McGill | Department of Epidemiology, Biostatistics and Occupational Health

EPIDEMIOLOGY

EPIDEMIOLOGY SEMINAR / WINTER 2019

THE DEPARTMENT OF EPIDEMIOLOGY, BIOSTATISTICS AND OCCUPATIONAL HEALTH, - SEMINAR SERIES IS A SELF-APPROVED GROUP LEARNING ACTIVITY (SECTION 1) AS DEFINED BY THE MAINTENANCE OF CERTIFICATION PROGRAM OF THE ROYAL COLLEGE OF PHYSICIANS AND SURGEONS OF CANADA

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Is Deployment of Trained Nurses to Rural Villages a Remedy for the Low Skilled Birth Attendance in Ethiopia? A Cluster Randomized Community Trial

MONDAY, 25 FEBRUARY 2019 / 4:30 pm – 5:30 pm

Strathcona Anatomy & Dentistry Building - Room 2/36

3640 University Street – Directions from Purvis Hall

ALL ARE WELCOME

ABSTRACT: ***Background:*** Low coverage of Skilled Birth Attendance (SBA) is one of the major drivers of maternal mortality in many low- and middle-income countries (LMICs) including Ethiopia. We conducted a cluster-randomized controlled community trial to assess the effect of deploying trained community-based nurses to rural communities on the uptake levels of SBA in Ethiopia.***Methods:*** A three-arm, parallel groups, cluster-randomized community trial was conducted to assess the effect of deploying trained community based reproductive health nurses (CORN) on the uptake of SBA services. A total of 282 villages were randomly selected and assigned to a control arm (n = 94) or 1 of 2 treatment arms (n = 94 each). The treatment groups differed by where these new service providers were deployed, a health post (HP) or health center (HC). Baseline and end line surveys were conducted to document and measure the effects of the intervention. Program impacts on SBA coverage were calculated using difference-in-difference (DID) analysis. ***Results:*** After nine months of intervention, the coverage of SBA services increased significantly by 81.1% (from 24.61 to 44.59) in the HP based intervention arm, and by 122.9% (from 16.41 to 36.59) in the HC arm, respectively (p <0.01). Conversely, a small and non-significant (2%) decline in SBA coverage were observed in the control arm (P >0.05). The DID estimate indicated a net increase in SBA coverage of 21.32 and 20.52 percentage points (PP) across the HP and HC based intervention arms, respectively (p < 0.001). ***Conclusions:*** Deployment of trained reproductive health nurses to rural communities in Ethiopia significantly improved utilization of SBA services. Therefore; in similar low-income settings where coverage of SBA services is very low, deployment of trained community-based nurses to grass-roots level could potentiate rapid service uptake. Additional cost-effectiveness and validation studies at various setups are required, before scale-up of the innovation, however.

OBJECTIVES: Participants will be able to describe the main findings of the WHO funded Implementation Research Platform (IRP) project entitled "Is deployment of trained nurses to rural villages a remedy for the low skilled birth attendance in Ethiopia? A cluster randomized community trial"

1. List the limitations of the existing rural health extension program in addressing the low coverage of skilled birth attendance in Ethiopia;
2. Explain the basic concepts behind the difference-in-difference (DID) analysis;
3. Describe the effectiveness of deploying trained reproductive health nurses in the rural villages and primary health care centers for the improvement of the skilled birth attendance in comparison to the existing strategy.

BIO: **Website**:https://www.researchgate.net/profile/Henok_Tadesse_Ayele
Publications:https://scholar.google.com/citations?user=cjiZLr0AAAAJ&hl=en