An audit on blood pressure checking technique among pregnant mothers

Raguraman S1, Elankumaran V2, Sivomiya S2

¹Faculty of Medicine University of Jaffna, ²DGH Mullaitivu

Introduction: Blood pressure (BP) is a vital sign and it is composed of systolic and diastolic blood pressure normal blood pressure generally around 120/80 mmHg. Diastolic BP ≥ 90 mmHg, Systolic BP ≥ 140 mmHg generally considered as hypertension. Hypertensive disorders in pregnancy complicate 2–8% and conferrisk to the health of mother and fetus. Therefore, an accurate BP measurement by correct technique plays an indispensable role in obstetrics.

Objectives: To evaluate the usage of correct technique to measure BP pressure in pregnant mothers at antenatal clinics.

Method: An institutional-based prospective clinical audit conducted among 123 pregnant women in District General Hospital, Mullaitivu from November 2019 to January 2020. Participants were collected from the antenatal clinic by random observations by investigators while measuring blood pressure by health professionals. NICE guideline (steps involved in the BP measurement of pregnant mothers) was used as a standard. Data analysis was done by simple proportion, and above 80% was considered the target level of performance.

Results Data analysis were done under the following three categories. <u>Human Factors</u>- BP was measured to all pregnant mothers (n= 123), who attended to the antenatal clinic. In that, all mothers (100%) were relaxed and sitting leaning back. <u>Instrumental Factors</u>- Stranded Sphygmomanometer was used all the time. However, the correct size cuff was used in 113 women (91.8%). <u>Procedure</u>- Bell of the stethoscope was used in 31and position the upper arm cuff at heart level was placed in 120 of the mothers. 95% of mother's BP cuff was inflated above 20 to 30 mmHg to palpable systolic pressure and 95% were deflated slowly by 2mmHgper second.

Conclusion. Overall, BP measuring technique was satisfactory in pregnant mothers, who have been attending to the antenatal clinic. However, using the bell of the stethoscope for listing the Korotkoff speed was not satisfactory.