Original Report: The Community and Patient Partnered Research Network

CREATING SAFE SPACES: A COMMUNITY HEALTH WORKER-ACADEMIC PARTNERED APPROACH TO ADDRESSING INTIMATE PARTNER VIOLENCE

Ashley Wennerstrom, PhD, MPH¹; Catherine Haywood, BSW²; Maeve Wallace, PhD, MPH³; Meredith Sugarman, MPH¹; Ashlee Walker, LMFT³; Trupania Bonner⁴; Yana Sutton⁵; Barbara Lacen Keller⁶; Marva Lewis, PhD⁷; Benjamin Springgate, MD, MPH⁸; Katherine Theall, PhD³

Intimate partner violence (IPV) is a persistent public health problem in the United States, with an estimated one in three women experiencing rape, physical violence, and/or stalking by an intimate partner within her lifetime. Non-Hispanic Black women disproportionately experience IPV, but there has been limited success in implementing culturally appropriate prevention programs and services for members of this population. Community health workers (CHWs) are trusted members of under-resourced communities who provide reliable health information and improve the cultural appropriateness of service delivery and may be a vital resource for developing new IPV interventions. Guided by the principles of community partnered participatory research, we developed the CHW-led Safe Spaces project, which aimed to establish a strong academic-community partnership to focus on issues related to experiences of IPV and the prevention of IPV in New Orleans. In this article, we describe the development of our partnership including the formation of an advisory board, creation of a broadbased stakeholder coalition, offering a community partnered participatory research training, conducting IPV education and outreach, and establishing a research agenda. Our processes are replicable and lessons learned may be relevant to other groups seeking to address IPV by leveraging the strengths of community-academic collaborations and CHWs. Ethn Dis. 2018;28(Suppl 2):317-324; doi:10.18865/ed.28.S2.317.

Keywords: Community Health Workers; Community Partnered Participatory Research; Intimate Partner Violence; Community Based Participatory Research; Health Disparities

INTRODUCTION

Intimate partner violence (IPV) is physical, sexual, or psychological harm by a current or former partner or spouse. IPV is a persistent public health problem in the United States.¹ An estimated one in three women have experienced rape, physical violence, and/or stalking by an intimate partner within their lifetime.² Fifteen percent of non-fatal violent crimes in the United States are incidents of IPV,³ and 45% of female homicide victims in 2008 were killed by an intimate partner.⁴

Non-Hispanic women of color disproportionately experience IPV. National data from 2010 indicate that 53.8% of women identifying as non-Hispanic multiracial, 46.0% of American Indian or Alaska Native women, and 43.7% of non-Hispanic African American women had experienced rape, physical violence, and/or stalking by an intimate partner in their lifetime.² Rates were lower among non-Hispanic White and Hispanic women (34.5% and 37.1%, respectively).²

Beyond the immediate injuries that victims of non-fatal IPV sustain. there are increased risks for a host of long-term physical consequences, including infection and chronic diseases.² Risk for depression, anxiety, low self-esteem, posttraumatic stress, and suicidal behaviors are also elevated among women who experience IPV.5-9 Moreover, evidence suggests that poor mental health may render women vulnerable to further victimization, perpetuating a cycle of violence and health consequences.¹⁰ negative

Address correspondence to Ashley Wennerstrom, PhD, MPH, Tulane University School of Medicine; 1430 Tulane Ave. SL-16 New Orleans, LA 70112; 504.988.4007; awenners@tulane.edu

¹ Tulane University School of Medicine,

New Orleans, LA

² Louisiana Community Health Outreach Network, New Orleans, LA

³ Tulane University School of Public Health and Tropical Medicine, New Orleans, LA ⁴ Crescent City Media Group, New Orleans,

⁵ Kali Red's Initiative: Take Back Your Life Foundation, New Orleans, LA

⁶ Central City Partnership, New Orleans, LA ⁷ Tulane University School of Social Work,

New Orleans, LA

⁸ Louisiana State University Health Sciences Center, New Orleans, LA

In addition, an estimated 4%-8% of women experience IPV during pregnancy, which may have implications for both maternal and child health.¹¹⁻¹³ IPV before and during pregnancy is associated with obstetric complications such as hypertension, hemorrhage, placental abruption, premature rupture of membranes, and preterm labor.¹¹ Pre- and postnatal depression and psychiatric ill-

We aimed to establish a strong academiccommunity partnership to focus on issues related to experiences of IPV, the prevention of IPV and its associated adverse birth outcomes in New Orleans...

ness have been observed among pregnant victims of IPV.^{14,15} These insults to maternal physical and mental health may increase the likelihood of delivering an infant born preterm or growth restricted,¹⁶⁻¹⁹ conditions with short- and long-term adverse health consequences for the neonate.²⁰⁻²² Children who witness IPV at home are vulnerable to physical and mental health consequences,²³ and may be more likely to later abuse their own children or experience revictimization in adulthood.^{24,25}

In the United States, cultural norms and opportunities based on historical and contemporary systemic racism, violence, and collective trauma, and the intersection of race- and gender-based oppression shape the ways in which IPV may be perceived, experienced and/or managed by women based on their race, class, or ethnicity.²⁶ Despite growing evidence of the negative health consequences of IPV victimization, there has been limited success in implementing culturally appropriate prevention programs and services, particularly for non-Hispanic African American women. Developing appropriate interventions may require innovative approaches and a movement bevond traditional academic-led research and service delivery methods.

Community-academic partnered approaches including communitybased participatory research and participatory action research have been suggested as mechanisms to guide research and interventions for IPV, particularly for racial or ethnic minority communities.²⁷⁻²⁹ Community health workers (CHWs) - trusted members of under-resourced communities who promote health equity through individual and community-level activities - have played key roles in developing culturally appropriate research and programs.³⁰ CHWs have been involved in research focused on improving social determinants of health³¹ and physical health outcomes,³² and in recent years, have been increasingly utilized in efforts focusing on mental health.^{33,34} However, use of CHWs in research aimed at addressing IPV has been limited. We used the principles of community partnered participatory research (CPPR) outlined by Jones and Wells³⁵ to develop the Safe Spaces project. We aimed to establish a strong academic-community partnership to focus on issues related to experiences of IPV, the prevention of IPV and its associated adverse birth outcomes in New Orleans, a city characterized by high rates of violent crime, domestic violence, and entrenched racial inequity in maternal and child health outcomes.³⁶ Safe Spaces leverages the strengths of a local CHW professional association, multiple community-based agencies, and faculty and research staff from local universities. This article describes the replicable processes, challenges, and recommendations that emerged from the successful development of the partnership.

PROJECT DEVELOPMENT

Origins

The Safe Spaces project originated from an existing relationship between two individuals with a three-year history of collaboration on developing a professional association for CHWs, the Louisiana Community Health Outreach Network (LACHON). One person (CH) was the chair of LACHON, with a background in social work and 30 years of experience working as a CHW in New Orleans. The other (AW) co-founded LA-CHON in conjunction with a previous community-academic partnered initiative³³ and was a junior investigator with a history of conducting community partnered projects.³⁷ Based on a mutual desire to promote health equity through CPPR, and with support

from an associate professor (KT) with a track record of research on violence and maternal and child health, we responded to an NIH conference series opportunity focused on developing community-academic partnerships.

We concentrated on IPV, and specifically its relationship to adverse birth outcomes, as many of our previous community and academic collaborators had personal and/or professional experience with the issue. We concentrated our efforts in a single neighborhood with high rates of violence and poor birth outcomes. Our overall goals were to develop a strong community-academic partnership, gather community input into causes of and possible solutions to IPV, and ultimately to develop an intervention to address IPV in the target neighborhood.

We agreed to follow CPPR princples35 throughout our work. Specifically, we collaborated on writing a funding proposal and included a dual principal investigator (PI) structure with one community PI (CH) and one academic PI (AW), with each person having defined roles. The community PI was primarily responsible for planning and managing community events, education, and relationships, while the academic PI took ownership of research development and grant management. We agreed that both PIs would be actively involved in all meetings and employ shared decision making. We collaboratively developed a budget in which approximately 40% of costs were allocated to LACHON and community-based partners. We included funds for the community-based PI, advisory board stipends, and hourly

wages for members of LACHON to plan and facilitate educational events and conduct data collection and analysis. We also received two small pilot grants from the academic partner institution to cover project costs that were prohibited by the NIH grant, such as refreshments for the various meetings described below.

To track project progress and emerging themes, we took de-identified notes at the events described in the following sections, which included advisory board meetings, community coalition meetings, a CPPR training, and community education sessions. We used sign-in sheets at events to track attendance, and CPPR training participants had the option to complete an evaluation form. All research procedures were approved by the Tulane University Institutional Review Board. An overview of Safe Spaces events appears in Table 1.

Advisory Board

We developed an advisory board composed of community and academic partners with a broad range of expertise. The board's charge was to

develop a strategic direction for the project and advise on research methodology. Between September 2014 and May 2017, the board convened a total of 12 times, with an average participation of 6.6 people per meeting. Most meetings were at a centrally located health center. The initial 11-member team, which included four academics from two universities and representatives of seven community organizations, opted to develop a shared set of guidelines under which to operate, in addition to the principles of CPPR. Through discussion and consensus at the first meeting, we arrived at the following guiding principles: 1) Every voice counts and we are all equal members of the team; 2) We seek to build capacity in communities; 3) We aim to serve and include people of all racial/ethnic backgrounds, while also acknowledging legacies of slavery, historical trauma, and White supremacy; 4) We welcome those with a history of incarceration and perpetrators of violence; 5) We recognize that experiences of violence and oppression likely contributed to their own vio-

Type of event/ meeting	Events/ meetings, N	Average participants per meeting/ event, N	Event/meeting leader	Location(s)
Advisory board	12	6.6	Community PI; Academic PI	Community Health Center
Community coalition	7	12.7	Community PI; Academic PI	Community Health Center; Library
CPPR training	1	53	Community PI; Academic PI; Advisory board members; CHWs;Invited CPPR experts	Church
Community forums	5	9.8	CHWs; Community PI	Church; Community Health Center; Library; Community center

Position / Affiliation	Area(s) of expertise
1. Project PI, Chair/CHW professional association	Community outreach; Community-based interventions; Women's health
2. Program manager /Community-based social services agency	Community outreach; Coalition development
3. Community engagement coordinator/ City government	Community engagement; Policy development
4. Program director/ Non-profit IPV services agency	IPV services and prevention
5. Director /Non-profit communications agency	Civic engagement; IPV prevention; Public health
6. Director / Non-profit IPV education agency	IPV services and prevention
7. Project PI, Assistant professor/Director training institute; Schools of medicine and public health	CPPR; Community health worker interventions and research
8. Associate professor / School of social work	Racism and health; Black women's health
9. Physician, associate professor / Schools of medicine and public health	CPPR; Mental health
10. Associate professor, director women's health center / School of public health	Women's health; Social epidemiology
11. Associate professor / School of public health	IPV prevention

Table 2. Advisory board members for the Safe Spaces project

lent behavior and/or incarceration; and 6) Flexibility is key. We understand that CPPR can go in different directions based on the desires of the communities with which we work.

Throughout the project, several people discontinued board participation due to personal and/or family commitments. We replaced members as needed and attempted to locate new members with skill sets similar to those who were departing. Most new participants had previously been involved in our coalition (described below), and thus were familiar with the project. Our final advisory board in 2017 had a total of 11 members including two men. Six people worked for community-based organizations and five represented five schools at two separate academic institutions. Seven members were African American, and four were White. Members' skills, affiliations, and expertise are summarized in Table 2.

Community Coalition

We created a community coalition that was open to a broad range of stakeholders. Our goal was to convene policymakers and service providers from local health centers, IPV-focused organizations, and other women's services agencies to discuss pressing needs for services and research. We hoped to foster collaboration across agencies and learn about relevant cultural considerations. We recruited participants through existing professional relationships and community listservs. The coalition first met in November 2014. We hosted seven meetings with an attendance mean of 12.7 participants.

In spite of CHW-led outreach, we encountered difficulty engaging local leaders and finding meeting space in the target neighborhood. As such, we held meetings in public spaces located slightly outside of the target community including a nearby health center, a church, and a library. Meetings generally included a description of the Safe Spaces project to orient new participants, discussion of current activities, and opportunities for agency representatives to share information about upcoming events and discuss possibilities for collaboration.

During each meeting, we also elic-

ited suggestions from coalition members about desired content for future gatherings. For example, at one meeting, some members requested information about an existing IPV law. Our coalition members did not have legal expertise so we invited a local judge and an experienced attorney to explain the law at a subsequent meeting. Coalition members representing state and local government agencies also presented recent programmatic and policy work on IPV.

Common themes that emerged from discussions were a lack of culturally tailored local IPV services for African American women, a need for interventions to teach teens and adults about healthy relationships, and issues with African American women being arrested for perpetrating IPV when they act in self-defense.

Community Partnered Participatory Research (CPPR) Training

Approximately six months into the project, we offered a half-day CPPR workshop to orient project partners to the underlying principles of the work and to begin building local capacity for other investigators and agency representatives to engage in partnered research. The event was held at a local church and open to members of the advisory board, participants in the coalition, and other individuals and researchers in the New Orleans area. The sessions were presented by a CPPR expert who had worked in New Orleans previously, local community-based and academic partners with CPPR experience, CHWs, and a state-level policymaker. Major topics included: an overview of the CPPR model; case studies of community-academic partnerships that have improved health disparities; strategies for authentic community engagement; and successful examples of grassroots efforts to change policies that disproportionately harm communities of color. Participants had the opportunity to sign up for work groups and receive additional information. We distributed flash drives with training materials and other relevant resources.

A total of 53 individuals representing 35 organizations attended the event. Of these participants, 31 completed a workshop evaluation. The evaluation asked participants to rate the following on a 5-point Likert scale (1= poor, 5= excellent): the length of the course was appropriate; the training provided knowledge/ skills that are applicable; overall presenter knowledge; overall presenter preparedness; and the overall course. There were open-ended questions including: Which aspects of the training were most and least helpful? What could be done to improve the training? What questions do

you have that were not answered today? Would you attend another Safe Spaces event? Why or why not? and additional comments or questions.

Participants reported high levels of satisfaction on all quantitative measures. Means for each question ranged between 4.5 and 4.9. Results are summarized in Table 3. Feedback on open-ended questions was generally positive. A common theme regarding the most helpful aspects of training was that "evidence and experiences shared from past projects, both local and elsewhere, helped to really gain insight into successful strategies to engage the community in different initiatives and ultimately benefit these communities." A suggestion for improvement that was mentioned frequently was that "distribution of master list of attendees, their organizations, and projects and contact info would be incredibly helpful." There were few responses about unanswered questions, though some people wanted information on project plans for data collection. There was broad interest in attending another similar event. Additional comments included that "it is very encouraging that universities are beginning to understand the value of community engagement and how we can learn from and support each other." Another person said, "it was encouraging to learn that state agencies are interested and willing to hear the needs and voices of community residents and willing to partner with community groups to improve outcomes."

Community Education and Outreach

Throughout 2015, we hosted five two-hour community forums to educate community members about IPV, provide resources for services, offer information about other women's health issues, and gather participants' suggestions to guide the research. Events took place at a variety of community centers, a church, and a library. We called our events "Women's Wellness Chats," as the advisory board agreed that general health and wellness would be a more appealing topic than IPV. We used LACHON's CHW email list, other community email listservs, word of mouth, and flier distribution at local agencies to recruit participants. Sessions were held primarily during evening hours to accommodate work schedules. We provided dinner, offered bus tokens, and allowed parents to bring children. Mean attendance per session was approximately 10 people.

CHWs with experience in addressing IPV facilitated each event. Sessions started with CHWs establishing ground rules for confidentiality. We

Table 3. Evaluation of the Safe Spaces CPPR training				
Question: Please rate the following	Mean (SD), 1=poor, 5=excellent			
The length of time was appropriate, n=30	4.47 (.68)			
The training provided knowledge/skills that are applicable, n=29	4.72 (.53)			
Overall presenter knowledge, n=26	4.88 (.33)			
Overall presenter preparedness, n=27	4.56 (.85)			
Overall course rating, n=19	4.89 (.32)			

created lists of common challenges that women face and used those to segue into discussing relationships. Facilitators provided examples of IPV in popular culture to stimulate conversation. During the discussion, we reviewed common warning signs and manifestations of IPV including verbal abuse, threats, control of financial resources, isolation, and stalking.

In less than three years, we developed a communityacademic partnership to address IPV that included creating an advisory board and a coalition, providing community education and outreach, gathering community input, and developing a plan to execute additional formative research.

CHWs also encouraged participants to suggest interventions to address IPV. In all forums, participants mentioned the importance of IPV prevention and teaching young people about healthy relationships. People also discussed the issue of women being labeled as perpetrators of violence when acting in self-defense.

An important outcome of these

events was participant requests that Safe Spaces conduct outreach to educate the community at-large. We created a colorful, simple brochure describing the project and existing IPV resources. We employed a total of six CHWs, advisory board members, education session facilitators, and/or LACHON members to distribute brochures and other resources at community events such as health fairs, community centers, schools, pharmacies, and barber shops.

Research Development

To capture community perspectives on IPV and appropriate methods of intervention, we hosted a series of focus groups with men and women. The academic PI produced a draft focus group guide based on a review of important themes from previous advisory board and coalition meetings, as well as community forums. The advisory board reviewed, discussed, and edited the guide.

Our final document was a result of several major considerations. First, we began the guide with the same scenarios of celebrities engaged in IPV that we successfully used during the Women's Wellness Chats. We believed that asking individuals to comment on well-known cases, rather than asking about personal experiences with victimization or perpetration, would reduce potential stigma and/ or re-traumatization while effectively eliciting attitudes about IPV. Based on input from our community coalition, we incorporated questions about knowledge of women being arrested for IPV when acting in self-defense and possible helpful resources aside from policy. Questions regarding IPV

during pregnancy were also included. Finally, since the importance of providing education about healthy relationships was a prominent theme from community forums, we included questions about specific mechanisms to provide community education.

We trained two LACHON-affiliated CHWs (one man and one woman) to serve as focus group facilitators. We completed six focus groups in 2016. Analysis is ongoing and we anticipate detailing results in a forthcoming report.

Lessons Learned

In less than three years, we developed a community-academic partnership to address IPV that included creating an advisory board and a coalition, providing community education and outreach, gathering community input, and developing a plan to execute additional formative research.

Leadership by our local CHW professional group was an invaluable component of our work, as it facilitated rapid dissemination of information about community events and hiring of trusted CHWs to conduct educational forums, and later, focus groups. Our initial design did not include conducting outreach, but we implemented it in response to CHWs' suggestions because our board valued their expertise in developing relationships. Investigators interested in CPPR may consider engaging organized CHW groups to ensure voices of under-resourced communities are represented throughout the research process.

We were encouraged by high at-

tendance at the CPPR workshop, particularly by community agencies and academic participants that were not a formal part of the Safe Space partnership, as well as positive feedback on the program. However, comments on evaluations and our subsequent experience of partnership development suggest a need for additional resources to build local CPPR capacity. For example, many of the discussions at coalition meetings tended to focus on strategies for improving or expanding IPV services to address immediate concerns, as opposed to developing a prevention-focused research agenda. There is likely a need to seek collaborative funding to enhance local agencies' service delivery capacity.

Similarly, we learned from challenges with neighborhood leader engagement that communities with limited capacity simply may be unable to participate in CPPR due to competing demands. Ultimately, we shifted our focus to a geographic area that, while still under-resourced, had more infrastructure and community agencies with which to collaborate.

Keeping coalition and advisory board members involved throughout the multi-year process was challenging due to personal and professional commitments. As the partnership progresses, we may consider changing meeting times, restructuring stipends, and/or employing technology to facilitate consistent meeting participation.

Although time-consuming, we found that writing the focus group guide collaboratively and considering the issues raised during community forums was highly valuable, and will likely lead to a more nuanced approach to addressing IPV in our target community. Our partnership is currently developing an intervention and associated funding application for future work. Members of the advisory board have agreed to sign a Memorandum of Understanding in advance of submitting our application.

This work is limited, as it is a case study. Our descriptions of meetings, events, and input relies heavily upon notes and meeting minutes that may contain errors. Nonetheless, we employed a unique approach to forming relationships and gathering community input for a highly stigmatized issue. Many of our processes and lessons learned may be replicable in other areas seeking to implement CPPR. Similarly, groups carrying out patient centered outcomes research may follow similar processes to engage patients.

CONCLUSIONS

Persistently high rates of IPV and long-standing racial and ethnic health disparities ^{2,3,37} suggest that efforts to prevent IPV and promote health equity in New Orleans and across the country have thus far been insufficient. With the establishment and continuation of the Safe Spaces project, we hope to facilitate meaningful and sustainable community engagement, and ultimately reduce IPV in New Orleans.

ACKNOWLEDGEMENTS

Research reported in this publication was supported by the Eunice Kennedy Shriver National Institute of Child Health & Human Development of the National Institutes of Health under Award Number R13HD080959. The content is solely the responsibility of the authors and does not necessarily represent the official views of the National Institutes of Health. CONFLICT OF INTEREST No conflicts of interest to report.

AUTHOR CONTRIBUTIONS

Research concept and design: Wennerstrom, Haywood, Wallace, Sugarman, Bonner, Sutton, Keller, Lewis, Springgate, Theall; Acquisition of data: Wennerstrom; Data analysis and interpretation: Wennerstrom, Walker, Theall; Manuscript draft: Wennerstrom, Haywood, Wallace, Sugarman, Walker, Bonner, Sutton, Keller, Lewis, Springgate, Theall; Statistical expertise: Theall; Acquisition of funding: Wennerstrom, Haywood, Bonner, Lewis, Theall; Administrative: Haywood, Wallace, Sugarman, Walker, Sutton, Keller, Lewis, Springgate, Theall; Supervision: Wennerstrom, Lewis, Springgate, Theall

References

- National Center for Injury Prevention and Control. Costs of Intimate Partner Violence against Women in the United States. Centers for Disease Control and Prevention; 2003. Last accessed May 16, 2018 from https:// www.cdc.gov/violenceprevention/pdf/IPV-Book-a.pdf
- Black M, Basile K, Breiding M, et al. *The* National Intimate Partner and Sexual Violence Survey. 2010 Summary Report. Atlanta, Georgia: National Center for Injury Prevention and Control, Centers for Disease Control and Prevention. 2011. Last accessed May 16, 2018 from https://www.cdc.gov/ViolencePrevention/pdf/NISVS_Report2010-a.pdf
- Truman J, Morgan R. Nonfatal Domestic Violence. Washington, DC: US Department of Justice, Bureau of Justice Statistics; 2014.
- Cooper A. Homicide Trends in the United States, 1980-2008. Washington, DC: US Department of Justice, Bureau of Justice Statistics; 2011.
- Bonomi AE, Thompson RS, Anderson M, et al. Intimate partner violence and women's physical, mental, and social functioning. *Am J Prev Med.* 2006;30(6):458-466. https:// doi.org/10.1016/j.amepre.2006.01.015 PMID:16704938
- Logan TK, Shannon L, Cole J, Walker R. The impact of differential patterns of physical violence and stalking on mental health and helpseeking among women with protective orders. *Violence Against Women*. 2006;12(9):866-886. https://doi.org/10.1177/1077801206292679 PMID:16905678
- Lipsky S, Caetano R. Impact of intimate partner violence on unmet need for mental health care: results from the NSDUH. *Psychiatr Serv.* 2007;58(6):822-829. https://doi.org/10.1176/ ps.2007.58.6.822 PMID:17535943
- 8. Coker AL, Davis KE, Arias I, et al. Physical

and mental health effects of intimate partner violence for men and women. *Am J Prev Med.* 2002;23(4):260-268. https://doi.org/10.1016/ S0749-3797(02)00514-7 PMID:12406480

- Woods SJ, Hall RJ, Campbell JC, Angott DM. Physical health and posttraumatic stress disorder symptoms in women experiencing intimate partner violence. J Midwifery Womens Health. 2008;53(6):538-546. https:// doi.org/10.1016/j.jmwh.2008.07.004 PMID:18984510
- Devries KM, Mak JY, Bacchus LJ, et al. Intimate partner violence and incident depressive symptoms and suicide attempts: a systematic review of longitudinal studies. *PLoS Med.* 2013;10(5):e1001439. https:// doi.org/10.1371/journal.pmed.1001439 PMID:23671407
- Sharps PW, Laughon K, Giangrande SK. Intimate partner violence and the childbearing year: maternal and infant health consequences. *Trauma Violence Abuse*. 2007;8(2):105-116. https://doi.org/10.1177/1524838007302594 PMID:17545568
- Berenson AB, Stiglich NJ, Wilkinson GS, Anderson GD. Drug abuse and other risk factors for physical abuse in pregnancy among white non-Hispanic, black, and Hispanic women. *Am J Obstet Gynecol.* 1991;164(6 Pt 1):1491-1496. https://doi.org/10.1016/0002-9378(91)91428-Y PMID:2048595
- McFarlane J, Parker B, Soeken K. Physical abuse, smoking, and substance use during pregnancy: Prevalence, interrelationships, and effects on birth weight. J Obst Gyn Neo. 1996;25(4):313-320. PMID:8708832
- Ludermir AB, Lewis G, Valongueiro SA, de Araújo TV, Araya R. Violence against women by their intimate partner during pregnancy and postnatal depression: a prospective cohort study. *Lancet*. 2010;376(9744):903-910. https://doi.org/10.1016/S0140-6736(10)60887-2 PMID:20822809
- Sarkar NN. The impact of intimate partner violence on women's reproductive health and pregnancy outcome. J Obstet Gynaecol. 2008;28(3):266-271. https:// doi.org/10.1080/01443610802042415 PMID:18569465
- Shah PS, Shah J. Maternal exposure to domestic violence and pregnancy and birth outcomes: a systematic review and meta-analyses. *J Womens Health* (*Larchmt*). 2010;19(11):2017-2031. https://doi.org/10.1089/jwh.2010.2051 PMID:20919921
- Alhusen JL, Bullock L, Sharps P, Schminkey D, Comstock E, Campbell J. Intimate partner violence during pregnancy and adverse neonatal outcomes in low-income women. *J Womens Health (Larchmt)*. 2014;23(11):920-926. https://doi.org/10.1089/jwh.2014.4862 PMID:25290007
- 18. Chambliss LR. Intimate partner violence

and its implication for pregnancy. *Clin Obstet Gynecol.* 2008;51(2):385-397. https:// doi.org/10.1097/GRF.0b013e31816f29ce PMID:18463468

- Silverman JG, Decker MR, Reed E, Raj A. Intimate partner violence victimization prior to and during pregnancy among women residing in 26 U.S. states: associations with maternal and neonatal health. *Am J Obstet Gynecol.* 2006;195(1):140-148. https://doi.org/10.1016/j.ajog.2005.12.052 PMID:16813751
- Goldenberg RL, Culhane JF. Low birth weight in the United States. Am J Clin Nutr. 2007;85(2):584S-590S. https:// doi.org/10.1093/ajcn/85.2.584S PMID:17284760
- Dong Y, Yu JL. An overview of morbidity, mortality and long-term outcome of late preterm birth. *World J Pediatr*. 2011;7(3):199-204. https://doi.org/10.1007/s12519-011-0290-8 PMID:21822987
- 22. Teune M, Bakhuizen S, Gyamfi Bannerman C, et al. A systematic review of severe morbidity in infants born late preterm. *Am J Obstet Gynecol.* 2011;205(4):374e 1-9. https:// doi.org/10.1016/j.ajog.2011.07.015 PMID: 21864824
- Shay-Zapien G, Bullock L. Impact of intimate partner violence on maternal child health. MCN Am J Matern Child Nurs. 2010;35(4):206-212. https://doi.org/10.1097/ NMC.0b013e3181dd9d6e PMID:20585210
- Miller-Graff LE, Cheng P. Consequences of violence across the lifespan: mental health and sleep quality in pregnant women. *Psychol Trauma*. 2017;9(5):587-595. https://doi. org/10.1037/tra0000252 PMID:28114773
- 25. Stöckl H, March L, Pallitto C, Garcia-Moreno C; WHO Multi-country Study Team. Intimate partner violence among adolescents and young women: prevalence and associated factors in nine countries: a cross-sectional study. *BMC Public Health.* 2014;14(1):751. https://doi.org/10.1186/1471-2458-14-751 PMID:25059423
- Nash ST. Through Black eyes: african American women's constructions of their experiences with intimate male partner violence. *Violence Against Women*. 2005;11(11):1420-1440. https://doi. org/10.1177/1077801205280272 PMID:16204732
- Yuan N, Gaines T, Jones L, Rodriguez L, Hamilton N, Kinnish K. Bridging the gap betweenresearch and practice by strengthening academic-community partnerships for violence research. *Psychol Violence*. 2016;6(1):27-33. https://doi.org/10.1037/vio0000026
- White J, Yuan N, Cook S, Abbey A. Ethnic minority women's experiences with intimate partner violence: using community-based participatory research to ask the right uuestions. *Sex Roles.* 2013;69(3-4):226-236. https://doi.

org/10.1007/s11199-012-0237-0

- Bloom, T, Wagman, J, Hernandez, R, et al. Partnering with community-based organizations to reduce intimate partner violence. *Hisp Jrnl of Beh Sci.* 2009; 31,2(244-257).
- Feathers JT, Kieffer EC, Palmisano G, et al. The development, implementation, and process evaluation of the REACH Detroit Partnership's Diabetes Lifestyle Intervention. *Diabetes Educ*. 2007;33(3):509-520. https://doi.org/10.1177/0145721707301371 PMID:17570882
- 31. Minkler M, Garcia AP, Williams J, LoPresti T, Lilly J. Sí se puede: using participatory research to promote environmental justice in a Latino community in San Diego, California. J Urban Health. 2010;87(5):796-812. https://doi.org/10.1007/s11524-010-9490-0 PMID:20683782
- Shah M, Kaselitz E, Heisler M. The role of community health workers in diabetes: update on current literature. *Curr Diab Rep.* 2013;13(2):163-171. https://doi.org/10.1007/ s11892-012-0359-3 PMID:23345198
- 33. Wennerstrom A, Vannoy S, 3rd, Allen C, et al. Community-based participatory development of a community health worker mental health outreach role to extend collaborative care in post-Katrina New Orleans. *Ethn Dis.* 2011;21(3 Suppl 1):S1-45-51. PMCID:PMC3715302
- 34. Wennerstrom A, Hargrove L, Minor S, et al. Integrating community health workers into primary care to support behavioral health service delivery: A pilot study. *J Ambul Care Manage*. 2015;38(3):263-272. https:// doi.org/10.1097/JAC.00000000000087 PMID:26049656
- 35. Jones L, Wells K. Strategies for academic and clinician engagement in community-participatory partnered research. JAMA. 2007;297(4):407-410. https://doi.org/10.1001/jama.297.4.407 PMID:17244838
- 36. Springgate BF, Wennerstrom A, Meyers D, et al. Building community resilience through mental health infrastructure and training in post-Katrina New Orleans. *Ethm Dis.* 2011;21(3 Suppl 1):S1-20-9. PMID: 22352077
- 2013 Report on the Health of Women and Girls in the Greater New Orleans Area. 2013. Last accessed May 16, 2018 from at: http://womenshealth.tulane.edu/uploads/Women_and_ Girls_Report_-_Full-1383756126.pdf.