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Overcoming barriers to scaling skilled birth attendants utilization in improving maternal, newborn and child health in Nepal

Submission date
03/09/2013

Recruitment status
No longer recruiting

Registration date
24/10/2013

Overall study status
Completed

Last Edited
08/05/2017

Condition category
Pregnancy and Childbirth

[_] Prospectively registered
[X] Protocol
[_] Statistical analysis plan
[X] Results
[_] Individual participant data

Plain English summary of protocol

Background and study aims
Despite a decrease in maternal deaths in last twenty years in Nepal, the underlying causes of maternal deaths remain a serious concern. The three main causes of maternal death in Nepal are post-partum haemorrhage (heavy bleeding during delivery), high blood pressure and related disorders during pregnancy, and abortion. The use of skilled birth attendants (SBAs) for childbirth can further reduce the maternal death rate. However, SBA service coverage for birth is currently low compared to the target to be achieved by 2015. Although the government of Nepal has put increased emphasis on implementation of SBA policy and scaling up of service coverage to meet the targets by 2015, there are several barriers to scaling up of SBA services in Nepal. Through a package of interventions the Nepal Public Health Foundation aims to develop and test a model method to increase the utilization of skilled birth attendants and improve maternal, newborn and child health in Nepal.

Who can participate?
Pregnant women who visit or do not visit health institutions for childbirth in the 36 clusters in a given period of time.

What does the study involve?
Village Development Committees (VDCs) from three districts (Bajhang, Dailekh and Kanchanpur) were randomly allocated to either the intervention or the control group. The intervention involves health facility management committees, mothers groups, female community health volunteers and youth groups. The interventions are increasing family support for pregnant women to reach the health facility, making funds available to remove financial barriers faced by families for using institutional childbirth care, making transport options available to reach a health facility for childbirth, developing women-friendly health services by improving providers communication skills, and reducing security problems of SBAs so that care can be available 24/7. The control group do not receive any intervention.

What are the possible benefits and risks of participating?
Through the intervention participants will help to improve the utilization of skilled birth

attendant services leading to improvements in their own health, the health of their children, and the health of their communities. There are no particular risks involved in participating in this study.

Where is the study run from?
The study is running from the Nepal Public Health Foundation based in Kathmandu, Nepal.

When is the study starting and how long is it expected to run for?
The intervention started in April 2013 and this will run until March 2014. The final evaluation of the intervention will be conducted in October 2014.

Who is funding the study?
World Health Organization (WHO) (Switzerland)

Who is the main Contact?
Prof. Sharad Onta
sharadonta@gmail.com

Contact information

Type(s)
Scientific

Contact name
Prof Sharad Onta

Contact details
Nepal Public Health Foundation
Dhara Marga 101/2, Maharajgunj
Kathmandu
Nepal
44600
+977 (0)9851085061
sharadonta@gmail.com

Additional identifiers

Study information

Scientific Title
Implementation research to overcome barriers to scaling skilled birth attendants utilization in improving maternal, newborn and child health in Nepal: a cluster randomized controlled trial

Study objectives
It is hypothesized that through a package of interventions which includes increasing family support for pregnant women to reach health facility, making funds available to remove financial barriers faced by families for using institutional childbirth care, making transport options available to reach a health facility for childbirth, developing women-friendly health services by improving providers communication skills, and reducing security problems of skilled birth attendants (SBAs) so that care can be available 24/7 will lead to increased utilization of skilled

birth attendants and improvements in maternal, newborn and child health in the districts of Far and Mid-West Nepal.

Ethics approval required
Old ethics approval format

Ethics approval(s)
1. Ethical Review Board of Nepal Health Research Council, 29/01/2011
2. Ethical Review Committee, World Health Organization (WHO), Geneva, Switzerland

Primary study design
Interventional

Study design
Cluster randomized controlled trial

Study type(s)
Quality of life

Health condition(s) or problem(s) studied
Maternal and Newborn Health

Interventions
Village Development Committees (VDCs) from three districts (Bajhang, Dailekh and Kanchanpur) were allocated to intervention and control clusters by randomization.

The intervention package to be implemented has five components to directly address these barriers. Each component has several activities, described below.

Component 1: Increased family support for the pregnant women to reach a facility for childbirth.
Female Community Health Volunteers (FCHVs) were oriented by project staff to discuss with the pregnant women and family members the importance of birth with a skilled attendant and review with the family the birth and emergency preparedness card which the woman has completed in her antenatal care visits. Mothers groups were given an orientation by FCHV with the support of project staff to invite the family of identified pregnant women (identify through FCHV and mothers group members in each ward) to regular meetings to discuss the importance of birth with a skilled attendant and family members support to the pregnant women to reach this care.
The mothers groups provide information to the family members about the fund and transportation arrangement mechanism.

Component 2: Develop a system to provide funds to support women and families to seek childbirth care with a SBA
The research team organized discussions with the Health Facility Management Committees (HFMCs) of respective Health Post, Sub Health Post on the operation of a fund by the mothers groups. Discussion on the roles and scope of HFMC to support mothers groups in operating the emergency fund and possible modalities for the operation of the fund, particularly how to protect against losses and replenishment of the fund was done.The project staff supported the HFMC in their discussions with mothers groups for the expansion of the current fund, to agree upon a modality of operation and to establish regular coordination and feedback between the Committee and mothers group. All mothers group agreed to use the existing fund as an

emergency fund to support women to reach a health facility which is supposed to be reimbursed by the women after getting the incentives from the health institution as a part of the Safe Delivery Incentive Program in Nepal.

Component 3: Develop a system to manage transportation to a facility for childbirth.
The research team interacted with the HFMC of all intervention VDCs to discuss the development of a system to manage transportation of mothers for institutional delivery. The possibility to mobilize local actors, particularly local youth groups and mothers groups, was discussed. There was also a discussion on the modality and functioning of the system. The research team supported the HFMC to organize a meeting with youth groups to discuss the need to organize transport for pregnant women to reach health facilities for childbirth. Youth groups have been mobilized to arrange the transportation for the women to arrive at health facilities for birth and in case of complications. The HFMC periodically organize meetings with the youth groups to review the activities, discuss any problems faced and possible solutions.

Component 4: Develop a women-friendly environment in health facilities.
The HFMC oriented the SBAs and staff on improving the friendliness of the facility to make health facility women friendly. Furthermore, training on communication skills was also given to the SBAs and staff of the facility. Meetings were organized with the health facility management committee and with providers to discuss on the policy to allow a companion of the womens choice during childbirth. SBAs were oriented on how to work with the companion during labour and birth.

Component 5: Establish a mechanism to improve the security of SBA
As security has been identified as one of the barriers to service provision, meetings were organized with the health facility management committee, mothers groups, youth groups and other relevant actors in the community to discuss the situation and agree upon the mechanisms to improve the security situation of SBAs. SBAs will be accompanied by a member of youth group or the FCHV of the particular area of a village during childbirth.

The control group has Village Development Committees (VDCs) of the same district but they do not receive any intervention at their cluster.

Intervention Type
Other

Phase
Not Applicable

Primary outcome(s)
1. Utilization of SBA services by pregnant women for childbirth (% of women who give birth with a SBA [facility and home])

Key secondary outcome(s)
1. Ante-natal check-up four times by pregnant women (% of pregnant women who had one and who had four ante-natal checkups during pregnancy)
2. Post-natal check-up of mothers and babies (% of mothers who received at least one post-natal check of mother and newborn baby)
3. Availability of transport to the women to visit a health institution for childbirth (% of women who used services and % of women who informed they did not receive SBA services because of transport problems)

4. Functional operation of emergency fund (% of women who perceived lack of finances as a problem in utilizing SBA services; % of women who received a loan from emergency fund and % of women who paid back the loan)
5. Security of SBA (% of SBAs who perceived security as a problem in work)
6. Support from family to the women for childbirth at health institution (% of women who perceived they had support from their family to use SBA services; % of women who informed lack of support from their family as a reason for not using SBA services)
7. Women-friendly health facility environment (% of women who inform that health workers were supportive at the facility; % of women who informed that they did not use SBA services because of unsupportive behaviour of health workers)

Completion date
01/10/2014

Eligibility

Key inclusion criteria
1. Bajhang, Dailekh and Kanchanpur has 120 Village Development Committees (VDCs). Baseline survey involved only women having children under 1 year of age in 50 VDCs. 20 VDCs were excluded because of their proximity to district hospital. Only 50% of the remaining 100 VDCs were selected for the baseline survey.
2. The intervention phase of the project involved only VDCs which have SBA utilization less than 60%. All mothers groups, youth groups, SBA, Female Community Health Volunteer (FCHV) of 36 VDCs were involved. One VDC with 57% utilization rate has been excluded to distribute clusters equally and evenly.
3. Evaluation phase will be similar to baseline phase. It will involve mothers having children under 1 year of age.

Participant type(s)
Patient

Healthy volunteers allowed
No

Age group
Adult

Sex
Female

Key exclusion criteria
Does not meet inclusion criteria

Date of first enrolment
01/04/2011

Date of final enrolment
01/10/2014

Locations

Countries of recruitment
Nepal

Study participating centre
Nepal Public Health Foundation
Kathmandu
Nepal
44600

Sponsor information

Organisation
World Health Organization (Switzerland)

ROR
https://ror.org/01f80g185

Funder(s)

Funder type
Research organisation

Funder Name
The Implementation Research Platform, World Health Organization (WHO) (Switzerland)

Results and Publications

Individual participant data (IPD) sharing plan

IPD sharing plan summary
Not provided at time of registration

Study outputs

Output type	Details	Date created	Date added	Peer reviewed?	Patient-facing?
Results article	results	01/10/2017		Yes	No
Protocol article	protocol	19/03/2014		Yes	No