ABSTRACT:

Background: Early identification of critical illness during pregnancy and labour helps in preventing maternal morbidity and mortality. Delay in diagnosis contribute to a large proportion of preventable maternal deaths. Patients usually display abnormalities in simple physiological parameters before developing any serious illness. Small changes in the combined physiological variables measured by MEOWS may pick up deterioration earlier than an obvious change in individual variable.

Aims of the study: This study aims at evaluating the use of MEOWS score as a simple bedside tool and establish its credentiality in predicting maternal morbidity and mortality.

Materials and Methods: Physiological parameters of 500 study subjects attending 3 peripheral health centres (Sanjeevarayanpet, Kondithope and Chennai harbour health post), will be recorded on MEOWS chart by village health nurses. A “TRIGGER” was defined as a single markedly abnormal (1 red trigger) or 2 simultaneously mildly abnormal observations (2 amber triggers). Patients who score one or more triggers are referred to RSRM lying-in hospital. Based on outcome at discharge, category 1 (normal and recovered without morbidity) and category 2 (recovered with morbidity or mortality) will be defined.
**Results:** Among the 500 patients analysed, 70.4% patients belonged to 21 -30 years age group. 64.6% were multigravida, whereas 35.4% were primigravida. 97 (19.4%) and 295 (59%) of patients required CCU and HDU admission respectively. 159 (31.8%) and 40 (8%) patients required blood and blood products respectively. 22 (4.4%) patients required ionotropic support. 81 (16.2%) patients required ventilatory support and Magsulf therapy was used in 151 (30.2%). 13(2.6%) patients required NASG garment use. Only 13.4% patients who triggered on MEOWS did not have any morbidity. There is a 97% correlation between referral MEOWS score and hospital MEOWS score.

**Discussion:** MEOWS chart provides an objective way of documenting health status of antenatal and postnatal mothers. Early referral of triggering patients to tertiary care centres reduce mortality. Morbidity is still higher in patients who trigger on MEOWS. Strong correlation of referral and hospital MEOWS supports its use in the community.

**Conclusion:** MEOWS score helps in early recognition of altered physiological parameters in pregnant mothers, before signs and symptoms become clinically evident. Early referral of mothers with subclinical illness to tertiary care centres helps in reducing maternal mortality and morbidity to a greater extent.

**Keywords:** MEOWS, obstetric morbidity, maternal mortality, physiological parameters, trigger.