Title:

Factors associated with the uptake of Intermittent Preventive Treatment for malaria among pregnant women aged 15 to 49 years old in Nigeria 2018.

Abstract

Background

Pregnancy-associated malaria is a leading public health threat that stances significant risks to pregnant women and neonates. This study aims to determine the prevalence of IPTp-SP uptake; and establish the factors associated with the uptake of any dose and optimal doses of IPTp-SP among pregnant women aged 15 to 49 years living in Nigeria, 2018.

Methods

The secondary data analysis used the 2018 Nigeria Demographic Health Survey (NDHS) dataset. The primary study chose 1389 clusters from a total of 74 strata formed from the urban and rural areas of the 36 States in Nigeria. Then, 30 households were selected from each cluster to form a sample size of 41,666 households. From the 41,666 households, 41,821 women aged 15 to 49 years were interviewed for the 2018 NDHS. Among the 41,821 women interviewed, only 12,742 with live births two years before or during the NDHS were included in the analysis. Descriptive analysis was carried out to determine the prevalence of IPTp-SP uptake. Multivariable logistic regression was used to establish the factors associated with receiving IPTp-SP during pregnancy for adjusting possible confounding factors. The study looked at IPTp-SP uptake as two outcomes variables (uptake of any dose and optimal doses). Then, fitted a separate multivariable model for each outcome variable using a four-step approach for modelling survey data as recommended by Heeringa et al., 2017. Given the complex survey design, all analyses adjusted for sampling weight, stratification and clustering. The p-value of <0.05 was considered significant.

Results

The study included 12,742 women aged 15 to 49 years with live births living in Nigeria. The mean age ± SD of the selected women was 28.3 ± 6.7 years old. In 2018, the overall prevalence of any dose of IPTp-SP was 63.6% (95% CI:62.0–65.1), and optimal doses of IPTp-SP were 16.8% (95% CI:15.8–17.8) during pregnancy. Women aged 30 years or older had 31% increased odds to receive any IPTp-SP dose (cOR:1.31; 95% CI:1.08 - 1.58). And pregnant women in the Southwestern region were 50% less likely to initiate IPTp-SP therapy (aOR: 0.50; 95% CI:0.39 - 0.65). In addition, women in the wealthiest households whose husbands had secondary education predicted a four-fold increase in uptake of at least one IPTp-SP dose (aOR:4.17; 95% CI:1.11–8.85).

Pregnant women in the poorer and richer households were 35% (aOR: 0.65; 95% CI:0.52–0.81) and 19% (aOR:0.81; 95% CI:0.64–1.03) less likely to receive optimal doses of IPTp-SP respectively. Moreover, attending four or more ANC visits predicted a 58% higher odds of completing at least three doses of IPTp-SP during pregnancy (aOR:1.58; 95% CI:1.31–1.88).

Conclusion

The low prevalence of region-specific IPTp-SP uptake implies that most pregnant women in Nigeria remain at substantial risk of pregnancy-associated malaria. Therefore, stakeholders should explore context-specific strategies such as community ANC outreaches to improve the IPTp-SP coverage across the regions in Nigeria. Also, future research should explore the drivers of low uptake of optimal doses of IPTp-SP among pregnant women in South-West Nigeria.

Keywords:
Pregnancy-associated malaria, Intermittent preventive treatment, Sulfadoxine-Pyrimethamine, Antenatal care, Malaria morbidity, Nigeria,