

## ABSTRACT

**Introduction:** Micronutrient and food supplements are recommended by World Health Organization (WHO) to improve maternal nutrition. These supplements together called Nutritional Supplements (NS) and they are provided to pregnant women free of charge by the government. Compliance with NS during pregnancy contributes to reduction of maternal anaemia, Low Birth Weight (LBW) and congenital anomalies.

**Objective:** To determine the compliance with nutritional supplements and factors associated with the compliance among pregnant women attending antenatal clinics in Medical Officer of Health (MOH) area, Kolonnawa.

**Methods:** A descriptive cross-sectional study among 271 pregnant women was conducted in the above setting. Probability proportionate to the size of clinic visits was applied to recruit the desired sample from all eight Ante Natal Clinics (ANCs). Participants were selected from the clinic attendance register of each clinic and every third woman fulfilling the inclusion criteria was invited for the study. A pretested Interviewer Administered Questionnaire (IAQ) was used to collect data. Compliance was assessed using scores with pre-determined cutoffs. Factors associated were assessed using chi square test for significance.

**Results:** Mean age of the study participants was 28.39 years (SD = 5.49 years). Almost 99% (n=268) were married with a mean monthly household income of Rs.51270.37. Only 28% of study participants had a good compliance with NS. There was no statistically significant association with age, education, employment status of participants, monthly household income and number of household members ( $p>0.05$ ). There was a statistically significant association between ethnicity and compliance ( $p=0.008$ ). Among the selected antenatal characteristics of the pregnant mothers; gravidity, Period of Amenorrhoea (POA) and Hemoglobin (Hb) level at the booking visit were not statistically significant ( $p>0.05$ ). Out of the participants who were anaemic at booking visit, 82.5% had poor compliance while in the non anaemic group only 30.5% had good compliance. Among women who had good compliance (28%, n= 76); 36.1% (n=26), 31.1% (n=59), 40.7% (n=57) had good knowledge, good attitude and good practices respectively. However, only the association between practices related to NS with compliance was highly statistically significant ( $p <.001$ ). Association between compliance with NS and side effects was statistically significant ( $p=.05$ ) Service related factors such as satisfaction with ANC services, understandability on instructions given

on how to take NS, conduction of ANC sessions, home visits done by Public Health Midwife (PHM) were statistically not significant ( $p= .351$ ,  $p= .588$ ,  $p= .387$  and  $p= .482$  respectively).

**Conclusion and recommendations:** Although 50% of pregnant women at Kolonnawa MOH area had good practices on NS, majority had poor knowledge and attitudes on NS leading to poor compliance. There is a need for improvement of compliance while educating them on the importance of the NS during pregnancy, proper consumption patterns and storage of it thus empowering them to be compliant with the supplements.

**Key words:** Compliance, Supplements in pregnancy, nutritional supplements, ante natal clinic services