# Pregnancy Intention, Women's Autonomy and Use of Maternal Health Services in South Western Ethiopia.

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#### Abstract

This study examines the potential importance of Pregnancy intention and women's autonomy in the use of maternal health services in Ethiopia. We hypothesized that unintended pregnancy and women's participation in household decision making influence use of maternal health services independent of maternal socio-demographic characteristics. Data for this study comes from a survey conducted among 1370 women with a recent birth in a Demographic Surveillance Site in south western Ethiopia. Results show that both unintended pregnancy and women's participation in household decision making are significantly associated with use of antenatal care services, even after controlling for other socio-demographic factors. However, for delivery care, the association was attenuated once we controlled for the effects of other socio-demographic variables. Factors other than unintended pregnancy and women's autonomy were found to be the main determinants of antenatal care and delivery care services. For both outcome variables; women's education, urban residence and distance from health facilities were important predictors.

## Background

Maternal mortality continues to be a major health problem in developing countries. In Sub-Saharan Africa, where more than half of all maternal deaths occur (1), non use of maternal health care is an important risk for poor maternal and neonatal outcome. The global target of reducing maternal mortality by two-third and increasing skilled attendance at delivery to at least 90% by 2015 is far from being met in Sub-Saharan Africa. In Ethiopia, despite the progress made in the last few years, maternal mortality is one of the highest in the world at 673 deaths per 100,000 births. The 2011 Ethiopian Demographic and Health Survey (EDHS) also revealed that only 34% of women used antenatal care for their recent births, and nine in ten women deliver at home (2).

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Several studies have examined the effects of individual, societal and health care factors on the use of maternal health services. However, few have considered the effects of unintended pregnancy and women's autonomy in the setting of sub-Saharan African countries. Moreover, many of the existing studies have not shown a consistent pattern of relationships between pregnancy intention, women's autonomy and maternal health seeking behavior. In this study, we examine the influences of pregnancy intention and women's autonomy on use of maternal health services in Ethiopia.

## **Data and Methodology**

Data for this study comes from a survey conducted among women with a birth in the last two years in South western Ethiopia. Participants were drawn from ten villages (kebeles<sup>4</sup>) in a Demographic Surveillance Site (DSS) using a simple random sampling procedure. In this DSS area consisting of about 60,000 people, there were 3400 women with a birth in the 2 years before the survey date, of which 1450 were randomly selected and 1370 women successfully interviewed. Ethical clearance was obtained from the College of Health Sciences, Addis Ababa University. Data were analyzed using STATA statistical software, and both bivariate and multivariate analyses were done.

The two key variables were measured in the following ways. Pregnancy Intention was measured using the standard approach of measuring pregnancy intention, which asks women; "At the time you became pregnant, did you want to become pregnant then, did you want to wait until later, or did you not want to have any (more) children at all?". The responses are: (1) wanted then (intended), (2) wanted to happen later (mistimed); (3) did not want at all (unwanted). Mistimed and unwanted pregnancies are then grouped together as unintended pregnancies. Similarly, women's decision making autonomy was measured by asking the following questions; "who makes decisions in your household about: (1) obtaining health care for yourself; (2) large household purchases; (3) household purchases for daily needs; and (4) visits to family or relatives?". The responses were: (1) respondent alone, (2) respondent and husband/partner, (3) husband/partner alone, (4) someone else. Response options 1 and 2 were counted to estimate the level of participation of women in household decisions.

<sup>&</sup>lt;sup>4</sup> Kebele is the smallest administrative unit in Ethiopia

### Findings

A total of 1370 women, with a mean age of 27 years, participated in the study. The average number of children ever born was 4.3. About 65% of women reported that their last pregnancy was intended, while for 35% of women their last pregnancy was unintended (mistimed and unwanted). Women with intended and unintended pregnancies differed in pre-conception contraceptive behavior, number of living children and birth interval. Women with unintended pregnancies reported higher contraceptive use, but more method failure and discontinuation than women with intended pregnancies. They also differed in the time of pregnancy recognition. Women with unintended pregnancies. Significantly higher proportion of women had participated in decisions on their own health care use (71%), and in major household purchases (67%).There was a statistically significant difference in participation in decision making between women with intended pregnancies.

With regards to maternal health care utilization, 42% have used antenatal care, 12% had delivered in a health facility, and 13% had skilled assistance at delivery for their most recent birth. Use of maternal health services varied with pregnancy intention and women's participation in household decision making at the bivariate level.

In the logistic regression analysis, pregnancy intention and women's autonomy are both associated with antenatal care, but not with delivery care, after adjusting for confounders. Women with unintended pregnancy are 27% less likely to have used antenatal care as compared to women with intended pregnancy. Women who participated in house hold decision making are 36% more likely to have used antenatal care as compared to women who did not participate in household decisions. Both factors were associated with delivery care at the bivariate level, but not in multivariate analysis. Factors other than pregnancy intention and women's participation in decision making were found to be important predictors of both antenatal and delivery care: education, residence, and distance from health facility were highly associated with both ANC and delivery care utilization. For delivery care, use of antenatal care and illness during pregnancy were also important predictors.

Variables	Antenatal care	Delivery care
	OR (95% CI)	OR (95% CI)
Age		
15-24	Ref	Ref
25-34	1.12 (.79-1.57)	.66 (.4499)*
35+	.92 (.57-1.46)	.74 (.41-1.34)
Educational status		
No education	Ref	Ref
Primary	1.51(1.12-2.04)*	1.10 (.73-1.66)
Secondary & above	3.08(1.35-7.03)*	2.39(1.18-4.86)*
Residence		
Rural	Ref	Ref
Urban	1.56 (1.14-2.14)**	1.66 (1.09-2.52)*
Pregnancy intention		
Intended	Ref	Ref
unintended	.73 (.5694)*	.69 (.46-1.03)
Wealth index		
Low	Ref	Ref
Middle	1.12 (.82-1.53)	1.36 (.82-2.26)
Upper	1.31 (.98-1.76)	1.47 (.89-2.45)
Participation in decisions		
No	Ref	Def
Yes	-	Ref
	1.36 (1.08-1.73)*	1.03 (.72-1.47)
Distance from health facility		
< 1 hour	Ref	Ref
> 1 hour	.59 (.4577)**	.49 (.3179)*
* significant at D < 0.05	** significant at n <01	· /

Table 1: Odds ratios from logistic regressions predicting factors associated with Antenatal & Delivery care utilization among women with births in last two years, Ethiopia 2012 (n=1370)

\*significant at P<0.05

\*\*significant at p<0.001

#### References

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