The effects of pregnancy intention on the use of antenatal care services: systematic review and meta-analysis.

Dibaba Y, Fantahun M, Hindin MJ.

Abstract

BACKGROUND:

There has been considerable debate in the reproductive health literature as to whether unintended pregnancy influences use of maternal health services, particularly antenatal care. Despite the wealth of studies examining the association between pregnancy intention and antenatal care, findings remain mixed and inconclusive. The objective of this study is to systematically review and meta-analyse studies on the association between pregnancy intention and antenatal care.

METHODS: We reviewed studies reporting on pregnancy intention and antenatal care from PubMed, Popline, CINHAL and Jstor search engines by developing search strategies. Study quality was assessed for biases in selection, definition of exposure and outcome variables, confounder adjustment, and type of analyses. Adjusted odds ratios, standard errors and sample size were extracted from the included studies and meta-analyzed using STATA version 11. Heterogeneity among studies was assessed using Q test statistic. Effect-size was measured by Odds ratio. Pooled odds ratio for the effects of unintended pregnancy on the use of antenatal care services were calculated using the random effects model.

RESULTS: Our results indicate increased odds of delayed antenatal care use among women with unintended pregnancies (OR 1.42 with 95% CI, 1.27, 1.59) as compared to women with intended pregnancies. Sub-group analysis for developed (1.50 with 95% CI, 1.34, 1.68) and developing (1.36 with 95% CI, 1.13, 1.65) countries showed significant associations. Moreover, there is an increased odds of inadequate antenatal care use among women with unintended pregnancies as compared to women with intended pregnancies (OR 1.64, 95% CI: 1.47, 1.82). Subgroup analysis for developed (OR, 1.86; 95% CI: 1.62, 2.14) and developing (OR, 1.54; 95% CI: 1.33, 1.77) countries also showed a statistically significant association. However, there were heterogeneities in the studies included in this analysis.

CONCLUSION:

Unintended pregnancy is associated with late initiation and inadequate use of antenatal care services. Hence, women who report an unintended pregnancy should be targeted for antenatal care counseling and services to prevent adverse maternal and perinatal outcomes. Moreover, providing information on the importance of planning and healthy timing of pregnancies, and the means to do so, to all women of reproductive ages is essential.