

Getting women to care in Nepal: Insights from a Difference in Difference analysis

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RESEARCH QUESTION

Can a health-promotion intervention improve behaviours with regards to ANTENATAL CARE service uptake?

INTRODUCTION

METHODS

RESULTS

In 2007, Green Tara Trust (GTT), a Nepalese Non-Governmental Organisation implemented a 5 year health promotion intervention to improve maternal health in 2 rural village development communities (VDCs) and selected a control community; where they had a care-as-usual approach. This study evaluated an intervention aimed to improve the uptake of antenatal care. The expectation is that health-seeking behaviour during pregnancy improves in the intervention area (South of Kathmandu) relative to the control area (North of Kathmandu). A controlled before and after, cross-sectional

study in 2007 (A, baseline) and again in 2010 (B, midline) with a questionnaire was administered to every woman with a child under the age of 2 in all households in both areas.

The surveys captured responses from 833 women of childbearing age with their last child of less than 2 years old.

• Baseline characteristics were not statistically different between intervention & control groups.

GTT activities in the field:

• GTT community health workers target women (between the ages of 15-49; with children less than 2 years old) in GTT health promotion groups and on a one-to-one basis.

• Also works with mother-in-laws who influence womens' ability to access Antenatal Care (ANC).

• Health Promotion talks at religious festivals to encourage participation in GTT groups.

Analysis:

Difference-in-Difference¹ (DiD) assessed the effects of intervention on outcome variables, while controlling for a constructed wealth index and other personal characteristics such as parity, age and level of education. DiD addresses a gap in evaluations² of community health promotion: using longitudinal analysis on programmes with a control to measure intervention effect (E) on health uptake behaviour i.e.

E = [(InterventionB + InterventionA) – (ControlA + ControlB)]

• DiD logistic regression results showed that the probability of attending ANC at least once during whole pregnancy was 6 times higher in the intervention than in the control group.

• The impact of the intervention on ANC attendance during the first trimester was not significant, (Figure 1).

• Poisson regression results showed that the intervention group exceeded the recommended 4 ANC visits 1.13 times more than n the control group, (Figure 2).

CONCLUSION

Although the impact was not significant during the first trimester, results showed the intervention is effective on antenatal attendance at least once during the whole pregnancy, with an increase in the number of visits.





Figure 1: Percentage of women attending their 1st ANC clinic in the 1st Trimester, changes between baseline and midline in both control and intervention areas

Figure 2: Percentage of women attending 4 ANC clinics, changes between baseline and midline in both control and intervention areas

References: 1. Liu X, Yan Hong, Wang D (2010) The evaluation of "Safe Motherhood" program on maternal care utilisation in rural western China: a difference in difference approach. BMC Public Health.
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