

Implementing simplified Neonatal Resuscitation Protocol - Helping Baby Breathe at Birth (HBB) - in a tertiary level hospital in Nepal for improved perinatal survival

Submission date 07/08/2012	Recruitment status No longer recruiting	<input type="checkbox"/> Prospectively registered <input checked="" type="checkbox"/> Protocol
Registration date 15/08/2012	Overall study status Completed	<input type="checkbox"/> Statistical analysis plan <input checked="" type="checkbox"/> Results
Last Edited 14/02/2018	Condition category Neonatal Diseases	<input type="checkbox"/> Individual participant data

Plain English summary of protocol

Background and study aims

Neonatal asphyxia is a medical condition that happens when a baby's brain and other organs do not get enough oxygen before, during or right after birth. This leads to almost a million deaths every year, which almost exclusively happen in low or middle income countries. For babies who are suffering from this lack of oxygen (hypoxia), a delay in receiving emergency care, such as resuscitation, can lead to severe disability in the child. This is a particular problem in these countries as a large number of births take place outside health facilities or without a skilled birth attendant present. In order to try to prevent disability and death, the American Academy of Paediatrics has developed an educational programme called "Helping Babies Breathe" (HBB). This training package is designed to train birth attendants in developing countries in essential skills of how to effectively treat hypoxia. The aim of this study is to find out whether an introduction of a simplified Neonatal Resuscitation Protocol (HBB) will improve the survival rate and overall outcome for babies suffering from hypoxia.

Who can participate?

Newborns delivered at Paropakar Maternity and Women's Hospital during the study period.

What does the study involve?

Birth attendants are provided with training in a simplified Neonatal Resuscitation Protocol (HBB), which is then used in the hospital. The number of neonatal deaths is counted over a six-month period when birth attendants are actively trained in the HBB practices. The results are then compared with a period of six months before the training began, and a period of three months after the active training ends.

What are the possible benefits and risks of participating?

A potential benefit of participating in the study is improved care offered by the trained health professionals. There are no potential risks of participating in the study.

Where is the study run from?
Paropakar Maternity and Women's Hospital (Nepal)

When is the study starting and how long is it expected to run for?
July 2012 to September 2013

Who is funding the study?
1. Laerdal Foundation (Norway)
2. Uppsala University (Sweden)

Who is the main contact?
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Contact information

Type(s)
Scientific

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Additional identifiers

Protocol serial number
N/A

Study information

Scientific Title
Evaluating the implementation of a simplified Neonatal Resuscitation Protocol - Helping Baby Breathe at Birth (HBB) - in a tertiary level hospital in Nepal on perinatal outcome and survival using a before-after study design

Study objectives
The introduction of a simplified Neonatal Resuscitation Protocol (HBB) will significantly improve perinatal outcome and survival in the study setting.

Ethics approval required

Old ethics approval format

Ethics approval(s)

1. Institutional Research Committee - Ministry of Health and Population in Nepal, ref: 2068-11-02BS
2. Ethical Review Board of Uppsala University, 15/08/2012, ref: 2012/267

Study design

Prospective cohort study with before and after design

Primary study design

Observational

Study type(s)

Treatment

Health condition(s) or problem(s) studied

Perinatal mortality

Interventions

After a six month baseline period a simplified algorithm for neonatal resuscitation at birth - Helping Babies Breathe (HBB) will be implemented in the hospital. In order to improve the adherence of the birth attendants towards this new guideline on neonatal resuscitation a framework of quality improvement cycle will be instituted.

Intervention Type

Other

Phase

Not Applicable

Primary outcome(s)

Perinatal mortality

Key secondary outcome(s)

1. Apgar score at 1, 5 and 10 minutes
2. Saturation at 5 and 10 minutes
3. Length of hospital stay
4. Performance of health staff at resuscitation (time to initiation, time of effective ventilation etc.)
5. Knowledge level and in-training performance of health staff

Completion date

30/09/2013

Eligibility

Key inclusion criteria

All newborns delivered at Paropakar Maternity and Women's Hospital in Kathmandu, Nepal during study period

Participant type(s)

Patient

Healthy volunteers allowed

No

Age group

Neonate

Sex

All

Key exclusion criteria

Does not meet inclusion criteria

Date of first enrolment

01/07/2012

Date of final enrolment

30/09/2013

Locations**Countries of recruitment**

Nepal

Study participating centre

Population Service International

Lalitpur

Nepal

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Sponsor information**Organisation**

Uppsala University (Sweden)

ROR

<https://ror.org/048a87296>

Funder(s)

Funder type

Charity

Funder Name

Laerdal Foundation (Norway)

Alternative Name(s)

Laerdal Foundation

Funding Body Type

Private sector organisation

Funding Body Subtype

Trusts, charities, foundations (both public and private)

Location

Norway

Funder Name

Uppsala Universitet

Alternative Name(s)

Uppsala University, UU_University, Uppsala Universitet, Sweden, UU

Funding Body Type

Government organisation

Funding Body Subtype

Universities (academic only)

Location

Sweden

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	05/07/2015		Yes	No
Results article	results	10/09/2015		Yes	No
Results article	results	31/08/2016		Yes	No
Results article	results	31/01/2018		Yes	No
Protocol article	protocol	05/10/2012		Yes	No
Participant information sheet	Participant information sheet	11/11/2025	11/11/2025	No	Yes