation:** PA faculty and students piloted a simulation-based culturally-sensitive training program with two groups of *comadronas* in two rural locations of Guatemala.

The results indicated that the knowledge of the *comadronas* improved from pre- to post-training surveys regardless of formal education, language, or age. Improvements per question ranged from 4-54%. Significant improvements were noted with specific