Nurse-delivered IPV Intervention RCT in Public Health Clinics in Mexico City

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Acknowledgements

- Anonymous donor
- Consenting women and nurse participants
- Mexico City Ministry of Health
- WHO (C. Garcia-Moreno)
- IPPF-WHR-Giselle Carino and Helena Acosta
- Mexfam – local IPPF affiliate México
- Nursing coordination at the México City MOH (Nurse A. Arellano)
- Study coordinators: P. Abril Campos and Oriana Ponta
MoH Mexico City Health System

- Mexico City “megacity”
  - ~ 50% (nearly 4 million) lacking private health insurance

- *Seguro Popular (now Propersa)*, Mexico’s federal health program, provides coverage for low income women at MoH clinics

- MoH system in Mexico City operates 206 health clinics and 31 hospitals
  - Health clinics are Type 1, Type 2, and Type 3

Since 2006, IPV program in 12 out of 31 hospitals, no IPV programs in community health centers
### Intervention Description (Treatment clinics only)

<table>
<thead>
<tr>
<th>Intervention component</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>Supportive care</td>
<td>Nurses trained to provide <strong>non-judgmental</strong> and <strong>empathetic</strong> counseling.</td>
</tr>
<tr>
<td>Safety planning and harm reduction counseling</td>
<td><strong>Individualized counseling</strong> focusing on planning for escape (formulating code with neighbors, storing a bag with valuables/identification, memorizing phone numbers, talking to children about plan, avoiding rooms with weapons). <strong>Harm reduction</strong> topics including the <strong>partners’ use of alcohol and illicit drugs</strong>, how to <strong>remove weapons</strong>, options for <strong>protecting reproductive health</strong>: protecting against <strong>unplanned pregnancy</strong>, <strong>STIs</strong>, and other <strong>individual-specific health risks</strong>.</td>
</tr>
<tr>
<td>Supportive referrals</td>
<td>Referrals to <strong>free and local IPV</strong> and <strong>sexual assault resources</strong>. Use and access facilitated by contacting programs together or by offering the woman step-by-step directions.</td>
</tr>
<tr>
<td>Booster counseling sessions at 3 months</td>
<td>All of the above components reviewed to create an individualized action plan.</td>
</tr>
</tbody>
</table>
Assess the impact of a nurse-delivered counseling intervention among women with recent IPV experiences on:

1) Past-year IPV (Physical and sexual)
2) Safety planning
3) Use of community resources
4) Quality of life (mental)

**Treatment Participants**
- Enhanced nurse-delivered counseling session at baseline
- Booster counseling at 3 months post baseline

**Control participants**
- Referral card from nurse
Nurse Training

• In collaboration with the MoH, health clinic director, and nursing supervisor, personal invitations were sent to eligible nurses
  • Morning shift; No field activities (i.e., home visits)
  • 197 nurses trained (147 remained in the study)

• Treatment nurses
  • 3 day group training + 3 field visits + 1 mock client
  • Booster training session at 3 months

• Control nurses
  • 1 day group training + 1 field visit + 1 mock client

• All group trainings were led by IPPF-WHR
  • Field visits led by research team
Evaluation

• Study Design:
  • 2-armed cluster RCT of 42 community health centers
  • Treatment clinics: enhanced counseling + booster at 3 months
  • Control clinics: referral card only
  • 950 participants

• Recruitment:
  • From April 2013 – August 2013 eligible women were enrolled using clinic-based screening (by RA)
    • Inclusion criteria for participants: a) experienced sexual or physical IPV in the preceding 12 months, b) ages 18-44

• Procedures:
  • Survey data collected at baseline, 3 months post baseline, and endline (15 months post baseline)
  • Qualitative interviews with nurses at 3 months post baseline
  • Qualitative interviews conducted 3 months post endline
A nurse-delivered, clinic-based intervention to address intimate partner violence among low-income women in Mexico City: findings from a cluster randomized controlled trial

Jhumka Gupta¹, Kathryn L. Falb², Oriana Ponta³, Ziming Xuan⁴, Paola Abril Campos³, Annabel Arellano Gomez⁵, Jimena Valades⁶, Gisele Cariño⁶ and Claudia Diaz Olavarrieta⁷
## IPV Outcomes (Endline versus Baseline)

<table>
<thead>
<tr>
<th>Outcome</th>
<th>Expected direction</th>
<th>Intervention Arm Pre-Post</th>
<th>Control Arm Pre-Post</th>
<th>Significance of Treatment Effects</th>
</tr>
</thead>
<tbody>
<tr>
<td>Physical and sexual IPV (12 m)</td>
<td>Significant Decrease</td>
<td>AOR 0.40 95% CI (0.28, 0.55) p&lt;.01</td>
<td>Significant Decrease</td>
<td>AOR 0.51 95% CI (0.36, 0.72) p&lt;.01</td>
</tr>
<tr>
<td>Physical IPV (12 m)</td>
<td>Significant Decrease</td>
<td>AOR 0.05 95% CI (0.03, 0.08) p&lt;.01</td>
<td>Significant Decrease</td>
<td>AOR 0.05 95% CI (0.03, 0.08) p&lt;.01</td>
</tr>
<tr>
<td>Sexual IPV (12 m)</td>
<td>Significant Decrease</td>
<td>AOR 0.47 95% CI (0.34, 0.64) p&lt;.01</td>
<td>Significant Decrease</td>
<td>AOR 0.54 95% CI (0.39, 0.75) p&lt;.01</td>
</tr>
</tbody>
</table>

Control & intervention participants reported significant decreases in IPV; there were no significant differences b/w treatment arms.
### Secondary Outcomes (Endline versus Baseline)

**Analysis using 3-level models accounting for individual, clinic, and time. Significance set at p<.05**

<table>
<thead>
<tr>
<th>Outcome</th>
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<th>Intervention Arm Pre-Post</th>
<th>Control Arm Pre-Post</th>
<th>Significance of Treatment Effects</th>
</tr>
</thead>
<tbody>
<tr>
<td>Use of community resources (12m)</td>
<td>Significant Increase</td>
<td>( \beta = 0.20 ) 95% CI (0.08, 0.31)</td>
<td>( \beta = 0.11 ) 95% CI (-0.003, 0.23)</td>
<td>Non-significant 95% CI (-0.09, 0.24)</td>
</tr>
<tr>
<td>Safety Planning Behaviors</td>
<td>Significant Increase</td>
<td>( \beta = 0.88 ) 95% CI (0.58, 1.18)</td>
<td>( \beta = 0.52 ) 95% CI (0.20, 0.83)</td>
<td>Non-significant 95% CI (-0.07, 0.79)</td>
</tr>
<tr>
<td>Quality of Life (Mental)</td>
<td>Significant Increase</td>
<td>( \beta = 2.34 ) 95% CI (1.41, 3.27)</td>
<td>( \beta = 1.46 ) 95% CI (0.48, 2.44)</td>
<td>Non-significant 95% CI (-0.43, 2.24)</td>
</tr>
<tr>
<td>Reproductive coercion (12 m)</td>
<td>Significant decrease</td>
<td>AOR 95% CI 0.56 (0.37, 0.83)</td>
<td>Non-significant AOR 95% CI 0.79 (0.54, 1.17)</td>
<td>Non-significant AOR 95% CI 0.71 (0.41, 1.23)</td>
</tr>
</tbody>
</table>

Control & intervention participants reported significant increases in safety planning, and mental QoL; no significant differences b/w treatment arms.
<table>
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<th>Control Arm Pre-Post</th>
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</tr>
</thead>
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<tr>
<td>Use of community resources</td>
<td>Significant Decrease</td>
<td>-0.16 (-0.30, -0.02)</td>
<td>-0.30 (-0.42, -0.17)</td>
<td>Non-significant 0.13 (-0.05, 0.32)</td>
</tr>
<tr>
<td></td>
<td>p = .02</td>
<td></td>
<td>p &lt; .01</td>
<td>p = .17</td>
</tr>
<tr>
<td>Safety Planning Behaviors</td>
<td>Significant Increase</td>
<td>0.48 (0.22, 0.75)</td>
<td>Non-Significant Increase</td>
<td>Significant Increase</td>
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<tr>
<td></td>
<td>p &lt; .01</td>
<td></td>
<td>0.08 (-0.19, 0.36)</td>
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<tr>
<td></td>
<td></td>
<td></td>
<td>p = .56</td>
<td>p = .04</td>
</tr>
<tr>
<td>Quality of Life (Mental)</td>
<td>Significant Increase</td>
<td>2.85 (1.91, 3.79)</td>
<td>Significant Increase</td>
<td>Significant Increase</td>
</tr>
<tr>
<td></td>
<td>p &lt; .01</td>
<td></td>
<td>1.40 (0.49, 2.31)</td>
<td>1.45 (0.14, 2.75)</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>p &lt; .01</td>
<td>p = .03</td>
</tr>
</tbody>
</table>

Analysis using 3-level models accounting for individual, clinic, and time. Significance set at p < .05

Intervention participants reported significant increases in safety planning and mental QoL relative to control at 3 months post baseline.
Select illustrative qualitative quotes

Low dose intervention was helpful for both treatment and control women
“No one had ever asked me about this [IPV] before. Both women treated me kindly, and made me think about this problem, and they made me feel that it was important.” (control participant)

Safety planning messaging resonated in this context
“I always am carrying my keys... papers, and in the entrance of my home my bag is hanging ... It is there to leave quickly, not only as a result of a family problem, but also in case of an earthquake.” (treatment participant)

Importance of more than one visit
“The first interview [was more helpful], because I really was needing to talk with someone. But the second [interview] gave me more courage to get help.” (treatment participant)
Implications of study findings

• Both the enhanced counselling intervention and the referral only appeared to reduce IPV from baseline to follow-up, but the enhanced counselling intervention was no more effective than “standard of care”.

• The enhanced counseling intervention showed promise in significantly improving safety planning behaviors and mental quality of life, but only in the short-term, and findings may be restricted to statistical significance.

• Qualitative data suggest that both treatment and control women experienced improvements in IPV levels, safety planning, and use of community resources due to both survey effects (particularly within a health care setting) and rapport with nurses and research team.

• For highly vulnerable women, a low-dose intervention within the health sector may play an important role in responding to women with IPV experiences.
Next Steps

• The 2017 guidelines strictly include nurses as first point of contact screening, treatment and/or referral of IPV victims

• Support study co-author, who is now head nurse in writing guidelines regarding IPV in health sector

• Continue ongoing dissemination activities
Questions, queries?

Obrigado
Gracias
Thank you

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Extra Slides
Why a nurse-delivered intervention to address IPV in Mexico City?

- In the WHO region of the Americas, 29.8% of women report lifetime IPV (WHO, 2013)
- 25-40% of women utilizing health services in Mexico have reported lifetime IPV
- Similar to other LMICs, rigorous evaluation of health sector response is scarce
- Community health centers serve the most vulnerable, nurses are first point of contact
Training and Intervention Materials
Study design

60 Health Centers Assessed for Eligibility

42 Health Centers Randomly Selected and Randomized

21 Control Health Centers

21 Treatment Health Centers

480 Participants

470 Participants

Baseline Rolling Recruitment April – August 2013

3 Month Follow-Up July– December 2013

15 Month Follow-Up July– December 2014

393 Participants

387 Participants

352 Participants

3 Excluded

81% retention at 3 months; 74% retention at endline
Loss to follow-up mostly due to “no-shows” and/or unable to be located

Total number of women approached: 29,947
1011 refused screening
27,799 ineligible
1137 eligible; 950 recruited (83.6% recruitment)
Baseline Demographics

• Did not observe significant differences between treatment and control on demographics and outcomes of interest

• Select demographics
  • Mean age: 30.1 treatment; 29.6 control
  • Previously screened for IPV in health setting: 9.2% treatment; 10.2% control
  • Monthly income < $133 USD for 50% of control and treatment
Recommendations for future studies

• Bundle health sector response with multi-sector interventions
• Reconsider control arms and definitions of “standard of care”
• Continue to explore broader outcomes
• Implement strong process evaluation
• More than one visit was important for women
• Consider non-personnel approaches to identification
• Explore safety planning uptake/resonance of message in disaster prone settings
• Consider role of latent class analysis
Methodological challenges

• Balancing efforts to reduce attrition with impacting behavior change

• Highly vulnerable population; pre/post changes in control and treatment arms were significant

• Primary outcomes: balancing “prevention” priorities with the importance of response within the health sector

• Timing constraints
Implementation challenges

• System-wide interventions not feasible MoH clinics
• Women’s dissatisfaction with community-based organizations they were referred to
• Control nurses and research assistants wanting to assume the “counseling” role
• Private spaces
• Nurse turnover