## QUALITY ANTENATAL CARE UPTAKE AND DELIVERY OF LOW BIRTH WEIGHT: FURTHER ANALYSIS ON 2015-16 MYANMAR DEMOGRAPHIC AND HEALTH SURVEY

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## ABSTRACT

Birth weight reflects gestational conditions and development during the foetal period. Low birthweight (LBW) is a major contributor to infant mortality. The purpose of this study was to analyse association between quality antenatal care (ANC) uptake and low birth weight (LBW) delivery. This study used Myanmar's demographic health survey (2015-16), a population-based nationally representative survey, in which 15-49 years aged women who had at least one birth in the five years preceding the survey were selected using stratified two-stage cluster sampling design. As the unit of analysis is mother, individuals recode (IR) file was used. A weight sample of 1,731 study mothers included in this analysis. The variable, birthweight less than 2,500 grams, was considered outcome variable. The predictor variable was defined as quality ANC uptake that was classified into two categories. The first one was proper ANC uptake when the mothers had at least four antenatal visits from skilled care providers and then the second one was receipt of four ANC services such as blood pressure measurement, blood and urine test and receiving at least two doses of tetanus toxoid injection during pregnancy. The multivariable analysis using binary logistic regression was done to determine the association between the outcome variable and independent variables using STATA version 15.1. The adjusted effect estimates were presented with AOR with 95% CI. The prevalence of study women who delivered LBW was 7.5% (95% CI: 6.3, 8.8) and that of study women who received proper antenatal care (ANC) was 73.5% (95%CI:0.71, 0.76). The mothers who had proper ANC uptake were less likely to deliver LBW children by 37% (AOR:0.63, 95% CI: 0.39,1.01) comparing to those who had no uptake. The prevalence of study mothers who had accessed components of ANC uptake was 76.8%. Regarding maternal smoking status, the mothers who had smoking habit had 3.81 times significantly more odds of increased risks of LBW children than those who did not smoke (95%CI: 1.27, 11.39). Moreover, having no education and being first order birth were observed as the significant determinants favorable to LBW delivery. The MCH services should be more focused on ANC uptake of the mother in both public and private health care system and be emphasized on reaching the grass root level targeted at the illiterate mothers or those with low education. Further research should also be performed to explore the barriers and the challenges for easily accessing the quality ANC uptake to reduce the delivery of low birth weight (LBW).