

What Happens After We Identify Intimate Partner Violence? The Family Physician's Perspective

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Background and Objectives: *Despite increased emphasis on asking about intimate partner violence (IPV), little data exists on patient outcomes. We surveyed family physicians in New Hampshire and North Carolina to determine rates of asking about IPV, patient outcomes after disclosure, and changes in the doctor-patient relationship as a result of patient disclosure. Methods:* Active members of the New Hampshire and North Carolina Academies of Family Physicians were surveyed. Data were analyzed using SAS PC. **Results:** *Data are similar between the two states. Physicians who regularly ask about IPV more often identify victims. Further, physicians in general ask more often about IPV now than 5 years ago. On average, physicians report 4.95 interventions for patients disclosing abuse, most often treating the physical and emotional complaints and documenting abuse. Physicians reported positive patient outcomes (eg, improved mental health, seeking counseling or services) more often than negative outcomes (eg, disruption of finances or housing and fear of worsened violence). Physicians believed that many outcomes resulted from disclosure to the physician. They also believed that IPV disclosure led to more work for the physician but an improved doctor-patient relationship. Conclusions:* *This is the first study of physician views of patient outcomes and the first study reporting an increase in the proportion of physicians asking about IPV. Our findings suggest that more physicians may be asking about IPV and more frequently. Additional studies are needed to compare physician and patient perceptions of outcomes resulting from disclosure.*

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In an article published in JAMA,¹ Cole asks the essential questions that many family physicians ask with regard to intimate partner violence (IPV). Among them is the daunting question, "What are the consequences—both intended and unintended—of asking about IPV?"

Few studies report findings regarding the consequences of screening for IPV on women patients who are victims.^{2,3} Rather, they focus on provider barriers to screening,⁴⁻⁶ the rates of screening,^{4,5,7-9} and methods to improve screening.¹⁰ Only two studies were identified that address outcomes and consequences.^{2,3} Gerbert and colleagues² asked women to describe only the positive outcomes or benefits of interactions with health care providers. Chang and colleagues,³ in a qualitative study of women from domestic violence support groups,

examined both positive and negative outcomes of interactions between women and their physicians. However, no studies have addressed outcomes of asking about IPV from the family physician's perspective.

This study examined family physicians' experience with patients who disclose IPV. Specifically, we focused on the physician's treatment response to the patient, the effects of patient disclosure on the doctor-patient relationship, and the perceived patient outcomes from the physician's point of view.

Methods

Subjects

We surveyed family physicians practicing in the states of New Hampshire and North Carolina. Study eligibility was determined by active membership in the state chapter of the American Academy of Family Physicians (AAFP), a precoded variable extracted from the AAFP database. Physician self-report in the survey later verified this active status. We excluded medical students, family practice interns and residents, family physicians in specialized practice (eg, geriatrics, emergency

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medicine), physicians in institutional practice (eg, Veterans Administration hospitals, prisons), family physicians in practices not treating women, and inactive or retired members of the AAFP. These exclusions were verified through physician self-report during survey response. Institutional Review Board approval was obtained for human subjects from both Dartmouth Medical School and the University of North Carolina School of Medicine.

All active members ($n=303$) of the New Hampshire Academy were surveyed. In North Carolina, active North Carolina Academy members ($n=1,634$) were dispersed across 100 counties organized into nine regions. Because some regions were heavily populated with family physicians and others were not, a one-stage disproportionate stratified sample with balanced allocation was used. The design (disproportionate sampling) allowed for a simple random sample of 66 family physicians in each region when the sample size was greater than 66 and a census of all family physicians in the respective region when the physician population in the region was less than 66. Balanced allocation is an ideal design for between strata (ie, between regions) comparisons, compensating for much smaller numbers of physicians in some regions and the resultant possibility of inadequate representation.

After excluding family physicians from the AAFP state chapter roster not meeting the criteria and using the disproportionate sample design, a total of 729 family physicians, 282 in New Hampshire and 447 in North Carolina, comprised the study sample.

Instrument

A one-page survey included the following items:

Demographic information included seven items: age grouped in five nominal categories; gender, also a nominal scale; practice type (categorized as a nominal scale, with five precoded categories and an "other" to be specified by the respondent); office zip code; board certification (categorized as yes/no); years in family practice (actual number); and whether the family physician had previous formal training or education regarding intervention with patients who disclose IPV (categorized as yes/no).

Study eligibility was measured by two items. The first was percentage of the practice comprised of women of childbearing age, measured by five ordinal categories. The second item, membership status in the state chapter of the AAFP, was verified by a yes/no response.

Asking about IPV at the annual well-woman visit was measured by two ordinal scales exploring current and past practice. Both were replications from an earlier North Carolina study of family physicians asking about IPV.⁹ In the first item, physicians were asked to indicate whether they "rarely or never," "occasionally," or "almost always" ask women about IPV during their

periodic health exam. The second item asked physicians to respond to the same question but reflecting on their behavior "5 years ago" (1996).

Patient disclosure about IPV was measured by a simple question, "Do you currently have patients in your practice who have disclosed to you that they have experienced intimate partner violence?" This item required a "yes/no" response. Physicians responding "no" ended the survey at this point. Physicians responding "yes" were asked to think of two recent patients who had disclosed IPV. The remainder of the survey then asked physicians questions about those two patients. The questions were as follows:

Change(s) in the doctor-patient relationship were measured by one question: "Were there any changes in your relationship?" with four itemized rating scales requiring response to amount of work/effort, rapport with the patient, insight into the patient, and respect for the patient's ability to take care of herself.

Management of the IPV patient was measured by a "yes/no" response to one multiple response question that explored treatment, documentation, referrals, patient advice, and an "other" category so that management strategies would not be missed.

Patient outcomes, as perceived by the family physician, were organized in two categories: (1) *Positive outcomes* were measured by one multiple response item, with 10 responses extracted from two previous studies focusing on patient-reported positive outcomes as a result of disclosing IPV.^{2,3} In addition, an "other" category, with a space for fill in the blank was added to ensure that family physicians' observations of patient outcomes not previously listed by patients also could be documented. (2) *Negative outcomes* were measured by one multiple response item, with 10 responses gleaned from the only study³ identified, addressing negative patient outcomes as a result of IPV disclosure. These responses were supplemented from the authors' experiences working with IPV survivors. An "other" category, with a space for fill in the blank, also was added to ensure that primary providers could list any outcomes not previously listed.

Family physician's perception of his/her impact on patient outcome was measured by one question, "Do you believe these events were a result of the patient's disclosure to you?" Family physicians were asked to respond with a "yes/no" response.

Procedures

The original survey was pretested with five clinicians in an academic family practice setting and two community physicians not included in the survey. Revisions were made for ease in completion and then pilot tested on three community physicians and two residents.

The survey took 20 minutes or less to complete. It was mailed in the summer of 2001; reminder postcards and follow-up mailings were sent 1 month and 6 weeks, respectively, from the original mailing.

Data Analysis

Our objective was to create a weighted data set using information about family physicians in each North Carolina region and in New Hampshire, thus mandating that the family physician, not the patient, was the observation unit (ie, the person about whom we wish to make inference). All statistical analyses were conducted using SUDAAN (Research Triangle Institute, Research Triangle Park, NC) software for sample surveys and accounted for the sampling design effects resulting from stratified samples.

Besides simple descriptive statistics performed for each state, the data analysis examined whether family physicians' treatment response to the patient varied by state, whether the effects of patient disclosure on the doctor-patient relationship varied by state, and whether the perceived patient outcomes also varied by state. For the comparison between states, when the variable of interest was dichotomous, the chi-square statistic was used. When the variable of interest was more than two levels, we used linear regression models that included the variable "state" as the predictor variable and the other variable of interest as the response variable. To test all the questions for consistency between patient #1 and patient #2, we used McNemar's test.

Preliminarily, all questions were tested for consistency between patient #1 and patient #2. Only two questions were found to differ significantly for the two patients. In the question that queried physicians about treatment response, family physician referrals to a family violence agency ($P<.01$) showed a significant difference between the two patients. The second item, "seeking a protection/restraining order," dealt with perceived outcomes as a result of the patient disclosure to the doctor ($P=.04$). No comments were received from physicians for open-ended responses. Therefore, no additional coding was necessary.

Results

We received 117 responses (42% of 282 eligible) in New Hampshire and 184 responses (41% of 447 eligible) in North Carolina, for a total of 301 responses. In the North Caro-

lina sample, the response had a range of 8% to 50% across the strata and was about 41% overall. Sampling weights were determined for each stratum to address the probability of selection from the corresponding population for that stratum and the response rate for that stratum. The weight was the ratio of the number in the population for the stratum versus the number who responded for that stratum.

The respondent profiles were very similar between the two states (Table 1) in age distribution, percentage of board-certified physicians, years in practice, and practice type for physicians, although the percentage of male physicians was higher in New Hampshire than in North Carolina. While 71% of New Hampshire physicians were male, only 59% of North Carolina physicians were male. For both states combined, about half of all respondents were ages 45 or older, almost all were board certified (>94%), and at least 30% had received formal training in managing the care of patients who reported IPV.

The percentage of physicians who had received training increased significantly with a corresponding increase in the percentage of women patients in the practice (New Hampshire: $P=.02$, North Carolina: $P<.01$). When more than 30% of the practice was comprised of women, 55% of the New Hampshire family physicians and 46% of the North Carolina family physicians had received training. In contrast, when women patients

Table 1

Physician Demographics

	NHAFP		NCAFP		Comparison P Value
	Study Sample (n=117)	SE	Study Sample (n=181)	SE	
Average age	45.73	.83	44.10	.80	.16
Gender (%)					.05
Male	70.94	4.22	59.29	4.08	
Female	29.06	4.22	40.71	4.08	
Board certified (%)	93.97	2.22	97.47	1.29	.17
Years in practice (average)	13.98	.78	12.41	.73	.14
Formal training in IPV (%)	36.79	4.70	30.37	3.79	.29
Practice type (%)					.92
Private/group	72.65	4.14	70.36	3.77	
Academic	12.82	3.10	16.86	3.08	
Institutional	10.26	2.82	8.01	2.23	
Other	4.27	1.88	4.76	1.74	

NHAFP—New Hampshire Academy of Family Physicians

NCAFP—North Carolina Academy of Family Physicians

SE—standard error

IPV—intimate partner violence

comprised less than 30% of the practice, only 29% of the New Hampshire and 18% of North Carolina family physicians reported receiving training.

Male and female family physicians in both states reported a significant increase from 1996 to 2001 ($P<.01$) in the frequency of asking about IPV in the context of the woman's periodic health exam. This comparison holds even when controlling for gender and training. Although more women than men physicians responded that they "almost always" asked about IPV, both for 5 years ago (11% versus 5%) and for current (25% versus 15%), the comparison was not significant (1996: $P=.21$; 2001: $P=.09$).

Physicians who had received training were much more likely to ask patients about IPV ($P<.01$). With training, 35% "almost always" asked, and without training, only 13% "almost always" asked. In addition, physicians who asked more regularly were more likely to have patients who disclosed IPV (New Hampshire: $P<.01$, North Carolina: $P<.01$). In both states, 97% of physicians who "almost always asked" had identified patients experiencing IPV. Regardless of asking, however, a major proportion of physicians in each state (New Hampshire=78%, North Carolina=82%) reported having patients who had disclosed IPV. For example, patients experiencing IPV were reported by 50% of North Carolina and 71% of New Hampshire family physicians who "rarely asked" about IPV.

Physician Interventions (Table 2)

When asked to select two recent patients in their practice who had disclosed IPV and to indicate actions they had taken after these patients disclosed IPV, with an average of 4.95 interventions per patient, physicians most often reported that they treated the emotional com-

plaint (82%), documented the abuse in the medical record (79%), and treated the physical complaint (67%). To compare, North Carolina physicians were more likely to advise the patient to leave the partner (North Carolina: 43%, New Hampshire: 31%, $P=.03$).

Physicians' Perception of Effects on Doctor-Patient Relationships (Table 3)

When asked to comment on the effect of IPV disclosure on the doctor-patient relationship, physicians reported that the doctor-patient relationship frequently changed, generally for the better (eg, rapport, insight, respect), after disclosure of IPV by the patient. For both states, 53% of the physicians reported that treating patients after disclosure of IPV led to more work. Yet, 48% and 76% of the physicians also believed that this effort led to improved rapport and better insight with the patient. In contrast, less than 5% of physicians believed that disclosure of IPV led to worse rapport or insight. There were some reports of worsened respect for the patient (New Hampshire=9%, North Carolina=16%), but better respect occurred more often (New Hampshire=32%, North Carolina=27%).

Physician's Perception of Patient Outcomes (Table 4)

A higher percentage of family physicians in both states noted that more positive outcomes than negative resulted from the patients' disclosure of IPV. The average number of positive outcomes was 2.38 per patient, and the average number of negative outcomes was .94 per patient. Overall, a patient had about twice as many positive changes as negative changes after disclosure. For both states, the most common positive changes perceived by physicians included patients' improved mental health (48%), leaving or taking steps to leave

Table 2

Estimated Population Proportions for Physicians' Interventions After Women Patients' IPV Disclosure

Intervention	Both States		New Hampshire		North Carolina		Comparison P Value
	Estimate	SE	Estimate	SE	Estimate	SE	
Treat the physical complaint	.67	.03	.64	.05	.68	.04	.48
Treat the emotional complaint (eg, depression, anxiety)	.82	.02	.74	.04	.83	.02	.08
Document IPV in the patient record	.79	.03	.72	.04	.8	.03	.11
Make referral to another health professional	.37	.03	.46	.05	.35	.04	.10
Make referral to social service agency	.37	.03	.34	.04	.37	.04	.55
Make referral to family violence agency	.40	.03	.33	.05	.41	.04	.22
Make referral to law enforcement	.12	.02	.10	.03	.12	.02	.56
Advise patient to get a protective/restraining order	.42	.03	.34	.04	.43	.04	.15
Advise patient to leave partner	.42	.03	.31	.04	.43	.04	.03
Advise patient on how to handle/interact with partner	.46	.04	.46	.05	.46	.04	.95
Other (please specify)	.13	.03	.11	.03	.13	.03	.55

IPV—intimate partner violence

SE—standard error

Table 3

Estimated Population Proportions for Physician Perception of Effect
of IPV Disclosure on Doctor-Patient Relationship

	<i>Both States</i>		<i>New Hampshire</i>		<i>North Carolina</i>		<i>Comparison P Value</i>
	<i>Estimate</i>	<i>SE</i>	<i>Estimate</i>	<i>SE</i>	<i>Estimate</i>	<i>SE</i>	
More work	.53	.04	.45	.05	.54	.04	.16
Better rapport	.48	.03	.47	.05	.48	.04	.86
Better insight	.76	.03	.76	.04	.76	.03	.88
Better respect	.28	.03	.32	.04	.27	.03	.41
Less work	.02	.01	.01	.01	.02	.01	.71
Worse rapport	.05	.02	.04	.01	.05	.02	.62
Worse insight	.01	.01	.01	.01	.01	.01	.93
Worse respect	.15	.02	.09	.02	.16	.03	.07

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Table 4

Estimated Population Proportions for Physician Perception of Patient Outcomes
As a Result of Patient Disclosure of IPV

	<i>Both States</i>		<i>New Hampshire</i>		<i>North Carolina</i>		<i>Comparison P Value</i>
	<i>Estimate</i>	<i>SE</i>	<i>Estimate</i>	<i>SE</i>	<i>Estimate</i>	<i>SE</i>	
<i>Positive outcomes</i>							
1. Leaving the abusive relationship or taking steps to leave	.41	.03	.31	.04	.43	.04	.02
2. Lessening of abuse; improved relationship with partner	.19	.02	.18	.03	.19	.03	.93
3. Improved housing/living circumstances	.26	.03	.19	.04	.28	.03	.10
4. Improved employment/education	.09	.02	.08	.02	.09	.02	.94
5. Seeking domestic violence services, including counseling	.40	.03	.41	.04	.4	.03	.91
6. Seeking a protective/restraining order	.22	.03	.13	.03	.23	.03	.02
7. Improved relationship(s) with family, friends	.19	.03	.19	.03	.19	.03	.92
8. Seeking treatment for substance abuse	.04	.01	.04	.02	.04	.01	.79
9. Coping better with partner's substance abuse (eg, Al-Anon)	.09	.02	.13	.03	.08	.02	.14
10. Improved mental health (eg, less depression)	.48	.03	.38	.04	.5	.04	.03
11. Other (please specify)	.02	.01	.04	.02	.02	.01	.26
<i>Negative outcomes</i>							
1. Fear of worsening violence	.17	.02	.12	.03	.17	.03	.15
2. Actual worsening of violence	.03	.01	.04	.01	.03	.01	.71
3. Disruption of housing/living circumstances	.20	.03	.21	.04	.2	.03	.95
4. Disruption of employment/education	.04	.01	.03	.01	.04	.01	.41
5. Disruption of finances	.20	.02	.20	.03	.2	.03	.94
6. Disruption of health or other insurance (eg, denial of insurance)	.05	.01	.02	.01	.05	.01	.06
7. Disruption of relationship(s) with family, friends	.10	.02	.06	.02	.10	.02	.14
8. Loss of custody or visitation with children	.02	.01	.01	.01	.02	.01	.15
9. New or worsened patient substance abuse	.03	.01	.02	.01	.03	.01	.47
10. Worsened mental health (e.g. depression)	.07	.01	.09	.02	.07	.02	.50
11. Other (please specify)	.03	.01	.02	.01	.03	.01	.69

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the relationship (41%), and seeking domestic violence advocacy services or counseling (40%). Negative patient outcomes reported by physicians were disruption of finances (20%) and housing or living arrangements (20%), fear of worsening violence (17%), and disruption of relationships with family and friends (10%). However, in comparison, about the same proportion reported improved housing or living conditions (Table 4). In contrast to the fear of worsening violence reported by physicians (New Hampshire: 12% of patients, North Carolina: 17% of patients), actual worsening violence was reported by New Hampshire physicians for 4% of their patients and by North Carolina physicians for 3% of their patients.

In comparison with New Hampshire family physicians, more North Carolina physicians believed that as a result of their intervention following the patient's disclosure, the patient had the following positive outcomes: leaving or taking steps to leave the abusive relationship (North Carolina: 43%, New Hampshire: 31%, $P=.02$), seeking a protective or restraining order (North Carolina: 23%, New Hampshire: 13%, $P=.02$), and improved mental health (North Carolina: 50%, New Hampshire: 38%, $P=.03$). When comparing physician report of negative outcomes by state, no differences were noted. When asked to comment whether they believed that changes in patient outcome were attributable to their interaction with the patient, they most often cited the areas of patients seeking domestic violence services or counseling (New Hampshire: 71%, North Carolina: 73%) and improved mental health for patients (New Hampshire: 50%, North Carolina: 68%).

Discussion

The results of our study show that family physicians are asking female patients about IPV more frequently than 5 years ago. The proportion of family physicians asking about IPV appears to be associated with the proportion of women in their practices—those physicians with a higher percentage of female patients are more likely to report routinely asking about IPV.

Victims of IPV often fear worsening violence, including the threat of loss of custody or visitation with their children if they tell others that IPV has occurred. While losing custody of children is a common fear, family physicians in this study did not report this as a common outcome. What is unknown is whether enough time had elapsed for the physicians in our study to know, with certainty, that this was indeed the outcome. Disruption of relationships with family and friends is also a fairly commonly expected outcome when the relationship is severed; however, in this study, more physicians reported improved relationships with family and friends than we expected.

Physicians reported that positive changes occurred after their patient's disclosure, including counseling and

referral for various services. This contradicts a widely held opinion that, in general, physicians lack effectiveness in their interventions with patients experiencing IPV. It also is encouraging to see that physicians in both states were referring patients to a network of "experts" (eg, domestic violence shelters, criminal justice system for protection, or restraining orders) in the community who deal routinely with the issue of family violence.

Limitations

Limitations of this study include a low response rate to the survey. We acknowledge that there is a possibility of selection bias because physicians who responded may be more interested and attuned to dealing with this issue with their patients. This may alter the reports of interventions and patient outcomes. Nonetheless, the similarity of response between the physicians in the two states is striking. We were surprised to see such minimal regional variation in the responses we received. This suggests that the response of a larger sample might be very similar.

We also acknowledge that literature on prevention indicates that physicians tend to overreport prevention activities, and they may have done so in this study by reporting a higher rate of IPV intervention than actually occurs. However, we were attempting to correlate physicians' perception of their behavior with perception of patient outcomes, rather than attempting to verify actual screening rates.

Another potential limitation is the reliability of physician recall of practice habits in 1996. Data from a 1996 survey⁹ in North Carolina yielded similar results to what our subjects reported for 1996, thus supporting the accuracy of our study results.

Finally, since we asked physicians to describe outcomes with two recent patients, physicians may have selectively reported patients with more positive outcomes. However, a number of negative outcomes were reported, with a fairly consistent pattern of outcomes across the sample.

Conclusions

It will be important in the future to correlate patient perceptions with the physician perspective and to examine the timeframe involved in outcomes reported. Other outcomes, intended and unintended, may occur over a continuum of time, and the physician may not be aware of his or her influence, especially if the patient contact is the annual well-woman visit. It will be valuable to learn if patients disclosing IPV believe their family physician intervened actively and effectively to help improve their lives, whether the relationship improved between them and their doctor, and whether the physician, patient, and local human service agencies (eg, domestic violence shelter, mental health counse-

lor, victim advocate) work collaboratively to ensure that a well-thought-out safety plan is an integral part of the patient's plan when steps are taken to leave the relationship.

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