Infusing technology into perinatal home visiting: screening and intervening for intimate partner violence

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Invited Presentation

14th September 2015, SIGNAL e.V., Charité Hospital & the Berlin Midwives Association, Berlin





Acknowledgements

- The DOVE trial is funded by the National Institutes of Health (Grant No: HD071771)
- The nested qualitative study is funded by the European Commission Marie Curie International Fellowship (Proposal Number: 329765)
- Research teams at the School of Nursing, University of Virginia and John Hopkins University.
- Home visitors and women who participated in the research.









Background & Gaps in Knowledge

- Pregnancy and the postpartum can be a time of increased risk of IPV (Bacchus et al. 2006; Campbell et al. 1993).
- Perinatal home visitation provides favourable conditions in which to support women affected by IPV.
- Context of care and nature of relationship between the woman and home visitor presents barriers and opportunities for addressing IPV (Jack et al 2008; Eddy et al. 2008)
- To date, no studies exploring the feasibility and acceptability of IPV interventions during perinatal home visits using trained home visitors or technology.





Objectives

- Explore how home visitors and women experience the process of screening for intimate partner violence during perinatal home visits using the home visitor administered or computer tablet method?
- How does screening for intimate partner violence using either method impact the relationship between home visitors and women?
- What role does technology have in perinatal home visitation for identifying and supporting women affected by intimate partner violence?





Methods

DOVE randomized controlled trial

The Schools of Nursing at the University of Virginia and John Hopkins University are testing two approaches for delivering DOVE (Domestic Violence Enhanced Intervention) during perinatal home visits:

- (i) Home visitor screens for domestic violence (Abuse Assessment Screen & Women's Experiencing of Battering) plus discussion of the cycle of abuse, health effects risk, assessment with Danger Assessment Scale, safety planning and referrals.
- (i) Computer tablet delivers the same materials using mHEALTH technology, but safety planning undertaken with the home visitor

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





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 randomises 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

- Explanation of the cycle of Abuse
- Information on abuse during pregnancy and health outcomes
- Danger Assessment Scale to assess risk of homicide
- 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 always does the safety plan (whether "paper" or "tablet" group)
- National Domestic Violence Hotline number and local resources





Methods

Nested interpretive qualitative study

- Ontological position of relativism
- Interpretivist epistemology
- Purposive sampling

Data collection (November 2013 to August 2014 n=51 interviews)

N=26 women enrolled to DOVE; N=23 home visiting staff; N=2 designers of the DOVE computer tablet

N=4 non-participant observations of home visits





Key Themes

Improving health worldwide





The relationship is pivotal

- Relationship of trust and openness between the home visitor and the woman is key to engaging families and bringing about parental change
- Women described familiar bonds of connectedness ("best friend"/"She's like my mom"/"a professional friendship")
- Home visitors likened asking about domestic violence to "Walking on eggshells", not wanting to appear to be "getting into their personal business" and damaging the carefully crafted relationship





Breaking the silence

- Women said IPV screening was an opportunity to talk to someone non-judgemental, and to 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")
- Women who are still with the abuser may be less receptive to IPV screening and interventions as it may conflict with women's coping strategies (i.e. minimising, rationalising, denial).
- Concerns focused on the repercussions of other people including abuser finding out that woman has disclosed, unwanted police involvement, children being taken away
- Women found the safety planning with their home visitor and list of resources to be most helpful, regardless of whether the abuse was current or in the past – post-separation abuse was an issue





Disclosure of IPV was a staged process

- Trust in the home visitor established over time and influenced by - communication style, body language, HV appearing comfortable with the topic, reassurances of confidentiality, letting women know that IPV is common, demonstrating knowledge, not pressing for information ("honesty" "friendly", "showing caring")
- Homophily (i.e. tendency to bond with similar others) women's feelings of perceived similarity with their home visitor facilitated open communication ("She's been in certain predicaments herself, so that made me feel she was someone I would talk to and be open with")

The impartiality of technology

- When abuse was too painful to discuss, the tablet provided a greater sense of anonymity/privacy— "there are just some things you feel ashamed saying, no matter how trustworthy that person...[the computer tablet] was like a safety blanket" [Woman, 20 yrs, Rural]
- Removes the 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, Rural]
- Computer tablet design features reduced the cognitive burden on women (e.g. presents one question at a time) and enhanced feelings of safety (use of ear buds for privacy and a "shut down" icon taking women to a baby video).
- Some women found the intervention content on the computer (video "talking head") difficult to absorb more flexibility and tailoring with home visitor method.





Social shaping of technology

- Social shaping of the computer tablet as an "impersonal" artefact or the conduit through which communication could be deepened "It really opened up and gave us the chance to talk about how her [new] relationship is different and how the violence impacted on her daughter's life" [Home Visitor, Female, 46+ yrs, Rural]
- The computer tablet created feelings 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, Rural]





Legitimacy of asking for confidential time in the home

- Home visitors' discomfort "It was uncomfortable for me and I know it was for her because one day he walked in unexpectedly...they kind of hang around in the kitchen where they can overhear...it's a matter of control and intimidation" [HV, 60+ yrs, Urban]
- Home visitor's safety may be compromised whilst working with high risk families

"She had probably substance abuse issues and she became angry at my questioning and concern. She said that she had a gun and that I shouldn't come back".

Limitations

- The findings can only be interpreted within the context of perinatal home visiting and other parenting programmes in high income countries, that offer continuity of care provider.
- Women who chose not to be interviewed may have been less satisfied with DOVE.
- The inclusion of more undocumented women may have yielded more diverse views about IPV screening and intervention.
- Imbalance of home visitor versus computer tablet participants as more women were randomised to the paper method. A prolonged period in the field may have yielded a more balanced sample.





Summary and Implications

- Women and home visitors were supportive of IPV screening and interventions in the home, but it was challenging to see women alone.
- Nurse-patient interaction and trust was at the core of developing positive and therapeutic relationships and was necessary for the home visitor administered and computer tablet method of DOVE
- Importance of skill building and practice-enabling components of IPV training programmes and use of teaching methods that facilitate experiential learning and reflective practice and feedback.

Summary and Implications

- Tailored interventions are needed to accommodate the stage women are at in the abuse cycle.
- Need to consider people, tasks, work processes and environment when implementing technology based interventions for IPV (Pinch & Bijker, 1984, user groups influencing the "interpretive flexibility" of technology).
- Further research dedicated to tailoring technology like DOVE or developing new applications that women find useful, and that complements the care approach of health practitioners and enhances the therapeutic relationship.



