

## ABSTRACT

**Background of study:** It is unacceptable for any woman, anywhere in the world, to risk her life and that of her baby by going through childbirth without expert care. Yet globally, every year, 48 million women give birth in the absence of a medical professional, and each year, 358,000 maternal deaths, and 814,000 newborn deaths occur during childbirth.

Ghana failed to achieve the MDGs 5 target of reducing maternal mortality by 75%, despite a stride of 42% reduction. In Ghana, 81.3 % of pregnant women make at least one ANC contact with a health care provider, yet, only 56.5% of women give birth in health facilities. Notwithstanding the multiplicity of interventions put in place to encourage the use of health facilities for deliveries in Ghana, utilization remains inadequate, and the reasons for the low patronage has not been explored into detail. This study therefore examines the factors affecting utilization of health facilities for delivery by pregnant women in the West Mamprusi Municipality (WMM) of Northern Ghana, by adopting the three delays model.

**Objectives:** To identify the challenges pregnant women face in accessing and utilizing health facilities for delivery in the WMM and to inform policy decision to improve maternal health outcomes.

**Materials and Methods:** The study was a cross-sectional household survey with 381 women in the age group, 15-49 years, conducted within the period of January to March 2019, in the WMM. The data was collected using structured questionnaire consisting of opened and closed ended questions. The data was entered using IBM-SPSS version 25 statistical software and exported to Stata version 15 statistical software for analysis.

Descriptive statistics and Chi-square test were performed. Bivariate and Multivariate logistic regression analysis were conducted to identify the variable associated with facility delivery. All statistical tests were set at 5% level of significant with a 95% confident interval.

**Results:** In this study, 75.3% of the respondents delivered their last child in a health facility while 24.7% delivered at home. The mean age of the respondents was 27.5±6.1 years. Younger women were ten times [AOR=10.21; 95% CI:1.83-56.99] more likely to deliver in a health facility than their older counterparts. Respondents with higher educational level were almost four times [AOR=3.66; 95% CI:1.19-68.9] more likely to deliver their children in a health facility. Respondents with shorter travel time to the nearest health facility had a higher chance [AOR=1.05; 95% CI:1.57-1.95] to deliver in a health facility than those with longer travel time. Women who made more ANC contacts with health care providers were more probable [AOR=1.17; 95% CI:1.04-36.7] to deliver in a health facility than those with less or no contacts.

**Conclusion:** To increase facility-based delivery, there is an urgent call for improvement on the services provided. Improvements should address, availability of services, health workers' attitudes and promotion of the importance of ANC attendance and facility delivery. Also, opportunities for female education by the government could help expose women to valuable knowledge of health emergencies and provide them with functional decision-make autonomy to improve their health.

**Keywords:** The three delays model, Health facility delivery, ANC, IBM-SPSS, West Mamprusi Municipality.