

incident. The samples were 130 respondents with ratio 1 : 4, 26 cases and 104 controls. Data analyzed by using odds ratio (OR) statistic test 95% CI. The result showed that maternal parity, birth attendants, K4 coverage of antenatal care had a significant association as risk factors of maternal mortality incident with the value of each variables namely : maternal parity (OR 2,728 ; 95%CI 2,124-4,503). birth attendants (OR 3,080 ; 95%CI 2,124-4,503), K4 coverage of antenatal care (OR 3,600; 95% CI 1,446-8,964). While maternal age variable with value (OR 1,456 ; 95% CI 0,541-3,919) didn't have a significant association to maternal mortality incident. Maternal parity, birth attendants, and K4 coverage of antenatal care are risk factors for maternal mortality incident, while maternal age didn't have a significant association to maternal mortality incident.

SP-086

Identification of Causes of Neonatal Deaths in Resource Poor Settings: Validation of a Verbal Autopsy Tool in Orissa, India

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Background: Health planners need evidence-based mortality and morbidity pattern for prioritizing health needs and resource allocation, particularly in settings with weaker vital registration system. Verbal autopsy is the only alternative mean fulfilling the gap. Objective of the study was to validate a VA tool identifying the causes of neonatal deaths (CODs) in resource poor settings.

Methodology: This population based cross sectional study was conducted in two randomly selected districts with 223 Anganwadi centers. Trained non-health personnel administered the semi-structured, pre-tested VA tool to caregivers and ascertained CODs with help of expert algorithm. Medical records (MR) were taken as "Reference Standard" for validation.

Results and Discussion: The mean age at death was 6.2 days. The cause specific mortality fraction was calculated and adjusted for each assigned COD and found no significant difference among VA and MR diagnosis. The average recall period was 38 days with no significant relationship with accuracy of diagnosis ($p=0.127$). Majority CODs had good sensitivity and specificity except LBW, Sepsis, Tetanus and congenital anomalies. Combining LBW and prematurity to TETS (too-early-too-small) and sepsis related CODs into 'all sepsis' resulted better sensitivity and specificity. **Conclusion:** The tool proves to be good for diagnosing birth asphyxia, prematurity, pneumonia, jaundice and diarrhea; and provides room for improvement in identifying deaths due to other CODs. The need of the

hour is to improve and implement a VA tool in health system to identify the causes of neonatal deaths with no extra resources.

SP-087

Triage Scoring in Severity of Illness

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The prospective cross-sectional study was undertaken to study the utility of triage scoring for severity of illness based on clinical variables related to Systemic Inflammatory Response syndrome and Advanced Pediatric Life Support in predicting the outcome of sick children and to find an association of final outcome with abnormal clinical signs, to study the utility of triage for need of intensive care management and the utility of triage scoring system for predicting mortality among children between 2 months to 14 years. A total of 570 children requiring hospital admission through the emergency department in Kanti Children's Hospital, Nepal were randomly selected. Chi square test and fisher's exact test was used for data analysis. About three-fifth was above 5 years of age with acute respiratory tract infections, meningitis/meningoencephalitis, fever under evaluation were the most common diagnosis. Abnormal respiratory rate and temperature were the most commonly associated variables. The mortality was 23.9% in children having more than two abnormal clinical variables whereas the mortality was 2% in children having 2 or less abnormal variables. Systolic blood pressure, capillary refill time, oxygen saturation, and assessment of neurological status based upon AVPU classification showed was significantly associated ($p<0.001$) with the final outcome of the sick children.

Therefore, a severity illness score based on clinical signs alone can predict severity of illness and outcome and can be easily applied in emergency department in order to improve the management of sick children and for counseling with the attendants.

SP-088

Comparison of the Effect of Alcohol Application Versus Natural Drying in Umbilical Cord Care

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Background and Aims: The umbilical cord infection may contribute neonatal mortality and morbidity risk. The rigorous and proper regimen of umbilical cord care, therefore, has become a matter of great concern for prevention of infection. The aims of this study were to compare time to cord separation, parental satisfaction, and infection rate among newborns whose cords were treated with alcohol versus natural drying.

Methodology: The quasi-experimental, comparative study was conducted at a medical center in northern