

Authors

Jhumka Gupta
George Mason University

Kathryn L. Falb
International Rescue Committee

Claudia Diaz Olavarrieta
Population Council

Oriana Ponta
Program Manager

Ziming Xuan
Boston University

Paola Abril Campos
Harvard University

Annabel Arellano Gomez
Mexico City Ministry of Health

Jimena Valades
International Planned Parenthood Federation

Gisele Cariño
International Planned Parenthood Federation

Gupta et al. *BMC Medicine* (2017) 15:126
DOI 10.1186/s12916-017-0889-y

BMC Medicine

RESEARCH ARTICLE

Open Access

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 Gupta^{1*}, Kathryn L. Falb², Oriana Ponta³, Ziming Xuan⁴, Paola Abril Campos⁵, Annabel Arellano Gomez⁶, Jimena Valades⁷, Gisele Cariño⁸ and Claudia Diaz Olavarrieta⁹

Abstract

Background: Rigorous evaluations of health sector interventions addressing intimate partner violence (IPV) in low- and middle-income countries are lacking. We aimed to assess whether an enhanced nurse-delivered intervention would reduce IPV and improve levels of safety planning behavior, use of community resources, reproductive coercion, and mental quality of life.

Methods: We randomized 42 public health clinics in Mexico City to treatment or control arms. In treatment clinics, women received the nurse-delivered session (IPV screening, supportive referrals, health/safety risk assessments) at baseline (T1), and a booster counseling session after 3 months (T2). In control clinics, women received screening and a referral card from nurses. Surveys were conducted at T1, T2, and T3 (15 months from baseline). Our main outcome was post-year physical and sexual IPV. Interim analyses were conducted via three-level random intercept models to evaluate the interaction term for treatment status by time.

Results: Between April and October 2013, 950 women (480 in control clinics, 470 in treatment clinics) with recent IPV experiences enrolled in the study. While reductions in IPV were observed for both women enrolled in treatment (OR, 0.46; 95% CI, 0.28–0.85; $P < 0.01$) and control (OR, 0.51; 95% CI, 0.36–0.72; $P < 0.01$) clinics at T3 (July to December 2014), no significant treatment effects were observed (OR, 0.78; 95% CI, 0.46–1.24; $P = 0.30$). At T2 (July to December 2013), women in treatment clinics reported significant improvements, compared to women in control clinics, in mental quality of life (β , 1.45; 95% CI, 0.14–2.75; $P = 0.03$) and safety planning behavior (β , 0.41; 95% CI, 0.02–0.79; $P = 0.04$).

Conclusion: While reductions in IPV levels were seen among women in both treatment and control clinics, the enhanced nurse intervention was no more effective in reducing IPV. The enhanced nursing intervention may offer short-term improvements in addressing safety planning and mental quality of life. Nurses can play a supportive role in assisting women with IPV experiences.

Trial Registration: Clinicaltrials.gov (NCT01661504); Registration Date: August 1, 2012

Keywords: Intimate partner violence, Violence against women, Randomized controlled trial, Screening, Safety planning, Health sector, Latin America and the Caribbean

* Correspondence: jgupta@gm.edu

¹Department of Global and Community Health, George Mason University, 447
971-4400 University Drive Fairfax, VA 22030, USA
Full list of author information is available at the end of the article



© The Author(s). 2017 **Open Access** This article is distributed under the terms of the Creative Commons Attribution 4.0 International License (<http://creativecommons.org/licenses/by/4.0/>), which permits unrestricted use, distribution, and reproduction in any medium, provided you give appropriate credit to the original author(s) and the source, provide a link to the Creative Commons license, and indicate if changes were made. The Creative Commons Public Domain Dedication waiver (<http://creativecommons.org/publicdomain/zero/1.0/>) applies to the data made available in this article, unless otherwise stated.

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

Background: Rigorous evaluations of health sector interventions addressing intimate partner violence (IPV) in low- and middle-income countries are lacking. We aimed to assess whether an enhanced nurse-delivered intervention would reduce IPV and improve levels of safety planning behaviors, use of community resources, reproductive coercion, and mental quality of life.

Methods: We randomized 42 public health clinics in Mexico City to treatment or control arms. In treatment clinics, women received the nurse-delivered session (IPV screening, supportive referrals, health/safety risk assessments) at baseline (T1), and a booster counselling session after 3 months (T2). In control clinics, women received screening and a referral card from nurses. Surveys were conducted at T1, T2, and T3 (15 months from baseline). Our main outcome was past-year physical and sexual IPV. Intent-to-treat analyses were conducted via three-level random intercepts models to evaluate the interaction term for treatment status by time.

Results: Between April and October 2013, 950 women (480 in control clinics, 470 in treatment clinics) with recent IPV experiences enrolled in the study. While reductions in IPV were observed for both women enrolled in treatment (OR, 0.40; 95% CI, 0.28–0.55; $P < 0.01$) and control (OR, 0.51; 95% CI, 0.36–0.72; $P < 0.01$) clinics at T3 (July to December 2014), no significant treatment effects were observed (OR, 0.78; 95% CI, 0.49–1.24; $P = 0.30$). At T2 (July to December 2013), women in treatment clinics reported significant improvements, compared to women in control clinics, in mental quality of life (β , 1.45; 95% CI, 0.14–2.75; $P = 0.03$) and safety planning behaviors (β , 0.41; 95% CI, 0.02–0.79; $P = 0.04$).

Conclusion: While reductions in IPV levels were seen among women in both treatment and control clinics, the enhanced nurse intervention was no more effective in reducing IPV. The enhanced nursing intervention may offer short-term improvements in addressing safety planning and mental quality of life. Nurses can play a supportive role in assisting women with IPV experiences.

July 12, 2017