Healthcare Can Change From Within: Achieving sustained improvement in the health care response to intimate partner violence

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Collaborating Agencies:

- Sojourner Truth Family Peace Center, Milwaukee, WI
- The Women's Center, Waukesha, WI

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The Context

- Victims of intimate partner violence (IPV)
  - More health problems of all types
  - More outpatient visits for illness & injury
  - Fewer outpatient visits for preventive care
  - More hospitalizations for all causes
  - Want physicians & nurses to discuss IPV

- Primary care clinics & emergency departments
  - Professionals skilled in discussing difficult & sensitive issues
  - Confidential care
  - Many victims of IPV seek medical care

Health clinics & EDs are ideal settings for IPV intervention

The Problem

Improvement in clinic systems is hard to achieve and sustain

Tactics of change that have not produced sustained improvement

- Key leaders (e.g. US Surgeon General)
- Professional association
- Regulatory: e.g. JCAHCO
- Mandatory CME
- Educate physicians, nurses, other clinicians
- Collaborate with community advocates
- Policies and procedures
- Mandated reporting laws

The Question

How can we achieve sustained improvement in the health care system's response to victims of intimate partner violence?

Response = identification
treatment & advocacy
prevention

Health Care Can Change from Within Ecological Intervention

- Individual change
  - Knowledge, attitudes & clinical skills
- Systems change
  - Support, resources, policies, procedures
- Cultural change
  - Shared beliefs, values, attitudes, expectations
  - Roles & behaviors
  - Network of professional relationships in the community

Change from Within Components

1) Health Care Advocates—Selected staff receive intensive training in IPV & health
2) Saturation training of all staff
3) Policies & procedures
4) Collaboration w/ advocacy agencies & experts
5) Primary prevention
6) CQI

Evaluation—2 Methods

- Clinic systems change—
  - Ambuel
- Longitudinal follow-up with battered women served by clinics—
  - Hamberger

Research Design Overview

Site	Pre		Post
ED	X	⟷	X
Peds	X	⟷	X
Fam Med (n=2)	X	⟷	X
			⇕
Fam Med (n=2) usual care control			X

Clinic Systems Change

- **Providers:**
  - Objective knowledge
  - self efficacy
  - understanding
- **Clinic Environment:**
  - Policies and procedures
  - Patient education & prevention
- **Clinical Behavior:**
  - Clinician self-report
  - Chart audit of IPV inquiry

4 Hypotheses re. Systems Change

1. Clinician knowledge, understanding & self-efficacy will increase.
2. Clinicians will rate their clinic as better prepared to identify, intervene and prevent IPV.
3. The clinic environment will improve as measured by policies and procedures, and patient education.
4. Chart audit & clinician self-report will document sustained increase in IPV inquiry.

Clinic Characateristics

	ED	Peds	Fam Med 1	Fam Med 2
Visits/Year	62,000	16,0000	17, 600	13,700
Medicaid	11%	92%	49%	41%
Medicare	25%	0%	11%	17%
Uninsured	17%	3%	16%	29%
Faculty	21	8	7	7
Residents	24	54	18	18
Nurses/MAs	150	9	11	9
PA/NP/EMT	10	1	2	0

Clinicians reported significant increases in

1) Self-efficacy (p=0.0004)
2) Understanding of referral resources (p=0.009)
3) Understanding of legal requirement (p=0.003)

4) Clinic's capacity to facilitate IPV intervention (p=0.005)
5) Staff well prepared (p=0.04)

Environmental Audit Before and After Intervention

	Before Intervention n=4	After Intervention n=4
IPV Posters & brochures (total locations)	3 (65 locations)	4 (105 locations)
Referral information for IPV	1	4
Non-English IPV posters and brochures	1	4
Written IPV Policy & Procedures	1	3
Screening of specific patients	3	3
Collaboration w/ community IPV agency	2	4

Environmental Audit: *Usual Care* vs. *Intervention* Family Medicine Clinics

	Usual Care n=2	Intervention n=2
IPV Posters & brochures (total locations)	0 (0 locations)	2 (45 locations)
Referral information for IPV	0	2
Non-English IPV posters and brochures	0	2
Written IPV Policy & Procedures	0	2
Screening of specific patients	0	2
Collaboration w/ community IPV agency	0	2

How recently have you identified a victim of IPV in your clinic?

	Post-intervention						
Pre-intervention	Past week	Past month	Past 6 mo.	Past year	> 1 year	Never	Total
Past week	1	0	1	0	0	1	3
Past month	0	3	0	0	0	0	3
Past 6 mo.	0	1	6	1	0	0	8
Past year	0	2	0	0	1	1	4
> 1 year	0	1	3	3	3	1	11
Never	0	2	5	3	1	13	24
Total	1	**9**	**15**	**7**	**5**	**16**	53

Chart Audit of Clinical Inquiry About IPV

Year	Yes: Inquiry Documented	No: Inquiry not documented
2005	**30% (24)**	**70% (55)**
2006	**42% (32)**	**58% (45)**
2008	**60% (49)**	**40% (32)**

Pearson chi^2 = 15.0466 **Pr = 0.001**
2005 vs. 2006: Pearson chi^2 = 2.1 **Pr = 0.146**
2006 vs. 2008: Pearson chi^2 = 5.67 **Pr = 0.017**

Health Care Can Change from Within: Longitudinal Findings

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Research Design: Longitudinal

- Quasi-experimental
  - 2 intervention family medicine clinics
    - Healthcare can change from within
  - 2 control family medicine clinics
    - Usual practice

Study Hypotheses

- Hypothesis 1: Abused women in the intervention clinics will report more inquiry from/discussion with their healthcare providers about IPV than women in the usual care clinics
- Hypothesis 2: Abused women in the intervention clinics will experience less violence fewer symptoms of injury and fewer negative consequences of injury than women who receive usual care,
- Hypothesis 3: Abused women in the intervention clinics will report greater connection to the community, safety, satisfaction with their healthcare
- Hypothesis 4: Women from the intervention group will show improved health status and lower healthcare utilization than women in usual care

Other Research Questions

- Victims' consumer feedback about benefits and potential harms of IPV screening in a primary care healthcare setting
- Participant reflections on being in an 18-month follow-up study

Method

- Recruitment
- Follow-up assessment
  - Immediately post recruitment (Time 1), 3, 6, 12, 18 months

Of 1408 patients screened:

Positive Screens	134
Number Enrolled	35 (26%)
Ineligible*	24 (18%)
Declined Participation	75 (56%)

* Ineligible = perpetrator of violence was not a current or former intimate partner or was a partner of the same gender

Instruments Used

- Conflict Tactics Scale-2 (CTS-2)
- CDC Healthy Days Core & Symptom Modules
- Patient Safety and Connection to the Community
- Chart audit
- Physicians and Nurses Asking about IPV

Analyses

- Wilcoxin Rank Sum Test
- Fischer's Exact Test
- Chi Square Test
- Random intercept proportional odds logistic regression
- Generalized least squares regression analysis
- Multiple linear regression analysis

Hypothesis 1

Screened (%)	Yes	No
• Intervention (n = 16)	75	25
• Control (n = 11)	18	82

  – Chi-square = 8.4, p< .004

- Intervention > Usual care for talking to their physician about IPV at 12 months (p < .04) and 18 months (p < .067)

Hypothesis 2

- Significant reductions in **overall violence** and **psychological abuse** at 12 and 18 months
  – Trends favoring Intervention group for overall violence (p = .08) and psychological abuse (p = .06)
- Significant reductions in **minor violence** at 12- and 18 months
- Significant reductions in **severe violence** at 12 months
- No significant change in **sex abuse** at 12- and 18 months
  – Intervention group lower at all measurement periods

Hypothesis 3

- Connectedness to the Community: Few meaningful group differences
  - Intervention > Usual care in volunteering at their children's school at 12 months ($p < .038$), but no differences at 18 months
- Satisfaction with Health Care
  - No group differences at any measurement time

- Safety Behaviors
  - Both groups significantly increased safety behaviors at 12 and 18 months
  - No group differences at any measurement time

Hypothesis 4

- Health Status
  - Number of days in a month physical and mental health not good – No group differences
  - Perceived Health Status – no group differences

- Total Doctor Visits
  - Compared to Usual Care, Intervention group had average drop of 4.5 visits from 2005 to 2008 ($p < .009$)
- Number of IPV-related visits (defined as diagnosis of mental health, injury, pain, STI or other sexual concern
  - Intervention made slightly fewer visits (2.2) than Usual Care group ($p = .095$)
- Average number of medications
  - Intervention group showed a slight increase in number of medications (.72) than Usual Care group ($p = .078$)
- Lab Tests
  - Intervention group showed a significant increase in average number of lab tests (.44) compared to Usual Care group ($p = .004$)

Other Study Findings

- Should doctors and nurses ask about IPV?
  - 100% said they should ask about IPV
- How helpful is it to ask about IPV?
  - 85% said it was helpful or very helpful
  - 14.3% said they were uncertain
- How harmful is it to ask about IPV?
  - 52.4% said it was not harmful
  - 42.86% said they were uncertain
  - 4.76% said it was harmful

What's behind the uncertainty?

- Concerns about violation of patient confidentiality and autonomy
- Asking in settings that are not private
- Evocativeness of being asked about IPV, fueling guilt, defensive denial, offense

Experience with the Longitudinal Study

- Almost no risk to safety from participating
- Challenged to think more about their abusive situations
- Brought back bad memories that were used as incentive to **continue working on safety**
- **Learned** about community resources and **safety strategies**
- Emotional support

Discussion

- Asking about IPV may be an intervention
- Most of the significant findings were among *clinic-centered* variables
  - Asking about IPV; discussing IPV, office visits
- Few group differences among *individual centered* variables
  - Symptoms of injury, clinic utilization,
- Few group differences on measures of *relationship-centered* variables
  - CTS
- No differences in *community-centered* variables
  - Help-seeking, new community activities

Study Limitations
- Small sample size
- Attrition
- Did not have a true pre-intervention baseline
- Could not account for healthcare received elsewhere

Study Strengths
- Prospective, longitudinal study
- Multi-modal assessment
  - Self-report
  - Chart audit
  - Environmental Observation

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