



**PRAISE**  
Prevalence of Abuse and Intimate Partner Violence Surgical Evaluation

**Prevalence of Abuse and Intimate Partner Violence Surgical Evaluation**

Gregory J. Della Rocca, MD, PhD, FACS  
On behalf of the PRAISE Investigators





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**Disclosures**

- Consultant: Synthes, Bioventus
- Stock options: The Orthopaedic Implant Company, Amedica, MergeNet, Bur Oak Brewing Company
- Intellectual property: Intellectual Ventures
- Research support: Synthes

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**Disclosures**

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- This research project has no direct conflicts of interest

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## Steering committee

- Mohit Bhandari
- Sheila Sprague
- Gregory J. Della Rocca
- Bradley A. Petrisor
- Rudolf W. Poolman
- Sonia Dosanjh
- Emil H. Schemitsch

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## Participating centers

- Hamilton Health Sciences Center
- St. Michael's Hospital
- Thunder Bay
- QEII Health Sciences Ctr
- Foothills Medical Center
- Royal Columbian Hospital
- University of Missouri
- Onze Lieve Vrouwe Gasthuis
- Academic Medical Ctr Amsterdam
- Aarhus Univ Hosp
- Sancheti Institute

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## Introduction



- Increased appreciation of the importance of intimate partner violence (IPV) as a serious public health problem
- Also known as domestic violence, spouse abuse, and battering
- AMA definition:
  - a pattern of coercive behaviors that may include repeated battering and injury, psychological abuse, sexual assault, progressive social isolation, economic deprivation, and intimidation

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## Introduction

- Intimate partner violence occurs in all countries, irrespective of social, economic, religious or cultural groups.
- Although women can be violent in relationships with men, and violence also occurs in same-sex partnerships, the overwhelming burden of partner violence is borne by women at the hands of men.
  - World Health Organization, World report on Violence & Health. (2002) Chapter 4: Intimate Partner Violence

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## Introduction

It is about power and control, and is not gender neutral

\*\*Adapted from: Ellen Pence and Richard Gelles, Power and Control: Tactics of Men Who Batter: Minnesota Program Development, Inc. Duluth, 1986  
Adapted by: National Women's Council on Child Abuse, Neglect, & Domestic Violence, 1997

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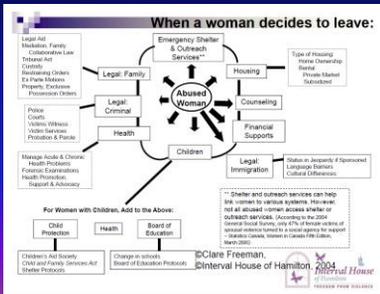
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## Introduction

- Why doesn't the woman leave the relationship?




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## IPV in orthopaedics

- Very little IPV research in orthopaedics, despite substantial IPV research in other medical disciplines

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## IPV in orthopaedics – a common cause of nonfatal MSK injuries in women

### Musculoskeletal Manifestations of Physical Abuse After Intimate Partner Violence

Mohit Bhandari MD, MSc, Sonia Dosanjh MSW, Paul Tornetta III, MD, and David Matthews, PsyD.  
On Behalf of the Violence Against Women Health Research Collaborative  
*J Trauma.* 2006;61:1473–1479.

#### Key Results:

Musculoskeletal injuries represent the second most common manifestation of IPV

- Sprains, dislocations, fractures, and foot injuries

Injury	Proportion (%)
Head and Neck	40
Musculoskeletal	28
Skin	22
Chest	8
Gastrointestinal	2

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## Introduction

- Victims of IPV utilize health services at higher rates than women who have not been abused
- Health care providers are in a good position to identify and assist victims of IPV

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## Introduction

- Estimates of abuse among ER patients vary between 14-41%, but only 12-17% have abuse documented in medical record
- ER physicians seldom identify these victims
  - Abbott et al. *JAMA* (1995) 273:1763
  - Roberts et al. *Ann Emerg Med* (1996) 27:741
  - Witt and Olson, *J Am Med Womens Assoc* (1996) 51:77

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## Introduction

- Orthopaedic surgeons are providers of musculoskeletal care and first-contact health care practitioners for many patients
- Establish ongoing relationships with their patients
- Have the opportunity to help victims of IPV




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## Introduction

- The COA and the AAOS have developed position statements on IPV

**AAOS** AMERICAN ACADEMY OF ORTHOPAEDIC SURGEONS  
AMERICAN ASSOCIATION OF ORTHOPAEDIC SURGEONS

**Advisory Statement**  
Domestic and Family Violence and Abuse: The Orthopaedic Surgeon's Responsibilities  
*This Information Statement was developed as an educational tool based on the opinion of the authors. It is not a product of a systematic review. Readers are encouraged to consider the information presented and reach their own conclusions.*

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**COA** THE CANADIAN ORTHOPAEDIC ASSOCIATION  
"ACHIEVE EXCELLENCE IN ORTHOPAEDIC CARE FOR CANADIANS"

**Intimate Partner Violence**

**Position Statement**  
The Canadian Orthopaedic Association recognizes that intimate partner violence

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## Introduction



### Guidelines:

1. Appropriately **screen** for problems of domestic violence and document them in the medical record
2. **Assess and assure** the safety of the victim
3. Appropriately **treat** victims
4. Take steps to **prevent** further harm

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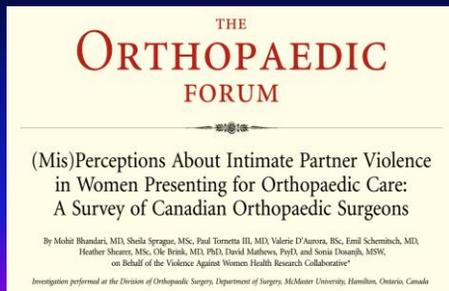
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## Surgeon perceptions?




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## Surgeon perceptions?

- 186 Canadian orthopaedic surgeons responded to survey
- 95% believed that <10% of their patients were victims of IPV
- 80% believed that <1% of their patients were victims of IPV
- Misperceptions:
  - Screening for IPV is an invasion of privacy (23%)
  - Investigating IPV is not the surgeon's duty (33%)
  - Victims of IPV play a role in their victimization (19%)
  - Victims choose to be victims (14%)

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## Surgeon perceptions?

Clin Orthop Relat Res (2013) 471:1074–1080  
DOI 10.1007/s11999-012-2749-x

Clinical Orthopaedics  
and Related Research  
Publishing the Science of Orthopaedic Surgery

CLINICAL RESEARCH

### Orthopaedic Surgeons' Knowledge and Misconceptions in the Identification of Intimate Partner Violence Against Women

Gregory J. Della Rocca MD, PhD, FACS,  
Sheila Sprague MSc, Sonia Dosanjh MSW,  
Emil H. Schemitsch MD, FRCS(C), Mohit Bhandari MD, PhD, FRCS(C)

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## Surgeon perceptions?

- 153 surgeon members of OTA surveyed
- 74% felt that IPV victims represented <5% of injured female patients
- Misperceptions:
  - Victims are getting something out of the relationship (16%)
  - Some women's personalities cause the abuse (20%)
  - The battering would stop if the batterer quit using alcohol (40%)

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So, what is the prevalence of IPV  
among female fracture clinic  
patients?

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## Study design

BMC Musculoskeletal Disorders 2010, 11:77  
<http://www.biomedcentral.com/1471-2474/11/77>

**BMC**  
Musculoskeletal Disorders

**STUDY PROTOCOL** Open Access

**Prevalence of Abuse and Intimate Partner Violence Surgical Evaluation (P.R.A.I.S.E.): rationale and design of a multi-center cross-sectional study.**

PRAISE Investigators

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## Survey of prevalence

- Orthopaedic fracture clinics, female patients presenting with injury
- Clinical sites in North America, Europe, India
- Validated questionnaires:
  - WAST (Woman Abuse Screening Tool)
  - PVS (Partner Violence Screen)
- Objective: quantify prevalence of abuse in last 12 months and lifetimes
- Target 3600 patients

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## Prevalence in Ontario

### The Prevalence of Intimate Partner Violence across Orthopaedic Fracture Clinics in Ontario

By the P.R.A.I.S.E. Investigators\*

*Investigation performed at Hamilton Health Sciences-General Site, Hamilton, and St. Michael's Hospital, Toronto, Ontario, Canada*

*J Bone Joint Surg Am.* 2011;93:132-41

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## Ontario pilot

- 282 women in two fracture clinics
- Prevalence of IPV within previous 12 months: 32% (95% CI 26.4%-37.2%)
- 24 women (8.5%) revealed *physical* abuse within last 12 months
- 7 women (2.5%) presented with injuries directly resulting from abuse
- None of the 24 women with physical abuse within 12 months was asked about abuse by an orthopaedic surgeon

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## International prevalence

Prevalence of abuse and intimate partner violence surgical evaluation (PRAISE) in orthopaedic fracture clinics: a multinational prevalence study

PRAISE Investigators\*

www.thelancet.com Vol 381

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## PRAISE definitive trial

- 2945 patients across 12 centers
- 85% response rate among female patients
  - Patients had to fill out questionnaire in private and therefore be able to separate themselves from those accompanying them to clinic
- 16% experienced IPV during past year
- 35% experienced IPV during lifetimes
- 49 women (1.7%) presented as a direct consequence of physical violence
  - Only 7 of them had been asked about IPV

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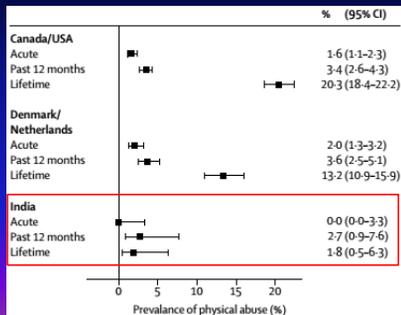
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## PRAISE definitive trial – physical abuse statistics




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## PRAISE definitive trial

- 1/6 of women have experienced IPV within past year
  - Similar to prior meta-analyses
- 1/50 of women present as a direct consequence of IPV
- IPV more likely in younger women who are unmarried, are in short-term relationships, and/or have no children

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## Stereotypes - caution

- Although this study reveals certain factors associated with increased risk of IPV, all women are potentially at risk.

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## Screening for IPV

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## Barriers to screening

- Time
- Lack of resources/protocols
- Lack of privacy
- Don't know what to do
- Misconceptions
  - Abuse is rare
  - Patients don't want to be asked about IPV
- Fear
- Personal discomfort with topic

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## Developing a screening program

- Who should we ask?
  - Recommend asking all women about IPV
  - Little evidence exists, and few support services exist, for asking men
  - Difficult to determine *a priori* who is at risk of being or becoming a victim
  - Universal screening contributes to changing social attitudes regarding domestic abuse
  - Universal screening decreases stigmatization, increases safety relative to selective screening, and avoids incorrect stereotype-driven processes

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## Developing a screening program

- Who should do the asking?
  - Ideally, a social worker or an “IPV coordinator” in all fracture clinics
    - This would require financial resources and policy changes
    - But, surgeons can do something too

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## Developing a screening program

- How should we ask?
  - AMA recommendation: three questions from WAST (Women Abuse Screening Tool)
    - Easy to understand
    - Easy to answer directly




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## Developing a screening program

- How should we ask?
  - Downloadable iPhone app (R3 app)
  - Quick, easy, convenient

<https://itunes.apple.com/us/app/r3-app/id491452316>

- HITS questionnaire – 4 questions, 1-5 scale
- Resources/hotlines/information

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## Developing a screening program

- HITS questionnaire:
  - How often does your partner physically hurt you?
  - How often does your partner insult or talk down to you?
  - How often does your partner threaten to harm you?
  - How often does your partner scream or curse at you?
- 91% efficacy in determining if a patient is in an abusive relationship
  - Sherin et al, *Fam Med* (1998) 30:508

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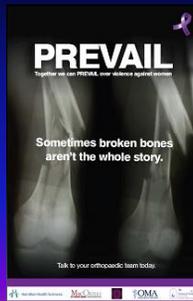
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## Developing a screening program

- Educational toolkits (under development at McMaster)
- IPV awareness
  - Posters
  - Buttons
  - iPhone apps




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## Developing a screening program

- Know your resources
- 1-800-799-SAFE




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### Things to consider

- Minimize harm, maximize benefit
- Need to ensure patient privacy and confidentiality
- Be aware of safety issues
- Be aware that not all victims of IPV are ready to disclose
- Support resources are available

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### What can you do?

- Be aware of IPV when speaking with patients
- Educate yourself



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### Awareness is key!

- Escalation of physical violence is a key factor for intimate partner homicide
- We should inquire about injury mechanism and violence in home/relationship



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Thank you



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