STARS Hidden Gems and Further Opportunities: Collaborating for stillbirth prevention

Session outline

- Overview of STARS 1.0
- Hidden Gems and summary of results so far
- Introducing STARS 2.0 “database”
- Where to from here?
  - Parents (research questions)
  - Research (FMs, Intuition, Sleep)
  - Else?

STARS 1.0

Historical Cohort:
- Population 1714 stillbirths greater than 3 weeks ago
STARS 1.0

- Historical Cohort Variables:
  - Demographics
  - Pregnancy Demographics
  - Activity (Before and After)
  - Ultrasound findings
  - Smoking drugs and alcohol
  - BP
  - FMs
  - Contractions
  - Gut instinct
  - Infection
  - Birth details
  - Cord/placenta
  - COD and Autopsy

Historical Cohort Variables:

- Demographics
- Pregnancy
- Activity (Before and After)
- Ultrasound findings
- BP
- Sleep (2 Qs)
- Smoking drugs and alcohol
- FMs
- Contractions
- Gut instinct
- Infection
- Birth details
- Cord/placenta
- COD and Autopsy

BMC Pregnancy and Childbirth

An international internet survey of the experiences of 1,714 mothers with a late stillbirth: the STARS cohort study

Jane Wantland M, Lockett M, O'Brien, Atkinson E, P. Meade, Cobley A, Usherwood and the STARS consortium


Received: 18 September 2014; Accepted: 20 July 2015; Published: 10 August 2015
STARS Study Data Request

Case Control Study:
- Stillborn cases (n=153) experienced a singleton stillbirth (≥28 weeks) less than 30 days previously
- Liveborn controls (n=480)
  - Still pregnant (n=269) or recently delivered (n=133) less than 30 days previously (78 unknown)
  - 170 of the pregnant participants returned to complete the survey once they had had the baby

Case-Control variables
- Demographics
- Pregnancy Demographics
- Activity (Before and After)
- Sleep
- Ultrasound findings
- Smoking drugs and alcohol
- BP
- FMs
- Contractions
- Gut instinct
- Infection
- Birth details
  - Inc cord placenta COD and Autopsy
Case-Control variables

- Demographics
- Pregnancy
- Activity (Before and After)
- Sleep
- Ultrasound findings
- Smoking drugs and alcohol
- BP
- FM
- Contractions
- Gut instinct
- Infection
- Birth details
  - Inc cord placenta COD and Autopsy

Case-Control

- FM under review
- Maternal instinct final stages
- Sleep preliminary data

STARS Study Data Request
Summary of what we have learnt so far from STARS 1.0

Historical
• 63% changes in fetal movement (increased, wild/crazy)
• "Gut instinct" that something was wrong (68%)
• Overnight time of death (56%).
• In many cases (55%) the mother believed the cause of death was different to that told by clinicians

Case-control: Fetal movements (FMs)
• Controls more likely to:
  – keep track of fetal movements
  – told to keep track by care provider.
  – Report increased strength and frequency of fetal movements, infrequent fetal hiccups, and frequent episodes of vigorous FMs.
• Cases more likely to:
  – perception of decreased strength, frequency
  – frequent lengthy episodes of fetal hiccups.
  – A single episode of excessive vigorous fetal activity (described as frantic or crazy)

Case control: Gut Instinct
• 110 (75.3%) of the stillborn cases and 29 (12.4%) of live born controls answered yes.
• 4 'themes' when felt:
  – 34 (40.5%) cases and 7 (16.7%) controls concern regarding FMs
  – 20 (23%) of cases and 3 (10.3%) controls week -night before birth:
  – 18 (21%) of the cases and 1 control most or all of the pregnancy
  – 12 (10.9%) and 10 controls (34.5%) something physical occurring such as pain. (Note this was the only theme that also noted in the control data).
Summary of what we have learnt so far from STARS 1.0

Case control: Sleep (prelim analysis)

- No relation: snoring frequency, sleepiness (ESS)
- No risk associated with supine sleep BUT small numbers (n=13/118 supine sleeping cases 'last night').
- Stillborn cases reported longer night time sleeping duration, and better sleep quality than controls.
- Controls more likely to report "very restless" sleep on the last night
- Cases got up less often on last night than controls.
- Regular day time nappers more likely to be a case

Where to from here?

Parents views:

- I would love the opportunity to further discuss and provide more information

Where to from here: Collaboration

FM: ?
Intuition: ?
Sleep: ?
Else: ?

(write your question and promote others that you support)
Fetal Movement

- Alex...
- What else can we be doing? (FM and Sleep Louise)
- Parents (what else do you want to know about fetal movements)

Intuition

- IKnew (Intuitive knowledge of new and experience women)
  - Stars 1.0 type survey?
  - Suggestions for approach?
    - Prospective in pregnancy
  - What researchers would like to be involved?

Where to from here: Collaboration

Sleep:
  International Multicenter Sleep position education?
  - SAVeD (Sleep Advice Versus Device)
  - Potential sites?
  - Who is interested (Australia, NZ, US, Canada, UK, Ireland?)
  - What might the protocol look like?
Where to from here: research

• Pregnancy outcome database (STARS 2.0)
  – needs funding

Where to from here: else?

• BMC-Stillbirth
• What is needed?