An infection control intervention study: Using infection control as an entry point for improving the quality of delivery care and strengthening health systems in developing countries

Submission date	Recruitment status No longer recruiting	[X] Prospectively registered		
22/10/2010		☐ Protocol		
Registration date	Overall study status	Statistical analysis plan		
25/11/2010	Completed	[X] Results		
Last Edited 10/09/2014	Condition category Pregnancy and Childbirth	[] Individual participant data		

Plain English summary of protocol

Not provided at time of registration

Contact information

Type(s)

Scientific

Contact name

Dr Julia Hussein

Contact details

Immpact
Health Sciences Building
Foresterhill
Aberdeen
United Kingdom
AB25 2ZD
j.hussein@abdn.ac.uk

Additional identifiers

Protocol serial number

N/A

Study information

Scientific Title

An infection control intervention study incorporating an interrupted time series with control: Using infection control as an entry point for improving the quality of delivery care and strengthening health systems in developing countries

Study objectives

The multifaceted strategy infection control package will result in the formulation and implementation of locally achievable and sustainable action to reduce rates of wound, bloodstream and reproductive tract infections after childbirth.

Ethics approval required

Old ethics approval format

Ethics approval(s)

Prof Rajeev Sharma, Convenor of the Ethics committee, Indian Institute of Management, Ahmadabad, 23/09/2010

Study design

Interrupted time series with control

Primary study design

Interventional

Study type(s)

Prevention

Health condition(s) or problem(s) studied

Maternal infections during childbirth

Interventions

Our intervention will have four core infection control elements, and a fifth element of appreciative inquiry as indicated below.

- 1. Improvement of surveillance systems for infection control
- 2. Operationalisation of infection control committees
- 3. Use of an audit, feedback, and problem solving mechanism
- 4. Development of locally relevant, standardised guidelines and protocols
- 5. Appreciative inquiry

Appreciative inquiry (AI) is a fairly new concept in infection control, and is the fundamental basis for our intervention. Appreciative inquiry hence brings together groups of people to identify problems and develop solutions, using self-reflective analysis and learning within a supportive environment. Sessions are held to include health facility personnel with diverse roles such as hospital cleaners, ambulance drivers, water engineer, nurses, doctors, administrators etc. Critical events are used in discussions which are non-threatening and non-punitive. Successes and problem-solving are the focus of discussions. In maternal health, it has been implemented at small scale to improve quality of emergency obstetric care in countries such as Bangladesh, India and Nepal. Although its effects were not evaluated formally in these settings, existing evidence suggest benefits of the approach.

We are planning to have 6 study sites of about 1000 deliveries per site, all in Gujarat state. They are a mix of government and private non profit health facilities. We hope to have 2 government and one PNP in each arm, control and intervention. The control facility will implement routine government procedures for infection control and will not receive the intensive surveillance-infection control committee-appreciative enquiry inputs.

The duration of the intervention and follow up will be 6 months.

Intervention Type

Other

Phase

Not Applicable

Primary outcome(s)

- 1. Puerperal infections in women who deliver in study health facilities including
- 1.1. Bloodstream
- 1.2. Reproductive tract
- 1.3. Wound infections

Key secondary outcome(s))

- 1. Antibiotic use
- 2. Duration of hospital stay

Completion date

01/09/2012

Eligibility

Key inclusion criteria

- 1. Women who delivered in the intervention and control hospitals (Gujarat state), who subsequently contract (puerperal) infection of the genital tract
- 2. Women in whom infections of the genital tract are identified after delivery, up to 42 days post partum
- 3. Puerperal infections are defined as those specified in ICD-10 codes 085 and 086 (see annex 1):
- 3.1. Puerperal sepsis
- 3.2. Other puerperal infections
- 3.3. Infection of obstetric surgical wound
- 3.4. Other infection of genital tract following delivery
- 3.5. Urinary tract infection following delivery
- 3.6. Other genital tract infection following delivery
- 3.7. Pyrexia of unknown origin following delivery
- 3.8. Other specified puerperal infections
- 4. Any woman over 28 weeks gestation who delivers a baby (live or stillborn) in any of the control or intervention hospitals
- 5. Any woman over 28 weeks gestation who has delivered a baby (in any location be it in the community, a study site or a non-study hospital) who is admitted with the placenta undelivered

Participant type(s)

Patient

Healthy volunteers allowed

No

Age group

Adult

Sex

Female

Key exclusion criteria

- 1. Any woman who delivers a baby (live or stillborn) less than 28 weeks gestation.
- 2. Miscarriage and abortion cases

Note: Often, these cases are seen in out-patients or admitted in a different ward and are classified as 'gynaecologic' cases and not 'obstetric' cases

3. Any woman admitted to the study site after delivery of the placenta

Date of first enrolment

01/01/2011

Date of final enrolment

01/09/2012

Locations

Countries of recruitment

United Kingdom

Scotland

India

Study participating centre

Immpact

Aberdeen United Kingdom AB25 2ZD

Sponsor information

Organisation

John D and Catherine T MacArthur Foundation (USA)

ROR

https://ror.org/00dxczh48

Funder(s)

Funder type

Charity

Funder Name

John D and Catherine T MacArthur Foundation (USA) (Grant number GSS 09-94513-000)

Alternative Name(s)

MacArthur Foundation, John D. & Catherine T. MacArthur Foundation, The John D. and Catherine T. MacArthur Foundation, John D & Catherine T MacArthur Foundation, John D and Catherine T MacArthur Foundation, JDCTMF

Funding Body Type

Private sector organisation

Funding Body Subtype

Trusts, charities, foundations (both public and private)

Location

United States of America

Results and Publications

Individual participant data (IPD) sharing plan

IPD sharing plan summary

Study outputs

Output type	Details results	Date created Date added Peer reviewed? Patient-facing?		
Results article		30/01/2014	Yes	No
Participant information sheet	Participant information sheet	11/11/2025 11/11/202	5 No	Yes