

# Call to Action for Panamerican Trauma Society: Isn't It Time to Take the Davis Challenge?

Rao Ivatury<sup>1</sup>, Carol Olson<sup>2</sup>, Michel Aboutanos<sup>3</sup>

Received on: 12 March 2024; Accepted on: 05 April 2024; Published on: xxxx

## ABSTRACT

The current report aims to underscore intimate partner violence (IPV) domestic violence (DV) as an important cause of preventable injury. It briefly outlines global efforts to minimize it and focuses on the role of healthcare, especially in trauma centers. The Virginia Commonwealth University (VCU) model is briefly presented with a brief summary of the evolution and results of the program. A call to action is issued for the Panamerican Trauma Society (PTS).

**Keywords:** Domestic violence, Household violence, Intimate Partner violence.

## ABSTRACTO

El informe actual pretende subrayar la violencia de pareja (IPV, DV) como una causa importante de lesiones evitables. Describe brevemente los esfuerzos globales para minimizarlo y se centra en el papel de la atención sanitaria y especialmente de los centros de traumatología. Se presenta brevemente el modelo VCU con un breve resumen de la evolución y resultados del programa. Hacen un llamado a la acción para la PTS (Sociedad Panamericana de Trauma).

**Palabras clave:** Doméstica Violencia, Familiar Violencia, La violencia de pareja, IPV.

*Panamerican Journal of Trauma, Critical Care & Emergency Surgery* (2024): 10.5005/jp-journals-10030-1444

Dr James Davis' Presidential message to the Western Trauma Association (WTA) in 2008 was a deeply personalized, powerful, and emotional account of domestic violence (DV) or intimate partner violence (IPV). He threw a challenge for trauma centers to critically review their own performance on this disregarded blight on women, partners, and children.<sup>1</sup> Inspired by his presentation at their annual symposium, the Virginia Commonwealth University (VCU) trauma center picked up the gauntlet.

The current report aims to underscore IPV (DV) used interchangeably as an important cause of preventable injury. It briefly outlines global efforts to minimize it and focuses on the role of healthcare, especially trauma centers. The VCU model is briefly presented with a brief summary of the evolution and results of the program. A call to action is issued for the Panamerican Trauma Society (PTS).

## SCOPE OF THE PROBLEM

A 2018 analysis by the World Health Organization (WHO)<sup>3</sup> noted that worldwide, nearly one in three women are subjected to physical and/or sexual violence by a partner or a nonpartner. Over a quarter of women aged 15–49 years are subjected to physical and/or sexual violence by their intimate partner at least once in their lifetime. Intimate partners are the cause of murders of >35% of women.<sup>1</sup> Besides the horrific mortality, IPV results in substantial morbidity—chronic pain, depression, anxiety, posttraumatic stress disorder, and substance use. In pregnant women, IPV may lead to a myriad of pre- and postpartum complications. It then extends to physical abuse in children of the families, causing behavioral and emotional disorders. These children may continue the cycle of violence later in life.<sup>2</sup> Lower levels of education, a history of exposure to childhood maltreatment, family violence, alcohol use, and marital discord are

<sup>1,3</sup>Department of Surgery, Virginia Commonwealth University, Richmond, Virginia, United States of America

<sup>2</sup>Department of Surgery, Injury and Violence Prevention Program, Virginia Commonwealth University, Richmond, Virginia, United States of America

**Corresponding Author:** Carol Olson, Department of Surgery, Injury and Violence Prevention Program, Virginia Commonwealth University, Richmond, Virginia, United States of America, Phone: 804-628-3222, e-mail: olsonca@vcu.edu

**How to cite this article:** Ivatury R, Olson C, Aboutanos M. Call to Action for Panamerican Trauma Society: Isn't It Time to Take the Davis Challenge? *Panam J Trauma Crit Care Emerg Surg* 2024;https://doi.org/10.5005/jp-journals-10030-1444.

**Source of support:** Nil

**Conflict of interest:** Dr Rao Ivatury and Dr Michel Aboutanos are associated as the Editorial board members of this journal and this manuscript was subjected to this journal's standard review procedures, with this peer review handled independently of these Editorial board members and their research group.

prevalent in these families. Not uncommonly, these families exhibit a culture of masculine privilege in superiority to women.<sup>1</sup>

The social and economic price of intimate partner and sexual violence is also massive. Victimized women may suffer isolation, inability to work, loss of wages, lack of participation in regular activities, and limited ability to care for themselves and their children. Spain et al.,<sup>3</sup> and Tennakoon et al.,<sup>4</sup> in a 2014 nationwide emergency department (ED) sample of millions of trauma patients, found that 5% had a diagnosis of DV. A total of 9,154 (1.4%) were injured because of IPV, of which 90.2% were female. Drug and alcohol abuse (22.2%), anxiety (1.8%), and depression (1.3%) were

high among all DV trauma patients. The DV trauma patients had 2.1 higher odds of mortality. Their ED charges were higher by \$1,516 compared with non-DV trauma patients. Similar findings were confirmed by a follow-up study in 2022 by Pallansch et al.<sup>4,5</sup> ED visits related to IPV increased from 0.11% in 2019 to 0.15% in 2020, and DV healthcare consults increased from 0.31% in 2019 to 0.48% in 2020.

## NATIONAL AND INTERNATIONAL APPROACHES TO DOMESTIC VIOLENCE AND THE ROLE OF THE HEALTH SECTOR

The Pan American Health Organization and the Inter-American Commission of Women of the Organization of American States, along with the WHO, emphasize DV as a critical public health problem. They reiterate that the health sector should make violence against women unacceptable, and it should be addressed as a public health problem, providing comprehensive services. It should train personnel to prevent the recurrence of violence through early identification of victims and providing appropriate referral and support.<sup>3,5-7</sup>

Of note, many countries have enacted laws against DV or have characterized the violence as a crime.<sup>7</sup> Enforcement of DV laws, unfortunately, however, is far from perfect. Police often fail to respond or are hostile to women who report DV. "To counteract this, Brazil established special units run and staffed by women to enforce DV laws in 1985. Costa Rica enacted the law against DV in 1996, and has formed a national plan to treat and prevent intrafamily violence. The plan heightened public awareness and sensitivity to the problem, extended an existing network of shelters and an emergency hotline, and trained more than 1,000 people in various institutions to recognize and deal with problems of family violence. In Peru, Universidad Peruana Cayetano Heredia pioneered a new violence-prevention approach, now offered by Lima municipality. It created and implemented the program "Men Renounce Violence." In Colombia, a medium- and long-term program called 360° covers physical, emotional, psychological health, and educational aspects to provide comprehensive support for adolescent mothers at risk of being victims of violence. In Honduras, Youth (YTH) and the Public Health Institute's GOJoven International Program and GOJoven Honduras are aiming to reduce teenage dating violence by studying the impact of a mobile app and WhatsApp messaging campaign called Zona Segura.<sup>7</sup>

Another area of intervention globally is economic empowerment. The International Food Policy Research Institute showed the effectiveness of a program to provide cash or food transfers to poor rural women in Bangladesh combined with nutrition behavior change communication. This combination reduced IPV by 26% compared to the control group. A similar program in Ecuador that combined cash, vouchers, and food transfers with nutrition training reduced physical and/or sexual violence by intimate partners by 19–30%.<sup>6</sup>

## ROLE OF THE TRAUMA CENTER

Davis et al. documented in several studies<sup>8-10</sup> that IPV is a neglected cause of injury, even in surgical and obstetric patients in trauma centers. Davis et al.<sup>9</sup> reported, "A recent systematic review reported only 9–40% of clinicians routinely screen for IPV. A survey performed in the EDs of two teaching hospitals found an incidence of acute DV (within that day) of 11.7% in voluntary respondents, and 54% of respondents reported either a recent or remote history of DV. In spite of this, only 2% of the entire study population was asked about or volunteered information concerning DV."<sup>9</sup> In a study of

National Trauma Data Bank data of 6,575 trauma patients,<sup>8</sup> the overall reported prevalence of DV among trauma patients was 5.7 cases per 1,000 trauma center discharges, with head injuries and extremity fractures predominating. The overall mortality rate was 5.9%. In another series,<sup>10,11</sup> 550 patients were admitted to the trauma service. The mechanism of injury was assault for 217 (14%) due to confirmed DV in 12.7%. Only seven of these confirmed patients received appropriate referrals. Of the confirmed and likely DV patients, 17 (63%) were sent home without investigation of safety, and only 21% of all assault victims had any social services evaluation. The DV screen was used in only 12 patients.<sup>12</sup> Examiner discomfort and improper environment (resuscitation area) were the cause of failure to complete the DV screen.

Improved recognition of DV by physicians in the ED has been demonstrated after specific educational efforts, including the use of standardized screening tools. Hugel-Wajek et al.<sup>12,13</sup> noted that a trained DV advocacy coordinator was more beneficial in identifying DV, with a much higher incidence of 4.8% than most other reported results using personal interviews. Even without this expertise, screening can be successful. Screening procedures and their efficacy have been extensively covered in the literature. In an outstanding review of screening for IPV, Paterno and Draughton<sup>11,13</sup> concluded: "All clinicians should routinely screen women for IPV. The development of a systematic screening protocol for use in clinical practice, which includes a plan for immediate response and action items when a woman discloses IPV, will assist in providing evidence-based screening. Prior to implementing a screening protocol, clinicians can practice screening with friends and colleagues and identify IPV resources available locally and nationally for both clinicians and women. Through all of this, therapeutic and nonjudgmental communication is key to creating an optimal environment where women are empowered to share their experiences and get help."

It is clear that it is possible to prevent violence against women and girls. Multiple stakeholders and sectors, using multiple home visits over sustained periods of time and multiple approaches, will be effective. Before these interventions can take place, however, the identification of the patients required at the initial encounter in the health care facility is crucial. Here is where the trauma centers should take on a significant role but often fail miserably. Failure to identify victims of DV and failure to intervene may have lethal consequences. In one study, within the 2 years before their deaths from DV, 44% of victims had presented to an ED, and 93% had injury-related complaints.<sup>11</sup>

Lack of education about DV has been identified as an issue among practicing physicians, impeding both the identification and referral of victims. Previous investigations have identified this issue in physicians practicing obstetrics and gynecology, psychiatry, and emergency medicine. It is surprising that the life support [Advanced Trauma Life Support (ATLS)] course, published in 1997, included some educational information about DV, albeit very briefly. The entirety of "Trauma in Women" (including trauma in pregnancy and DV) was allotted only 10 minutes for presentation. In Davis's study, the group comprised chiefly of medical students (with no earlier ATLS training) had a slightly better initial knowledge of DV than did the groups of surgeons and emergency medicine physicians with ATLS training. However, after the educational lecture, all groups demonstrated significant improvement on the posttest.<sup>8</sup>

## Trauma Center Role: The Virginia Commonwealth University Model

Virginia Commonwealth University (VCU's) level 1 trauma center holds one of the largest hospital-community-based injury and

violence prevention programs (IVPP) in the Americas. IVPP picked up the gauntlet of the Davis challenge. With the help of forensic nursing, IVPP developed a multidisciplinary, evidence-based program addressing IPV in hospital settings with community engagement. The description and the results were presented at the annual WTA assembly and are briefly summarized here.<sup>1</sup>

Virginia Commonwealth University (VCU) trauma centers took a critical second look at their practice of screening and follow-up of potential IPV patients. The program, labeled Project Empower, was nurtured by the forensic nurse examiners and VCU's IVPP. The multidisciplinary approach consisted of staff education, patient screening and interdisciplinary intervention with two primary goals. First, to train health care providers to appropriately screen and assess for IPV in their patient populations. Second, to provide advocacy within the VCU health system for potential or actual victims of IPV. Prospective data were collected on demographics, mechanisms, and social risk factors.

In 2010, a hospital-wide IPV screening training program was started, with faculty and staff receiving training in "danger assessment," a validated tool for determining the level of danger an abused woman has of being killed by her intimate partner and also in "RADAR" training, a provider-focused initiative by Virginia Department of Health for IPV prevention.<sup>1</sup>

The findings: "between 2010 and 2014, 737 providers were trained. They comprised nurses (73%), social workers (13%), and others, including physicians, students, advanced providers, and administrators. In 2015, Project Empower extended beyond the ED and trauma units to other in-hospital units and clinics, including women's health and obstetrics. In 2016, Project Empower launched hospital-wide awareness campaigns and workshops. Hospital staff and faculty, including nurses, residents, practitioners, attendings, and various health learners, were taught the use of the "hurt, insult, threaten, and scream" DV screening tool. An IPV crisis fund was created in 2013 through the VCU women's auxiliary for the benefit of victims. In 5 years (2013–2018), a stepwise stakeholder engagement strategy was completed, progressing from hospital staff to university and health system and on to the community, through awareness campaigns, regional response team development, and patient-centered community partnership and alliances."<sup>1</sup>

Initial surveys documented only a 20% IPV prevalence with a lack of screening for IPV by >80% of providers, even though 15% of cases were related to DV and 20% to substance abuse. As expected, these victimized patients were mostly poor and unmarried African women without health insurance, injured by firearms (44%) or stabbing (34%).<sup>1</sup>

The survivors of the IPV received victim crisis funds (16%), safety planning (68%), crisis intervention (78%), sexual and DV education (83%), and community referral (83%). Within 5 years, only 4% were reinjured and seen in the ED, and the reinjury rate fell to 3% within a 5-year period. There were only two potential IPV-related deaths that occurred 3 years after the initial encounter, both with penetrating head injuries.<sup>1</sup>

The VCU Project Empower model brought home several lessons: the pitfalls in screening methods used in the hospitals, not equipped to assess the array of IPV forms, and poorly placed referrals to services outside of the hospital at the most vulnerable time for IPV patients. Instead, an alternative superior model was a hospital-based screening and intervention effort with advocacy and support from an IPV intervention team member.

The impact of Project Empower at VCU demonstrated crisis intervention, safety planning, and community referral with gradual

and significant success in all three categories based on the myriad of services provided. Of note, 9% of women in the VCU study were pregnant. Recognizing reproductive coercion can lead to a significant amount of IPV; Project Empower was expanded beyond the ED and trauma units to the Women's Health units to provide staff training in IPV screening as well as direct services to IPV patients.

In 2023, VCU IVPP revisited the growth of Project Empower since its inception. The advent of training healthcare providers on improved screening, increasing dedicated staff for hospital-based response, and the recognition of the importance of interventions have resulted in a steady and significant increase in positive responses. The program is having a significant impact on identifying victims of violence and intervening earlier to prevent reinjury, even as rates of referrals began increasing again by 2022 after the pandemic.

## CALL TO ACTION

Before a call to action, it is appropriate to acknowledge the difficulty in defining IPV. The bewildering cultural variations in the norms of the member countries of PTS, North and South, defy a uniformly accepted definition of violence. In Latino cultures, family behaviors such as financial control, verbal taunts, belittling, and forced sex may be seen as a way of life and something to be endured rather than defied. Women often learn that men are entitled to be dominant and controlling while women are supposed to be the caretakers. Thus, the importance of being a "good wife" and mother might make these women more vulnerable to ongoing IPV. Help-seeking rates among Latino and non-Latino IPV survivors differ; Latina women disclose their experiences of IPV to family members more often than non-Latina women, while non-Latina women prefer reporting to healthcare workers, clergy, and shelter services more. These circumstances may present a problem in defining IPV. Keeping this in perspective, trauma center clinicians and personnel of PTS must look both at and beyond culture when considering IPV, consider other items such as family and socioeconomics and work that much harder to define patients at risk.

The authors echo Dr Davis's call to make IPV and DV screening part of every trauma center's performance improvement. In addition, the authors would like to call to action on the part of PTS to emphasize DV and IPV prevention as important initiatives of trauma surgeon members and their institutions.

Panamerican Trauma Society (PTS) should reward high recognition for personnel and centers, making IPV prevention an achievable goal. Educational activities such as special sessions in their annual congress, workshops to train trauma centers in setting up Project Empower, and maturing it to get a diverse stakeholder group together to address the problem of IPV must be their priority. PTS should become the training ground to teach young surgeons and ancillary staff in screening. It should actively pursue initiatives that may keep this preventable menace in the limelight and make a difference for these persecuted patients. It should, as reiterated by WHO:

- Renew commitment to eliminate IPV violence against women (men).
- Strengthen health, judicial, and other relevant systems to better respond to and prevent violence against women (men).
- Advocate for a joined-up multisectoral response to violence against women (men); and
- Nationalize and localize violence against women (men) prevention programs and strategies. "Men" added by authors.

- This journey should be launched by each healthcare provider of PTS who sees an injured patient.
- Panamerican Trauma Society (PTS): It is time for action.

## ORCID

Rao Ivatury  <https://orcid.org/0000-0001-7208-7836>

Carol Olson  <https://orcid.org/0000-0002-0759-9445>

## REFERENCES

1. Davis JW. Domestic violence: the "rule of thumb": 2008 Western Trauma Association presidential address. *J Trauma* 2008;65(5):969–974. DOI: 10.1097/TA.0b013e31817f9e6f
2. Aboutanos MB, Altonen M, Vincent A, et al. Critical call for hospital-based domestic violence intervention: the Davis Challenge. *J Trauma Acute Care Surg* 2019;87(5):1197–1204. DOI: 10.1097/TA.0000000000002450
3. WHO. Violence against women prevalence estimates, 2018: global, regional and national prevalence estimates for intimate partner violence against women and global and regional prevalence estimates for non-partner sexual violence against women. Executive summary. Geneva World Health Organization; 2021. License: CC BY-NC-SA 3.0 IGO.
4. Lakshika, Lisa MK, David A. Injury Due to Domestic and Intimate Partner Violence in the United States: A Nationwide Evaluation of Emergency Department Visits. *J Am Coll Surg* 2019;229(4)S2:e61. DOI: 10.1016/j.jamcollsurg.2019.08.754
5. Pallansch J, Milam C, Ham K, et al. Intimate partner violence, sexual assault, and child abuse resource utilization during COVID-19. *West J Emerg Med* 2022;23(4):589–596. DOI: 10.5811/westjem.2022.4.55582
6. Pan American Health Organization. Addressing violence against women in health policies and protocols in the Americas: a regional status report. Washington, D.C.: PAHO; 2022.
7. <https://www.prb.org/resources/domestic-violence-an-ongoing-threat-to-women-in-latin-america-and-the-caribbean/>
8. Joseph B, Khalil M, Zangbar B, et al. Prevalence of domestic violence among trauma patients. *JAMA Surg* 2015;150(12):1177–1183. DOI: 10.1001/jamasurg.2015.2386
9. Davis JW, Kaups KL, Campbell SD, et al. Domestic violence and the trauma surgeon: results of a study on knowledge and education. *J Am Coll Surg* 2000;191(4):347–353. DOI: 10.1016/s1072-7515(00)00697-9
10. Davis JW, Parks SN, Kaups KL, et al. Victims of domestic violence on the trauma service: unrecognized and underreported. *J Trauma* 2003;54(2):352–355. DOI: 10.1097/01.TA.0000042021.47579.B6
11. Paterno MT, Draughon JE. Screening for intimate partner violence. *J Midwifery Womens Health* 2016;61(3):370–375. DOI: 10.1111/jmwh.12443
12. Hugel-Wajek JA, Cairo D, Shah S, et al. Detection of domestic violence by a domestic violence advocate in the ED. *J Emerg Med* 2012;43(5):860–865. DOI: 10.1016/j.jemermed.2009.07.031
13. Satyen L, Rogic AC, Supol M. Intimate partner violence and help-seeking behaviour: a systematic review of cross-cultural differences. *J Immigr Minor Health* 2019;21(4):879–892. DOI: 10.1007/s10903-018-0803-9