Results 402 infants died during the period 1/1998–12/2012 and 239 had an autopsy (59.4%). The mean value of days-of age-death in infants with autopsies was 9.8 ± 23 days, CI 95% (6.8–12.9) vs. 18.3 ± 28 days CI 95% (13.9–22.6) for cases without autopsy, p < 0.01. Group A had a high percentage of cases with autopsy: 115/ 171 (67%) In group D a low percentage of cases had an autopsy: 13/46 (28%). Using Kruskal Wallis rank test differences between Group A and group D were significant (p < 0.001).

Conclusions Autopsy rates in infants dying during the first 2 days of life were significantly higher than rates after 28 days of life. Reasons for these differences need to be evaluated in a prospective manner that should include social, educational, religious and behavioural aspects of parents and caregivers.

PO-0652 NEW NEONATAL RESUSCITATOR GIVES MORE LUNG VOLUME ON A MANNEQUIN MODEL

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Background Bag mask ventilation of the newborn is the most difficult part of neonatal resuscitation, as experienced in the Helping Babies Breathe program. Methods to facilitate improved bag mask ventilation and air training are therefore needed.

Methods 41 nursing and medical students without any knowledge of newborn resuscitation were trained in basic bag mask ventilation and ventilated with two devices; a new Upright resuscitator (Laerdal Global Health, Stavanger) and a standard newborn resuscitator (Laerdal Medical, Stavanger) on a manikin in random order. Ventilation data was collected with the Newborn Resuscitation Monitor (Laerdal Global Health) and analysed for 40 students. One was omitted due to inaccurate data signal reading. The students answered questions grading mask seal (1) and ease of air entry (2) from 1 (difficult) to 4 (easy) and finally which device they preferred.

Results 31 of 41 (76%) students preferred the Upright resuscitator. For "mask seal" mean score was 3 for Upright and 2.5 for standard (one sample binomial test p = 0.03), and for "ease of air entry" 3.5 for Upright and 3.2 for standard (p = 0.05). Mean expired lung volume was 15.5 ml for Upright and 13.8 for standard resuscitator with mean difference 1.7 ml (95% confidence interval 3.2–0.02, one sample t-test for paired observations p = 0.03). Mean mask leakage for Upright was 46% and standard 60% (paired sample test p < 0.001).

Conclusion The students showed a preference towards the Upright resuscitator, which also provided a slightly higher expiratory volume and significantly reduced mask leakage compared to the standard resuscitator.

PO-0653 THE PERIODONTAL PATHOGENS IN THE SALIVA OF ONE-YEAR-OLD INFANTS DELIVERED WITH VERY LOW BIRTH WEIGHT

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Background Prematurity postpones the birth of a subsequent sibling. This phenomenon is strongest in mothers with long prior interbirth interval, a proxy of fertility problems.

Goal We assessed whether a history of miscarriages explains the postponed birth of next sibling after preterm birth.

Methods We obtained pregnancy and newborn data from Finnish Medical Birth Register (Jan 1, 1987 - Sep 30, 1990). Sibling data came from the National Population Register Centre.

Of the total of 230378 singleton births we excluded 1242 (0.5%) due to death before 1 yrs. GA was missing for 2922