Exploring the social and ethical aspects of an mHealth intervention in perinatal urban and rural home visitation programmes for women affected by domestic violence

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Presenter Disclosures
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- Home visitors and women who participated in the research.

Objectives

- Compare mobile health technology with standard paper and pencil methods for screening women for domestic violence during perinatal home visitation.

- Describe the challenges and benefits of screening for domestic violence using these methods.

Methods

DOVE randomized controlled trial

The Schools of Nursing at the University of Virginia and John Hopkins University are testing two approaches for delivering the DOVE domestic violence intervention during perinatal home visitation:

(i) Screening for domestic violence and intervention administered by trained home visitors using standard paper methods.

(i) eMOCHA DOVE which delivers the same materials using mHEALTH technology ("computer tablet").

Study sites: Rural (Virginia, Missouri) Urban (Baltimore, Maryland)

Methods

Nested interpretive qualitative study

(i) To explore women and home visitors views and experiences of screening and intervention for domestic violence in perinatal home visitation using both methods.

(ii) To identify the challenges and what works well for home visitors and their clients

Data collection (November 2013 to August 2014)

N=26 interviews with women enrolled to the DOVE trial; N=23 interviews with DOVE trained home visitors; N=2 interviews with designers of the DOVE computer tablet; N=4 non participant observations of home visits

DOVE procedures

- **Eligibility:** women up to 3 months postpartum, minors aged 13-17 can sign assent with adult consent.
- **Informed consent:** all women presented study information and consent via the computer tablet which randomizes to “paper” or “tablet”.
- **Phase 1: Screening for domestic violence (DV) with Abuse Assessment Screen and Women’s Experience of Battering**
  - If negative for DV, women screened 2 more times
  - If positive for DV at any of the 3 screens, woman stops and moves to Phase 2 interventions
- **Phase 2: intervention**
  - Researcher does a baseline interview with women
  - Then home visitor provides 6 interventions at one month intervals

DOVE intervention materials

- Cycle of Abuse
- Information on abuse during pregnancy and health outcomes
- Danger Assessment Scale
- Options available:
  - Stay with the abuser, but develop a safety plan/access advocacy
  - Leave the abuser – go to a shelter/other safe place
  - File criminal charges or seek protective orders
- Home visitor does safety plan (whether “paper” or “tablet” group)
- National Domestic Violence Hotline number and local resources

Emergent findings

Context of perinatal home visiting

- Home visitor's ability to develop a trusting relationship is key to engaging women in home visitation activities.
- The home (i.e. space available, the presence of others) can be a facilitator or barrier to relationship building.
- Home visitors likened asking about domestic violence to *"Walking on eggshells"*, not wanting to appear to be *"getting into their personal business"*

Views on screening for domestic violence…. *"opening the door"*

- Women said it was an opportunity to talk to someone non-judgemental, outside of family and friends, as well as be connected to resources *"you realize there's somebody out there that's actually caring, wants to help you, or wants to know if you're okay. So it's very beneficial"* [Woman, 20 yrs]

- Home visitors felt they had a role in asking questions, safety planning, referral to community resources, listening and respecting women's choices and educating women.

- Some of the view that other professionals are better placed *"they need more social workers because they have more of an education as far as what to ask, what to look for. As nurses, we're more medical orientated"* [Home Visitor, Female, 36-45 yrs]

- Use repeated screening judiciously – *"I told you no before, I'm insulted, it seems as if you didn't believe me. Even though we say something could have changed, it's a little bit challenging"* [Home visitor, Female, 51 yrs]

- Repeated intervention content was not always positively received by women.

Safety and confidentiality

- Concerns amongst women about the potential consequences of disclosure (e.g. partner finding out, children taken away, feeling judged) – *"I know I can trust you, but these are my secrets"* [Woman, 20 yrs]

- Home visitor's safety may be compromised working with families known to be at high risk
  - *"We had one where a knife was pulled out, just waving it around"*
  - *"I had to intervene. I had to pull a couple apart"*
  - *"She had probable substance abuse issue and she became angry at my questioning and concern. She said that she had a gun and that I shouldn't come back"*

- Home visitors personal experiences of domestic violence

- Boundaries, frustrations – *"If they're not willing to make the change, that's very hard to accept"* [Home Visitor, Female, 46+ yrs]

Infusing technology into screening: potential benefits

- When abuse is too painful to talk about – *"there are just some things you feel ashamed saying, no matter how trustworthy that person"* [Woman, 20 yrs]
- No fear of being judged - *"I think it takes away some of that having to make conversation, the eye contact, the are they going to judge me?"* [Manager, Female, 46+ yrs]
- Tablet provides a greater sense of anonymity means women are more likely to answer honestly.
- Tablet design features make it easier for women to complete than paper
- Tablet can be a tool to facilitate conversation – *"It's really opened up and gave us the chance to talk about how her relationship now is different (from past abusive relationship) and how the violence impacted on her daughter's life"* [Home Visitor, Female, 46+ yrs]

Infusing technology into screening: challenges

- The computer tablet created a sense of redundancy for some home visitors: "*…you've provided information, but there's been no discussion about it. So to see where mom's understanding is, I think I struggle with that one*". [Home Visitor, Female, 46+ yrs].

- The absence of non-verbal cues sometimes posed a challenge for home visitors who were unable to determine if abuse was an issue *"When you talk to somebody I feel I can read a person a little better…you know body language, attitude towards the person"* [Home Visitor, Female, 36-45 yrs]

- Tablet can't provide an empathic response - *"It's cold, it's just her interacting with a machine, there's no sympathy, it's like no comfort, no support*" [Home Visitor, Male, 25-35 yrs].

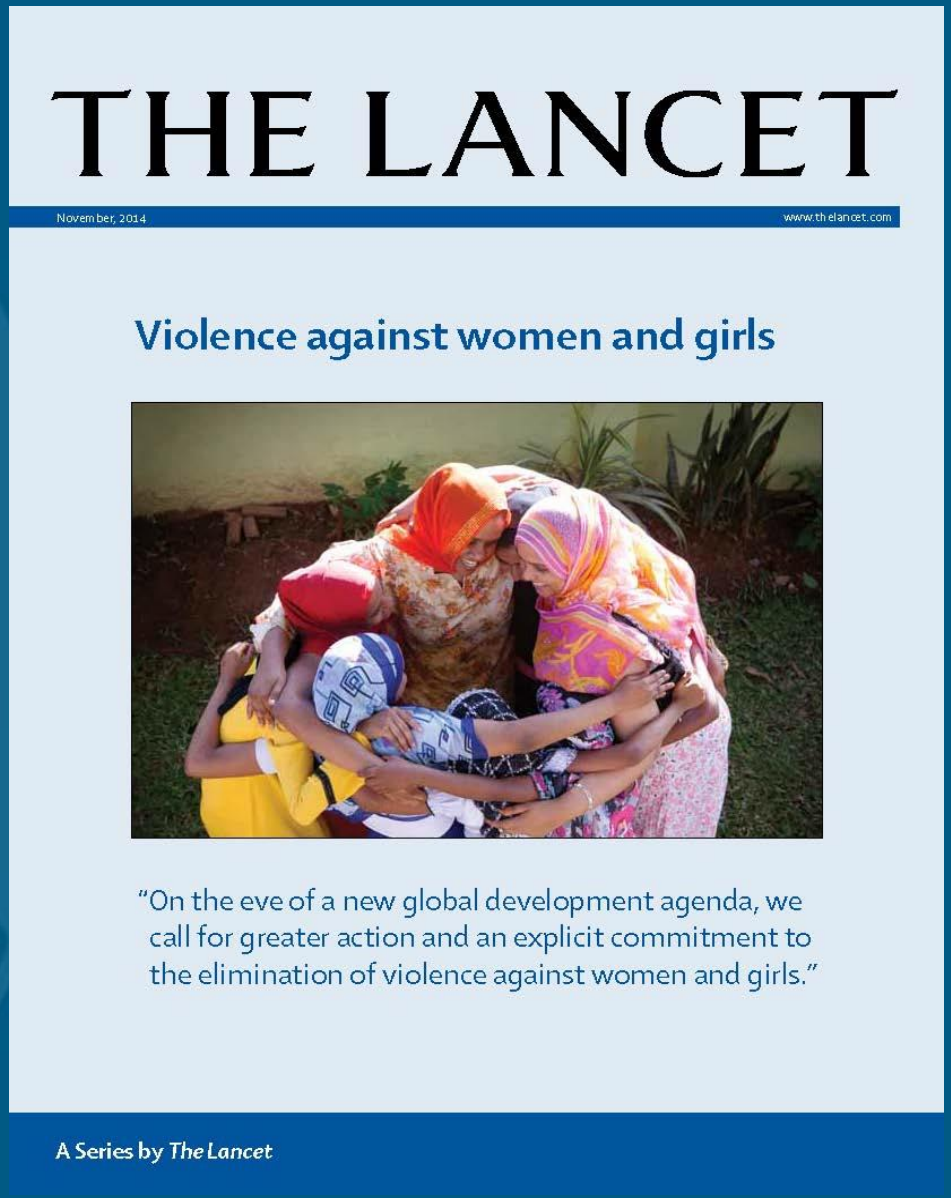
- Easy to use, but technical glitches – lack of connectivity, automatic updates not working, slow transfer of information to the research teams causing delays in starting women on the intervention, may impact on other HV activities.

Summary

- Enquiry for domestic violence during home visitation is feasible and acceptable to end users, but it takes time to become embedded.
- Tablet offers some benefits over paper based screening, but both methods have advantages and disadvantages.
- Nurse-patient interaction is at the core of developing positive and therapeutic relationships (Peplau 1997; Dult-Battey 2004).
- Therefore, good interpersonal skills are still required for DV assessment and intervention with the computer tablet.

Summary

- Consider varying intervention content (e.g. use real time data to provide individualized content, include videos of survivors).
- Reinforcement training should include feedback mechanism with evaluation/study data to sustain changes in practice
- Greater application of theories to the development of technology based behavioral interventions (Brendryen et al 2010; Gammon et al 2008; Hekler et al 2013).
- Consider people, tasks, work processes and environment when implementing technology based interventions for domestic violence – *social construction of technology* (Pinch & Bijker 1987; Klein & Kleinman 2002).



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