Magnitude, disparity and predictors of quality Antenatal care service: a systematic review and meta-analysis

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Abstract

Background: Antenatal care is directed towards ensuring healthy pregnancy outcomes. Quality antenatal care increases the likelyhood of receiving effective intervention to to maintain maternal, fetal, and neonatal outcomes while poor quality is linked to poor pregnancy outcomes. However, owing to the complex nature quality, researchers have followed several approaches to systematically measure it. The evidence from these variable approaches pose challenges to programmers and policymakers. Hence, it is imperative to obtain a pooled estimate of the quality of antenatal care. Therefore, considering the scarcity of evidence on the quality of antenatal care, this study aimed to fill this knowledge gap.

Objective: This study aimed to estimate the magnitude, disparity and predictors of quality of Antenatal Care services.

Method: This study conducted a literature search for published and unpublished sources from 2002 to September 8, 2022, to assess the prevalence of quality antenatal care. Statistical heterogeneity was assessed using Cochran's Q test, and sensitivity and sub-group analyses were conducted. All statistical analyses were performed on Stata 16.

Results: The global pooled poor quality of ANC was 64.28% (95%CI: 59.58% − 68.98%) (I2 = 99.97%, p =0.001).

The identified pooled predictors of good quality antenatal care service were: number of ANC visits (fourth and above ANC visit) (AOR = 2.6, 95% CI: 1.37- 3.84), family wealth index (AOR = 2.72, 95% CI: 1.89- 3.55), maternal education attainment (AOR = 3.03, 95% CI: 2.24- 3.82), residence (urban dwellers) (AOR = 4.06, 95% CI: 0.95- 7.17), and confidentiality ANC (AOR = 2.23 (-0.36-4.82).

Conclusions*:*

The study found regional and country-level disparities in the quality of antenatal care services for pregnant women where poor-quality ANC services were provided for more than two-thirds to three-fourth of ANC attendants. Therefore, policymakers and health planners would put a great deal of emphasis on addressing the quality of Antenatal care services.

Policy implications: - This study revealed regional and country-level disparities where pregnant women who resided in Asia, Africa, and the South American continents had the lowest quality antenatal care services provided. Therefore, policymakers and health planners would put a great deal of emphasis on addressing the quality of Antenatal care services.

Recommendation 1: Policymakers and global funders need to invest resources to monitor and improve the quality of antenatal care in order to meet the global maternal mortality target as per the SDGS plan by shifting health systems from coverage of ANC services to quality of ANC services based on World Health Organization (WHO) quality ANC contents.

Recommendation 2: Health care systems in LMICs should provide high-quality ANC based on WHO recommendations for pregnant women in need of quality services at all levels.

Recommendation 3: The Ministry of Health should maintain high-quality antenatal care services per nationally accepted WHO recommendations at all levels.

Recommendation 4: Policymakers and health planners should prioritize the quality of ANC service as current international and national public health agendas to reduce maternal and neonatal mortality and morbidities as per SDGs plan 2030.