**Outcome & Evaluation:** While more than 60% women fell in the optimum BMI (body-max index) range, majority of them did not consume adequate amount of food in the groups vegetables (about 70%), milk (about 99%) and fruits (about 80%). However protein consumption is quite satisfactory among these women (more than 15%). Through a primary multi-variate regression analysis, women's literacy and receive of face-to-face advise from community health workers were found as statistically significant factors influenced women's nutritional outcome. However more rigorous statistical analysis will be conducted in near future.

**Going Forwards:** This study will contribute to the maternal health literature of developing countries. Health policy making in many developing countries can be greatly benefitted through the study findings. This study was funded by School of Public Health, Simon Fraser University.
**Abstract #:** *2.018_PLA*

## Honoring motherhood: The meaning of childbirth for Tongan women

Abstract Opted Out of Publication
**Abstract #:** *2.019_PLA*

## The assessment of water-use behaviours after implementation of new water infrastructure at a remote Himalayan school

C. Bhatla, D. Soni, J. Bhatla, D. Raff, T. Skutezky, J. Fairley, J. Chung, J. Herman, V. Kapoor; University of British Columbia, Vancouver, Canada

**Background:** Since 2007, the University of British Columbia has been partnered with a local NGO to improve children's health at an Indian Himalayan boarding school. Following the 2014 study assessing water use behaviours of new infrastructure, this study aimed to assess changes in water use behaviours from the previous year.

**Methods:** Using the 2014 methodology to assess student behaviour, movements of 142 students were tracked using GPS armbands. Frequency of water station visits, and temporal relation to visits to toilet and dining facilities was assessed. Randomly selected students were divided into cohorts A (grade 3-5, n = 66), B (grade 6-8, n = 44), and C (grade 9-10, n = 32).

Video observation was conducted using hidden video cameras to provide information on handwashing and drinking frequencies. This study was approved by UBC's Research Ethics Board.

**Findings:** Students visited a water station for more than 30 seconds an average of 3.2 times / day, up from 2.3 times / day in 2014. Frequency of visits after toileting increased from 10% to 18% and frequency of visits before dining increased from 12% to 35%. Cohort C improved the most, going from 0% to 18% after toileting and from 12% to 39% before dining. All cohorts showed at least a 75% increase in both categories, with the exception of water station visits after toileting by cohort A, which remained at 10%.

Results show that the water station outside the dining area, which is new since last year, is the most used (37% of all water station visits), with the majority visits occurring before and after lunch.

**Interpretations:** The addition of a new water station in an ideal location and increased awareness due to health education has increased water station usage before dining.

The lack of hand washing improvement after toileting by the youngest cohort suggests that future education programs should focus significantly on this group, as they likely require constant reminders in order to develop habits.

Location and age-specific results from the past two years will guide future infrastructure improvements and will facilitate targeted education.

**Funding:** Funding was obtained through UBC's Faculty of Medicine Summer Student Research Program (SSRP).
**Abstract #:** *2.020_PLA*

## Latino adolescents' self-perceived malocclusion is more correlated with quality of life than are examiner assessments

J.G. St. Martin, B.W. Chaffee, I. Ching, M.F. Orellana, K. Aamodt; University of California, San Francisco, San Francisco, CA, USA

**Background:** To evaluate how people's perception of their own smile compares to how professionals rate it, and how both measures relate to their quality of life.

**Methods:** In this cross-sectional, multi-center study, data were collected from adolescents (N = 2035) at 13 schools in Mexico and Peru (January 2014-February 2015). Self-assessed malocclusion was measured using the Index of Orthodontic Treatment Need Aesthetic Component (IOTN). Calibrated dentist-examiners measured malocclusion severity using the Index of Complexity, Outcome, and Need (ICON). Oral Health Related Quality of Life (OHLQoL) was measured using the Child Oral Health Impact Profile (COHIP-SF19). We calculated the sensitivity and specificity of self-perceived malocclusion (IOTN $\geq$ 5) against gold-standard normatively determined malocclusion (ICON $\geq$ 43), and compared total and socio-emotional COHIP scores for those classified as true negative (TN), true positive (TP), false negative (FN), or false positive (FP) for malocclusion (Mann-Whitney U-test).

**Findings:** Mean participant age was 14.1 $\pm$ 1.7yrs; 51.5% female. Participant and practitioner malocclusion assessments were correlated (Spearman rho = 0.37), but participants significantly underestimated malocclusion severity (P < 0.001). Few participants self-perceived malocclusion (9.9%), but half (49.9%) were diagnosed with malocclusion, indicating poor sensitivity of self-assessed IOTN score to identify clinically evident malocclusion (sensitivity = 17.5%, specificity = 96.9%). Total and socio-emotional OHRQoL were significantly lower in participants with malocclusion (P < 0.001). However, participants that self-perceived malocclusion (TP, FP) had lower overall (TP = 51.1, FP = 51.9) and socio-emotional (TP=28.7, FP = 27.4) OHRQoL, and these scores did not statistically differ by (P > 0.05). In contrast, participants that did not self-perceive malocclusion (TN, FN) had higher overall (TN = 57.7, FN = 56.3) and socio-emotional (TN = 31.3, FN = 30.5) OHRQoL,