

questions such as “amount of blood loss requiring medical treatment” ( $p < 0.001$ ) and “signs of placental separation” ( $p < 0.001$ ).

The opinions of the *comadronas* with respect to management of the normal birthing process and possible complications also showed a positive change overall ( $p < 0.005$ ), but with age contributing to statistically significant differences in results. Although knowledge improved irrespective of age, older *comadronas* were less likely than younger *comadronas* to change their opinions on their practices.

**Going Forward:** We believe that our novel use of simulation manikins may have strongly contributed to our outcomes. We look forward to implementing a more expansive study and hope that this endeavor will result in a positive impact on lowering the rate of maternal mortality in Guatemala and the other countries in Latin America that we will be visiting.

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**Abstract #:** 1.030\_WOM

### Knowledge and Attitude of Women Aged 30-49 Years towards Menopause in Gulele Sub-City of Addis Ababa, Ethiopia

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**Background:** Menopause is a natural phenomenon marked by a reduction in estrogen and progesterone levels and eventual cessation of menstruation occurring in women approaching middle age. Appropriate understanding of the physical, social, and psychological transitions during menopause differs across countries and cultures. There is a paucity of research on the menopausal experience of women living in urban Ethiopia.

**Methods:** We conducted a community-based, cross-sectional study on 586 women aged 30-49 years in Gulele sub-city of Addis Ababa, Ethiopia using a multi-stage cluster sampling method. IRB approval was obtained from Addis Ababa University and informed consent were sought from each participant. Data were collected through interviewer-administered questionnaires. Menopausal knowledge was assessed using a 26-item, binary response score to clinical questions. Menopausal attitudes were assessed using a 10-item Likert scale. We performed descriptive analyses and binary logistic regressions to understand factors associated with increased menopausal knowledge and attitude.

**Findings:** Out of 568 participants, 15.7%, 61.8%, and 22.5% of them had poor, moderate, and adequate levels of knowledge of menopause, respectively. A majority of the women had an overall positive attitude towards menopause (84%). After controlling for other variables in the adjusted logistic regression model, women who did not receive information on menopause as compared to those who did receive (adjusted odds ratio [95% CI] = 0.14 [0.07–0.28]) were found to significantly lower odds of adequate menopause knowledge. Similarly, women with lower [Adjusted OR = 0.11 (95% CI: 0.04, 0.28)] and middle [Adjusted OR = 0.22 (95% CI: 0.09, 0.55)] economic statuses as compared

to higher economic status had lower odds of having a positive outlook on the menopausal experience. Women had more positive outlooks at higher age category (45-49) as compared to younger groups (30-34) [Adjusted OR = 0.20 (95% CI: 0.09, 0.46)].

**Interpretation:** Overall, adequate knowledge about menopause was low among women in Addis Ababa. Positive attitudes towards menopause was associated with socioeconomic factors. Increased attention and focus on women entering menopause throughout Ethiopia will assist in reducing barriers to knowledge and care.

**Source of Funding:** Addis Ababa University, Addis Ababa, Ethiopia.

**Abstract #:** 1.031\_WOM

### Improving Clinical Skills for the Treatment of Postpartum Hemorrhage in a Low-Resource Setting Using Two Simple, Low-Cost Training Models

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**Background:** Obstetric hemorrhage is the leading cause of maternal mortality worldwide. There are simple techniques available to treat postpartum hemorrhage, however hands-on skills training can be difficult in low-resource settings where high fidelity models are not available.

**Methods:** As part of a training to address obstetric hemorrhage in two government maternal health facilities in Lilongwe, Malawi, two different low-cost models were created using locally sourced materials (baby bottles, pantyhose, foam, fabric, foley catheters, etc) to assist with training participants in a) uterine tamponade using a makeshift condom-catheter balloon device and b) B-Lynch compression sutures and c) uterine artery ligation. The models were piloted with expert clinicians and amended to improve authenticity. Clinical staff from two health centers have now undergone training with these models. As part of continuous quality improvement of the program, each participant completed a pre- and post-assessment, rating their own competence on a Likert-type scale for each of the techniques taught. Comparisons were made between the pre- and post-test scores using the one-tailed, paired student's t-test to assess improvement in the confidence reported by the trainees.

**Findings:** Training is ongoing, but preliminary results from 24 trainees show a significant increase in mean self-assessment scores from 2.5 to 4.95 for condom-catheter balloon device construction, 2.6 to 4.6 for condom-catheter balloon device placement, 2.25 to 4.5 for B-Lynch compression suture placement, 2 to 4 for uterine artery ligation ( $p < 0.0001$  for all values). Training for approximately 90 additional participants is scheduled during October and November 2016.

**Interpretation:** Clinicians in low-resource settings can gain confidence in their procedural skills through hands-on training using two simple models constructed with low-cost materials that are locally available.

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