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Characteristics of Intimate Partner Violence Incidents and the Environments in Which They Occur: Victim Reports to Responding Law Enforcement Officers

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Abstract

The objectives of this study were to identify intimate partner violence (IPV) incidence rates, to quantify specific risks and characteristics of these incidents and the environments in which they occur, to identify how often children are present for or injured during these incidents, and to identify differences in victim reports of IPV to law enforcement officers at the scene of the incident compared with previously published reports of IPV from retropsective, anonymous surveys and domestic violence shelter interviews. Data gathered by responding law enforcement officers at the scene of the IPV incident were used to determine the prevalence of IPV incident characteristics and outcomes. Females aged 20 to 39 years, unmarried adults, and African Americans were disproportionately represented as victims of IPV in this study. IPV incidents were significantly more likely to occur on Saturdays and Sundays and during the months of May through August. Relationship durations for suspect–victim pairs were most often less than

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12 months at the time of the incident. Weapon use and/or strangulation was common, occurring in 44% of all incidents. Minors (under age 18 years) were frequently present in the home during the IPV incident or a member of the household (59%). This study provides a unique perspective of IPV by utilizing data collected directly from the scene of the incident by first responders. Previously published characteristics of IPV were confirmed, but this study also brings to light new and critical information concerning this prevalent form of violence. Study findings relating to incidence, seasonality, severity, disproportionately affected populations, and child exposure are discussed.

Keywords
domestic violence, disclosure of domestic violence, children exposed to domestic violence, intimate partner violence, witnessing partner violence, law enforcment

Introduction

Violence is a prevalent public health issue that continues to threaten the well-being of individuals, households, and entire communities all over the world. In the United States, 52% of women and 66% of men report being victimized by physical assault (i.e., behaviors that threaten, attempt, or actually inflict physical harm) at some point in their lifetime (Tjaden & Godeke, 2000). For many, 33% of women and 28% of men, this physically violent victimization will occur at the hands of an intimate partner (Black et al., 2011).

In nearly 80% of intimate partner violence (IPV) incidents reported in the United States, the victim is a woman (Catalano, 2015). Victim self-reports from a national survey indicate that women who are physically assaulted by an intimate partner will experience seven such assaults at the hands of this same partner over their lifetime (Tjaden & Thoennes, 2000). Risk factors associated with increased incidence rates of IPV among women include lower levels of socioeconomic status, marital status, young age, and pregnancy (Catalano, 2007, 2015; Gazmararian et al., 1996). Women ranging in age from 18 to 34 years appear to be at the highest risk of victimization by an intimate partner (Catalano, 2015).

Victimization at the hands of an intimate partner has been linked to a wide range of negative social, physical, and emotional consequences. Among women who report experiencing intimate partner physical violence, nearly 25% also report experiencing stalking and/or rape (Black et al., 2011). Women who report physical violence, rape, and/or stalking by an intimate partner are more likely to report experiencing adverse physical symptomology (Black

et al., 2011). Findings from the *National Violence Against Women Survey* indicate that 32% of women who report being raped by an intimate partner and 39% of women who report a physical assault by an intimate partner suffer physical injury (Tjaden & Godeke, 2000). Furthermore, women who are victimized by IPV are at an increased risk for a range of chronic diseases and negative health risk behaviors that include joint disease, migraines, stomach ulcers, chronic pelvic pain, asthma, binge drinking, and HIV risk factors (Breiding, Black, & Ryan, 2008; Coker, Smith, Bethea, King, & McKeown, 2000). Overall, women who have been victimized by IPV are nearly three times as likely to report poor physical health and more than three times as likely to report poor mental health (Black et al., 2011). Male victims of IPV are nearly twice as likely to report poor physical health and more than twice as likely to report poor mental health compared with the general population (Black et al., 2011).

While physical symptomology of IPV may be substantial and extensive, the underlying emotional and psychological damage often created by these incidents, and the environments in which they occur, may cause even more lasting damage to victims. Victims of these environments may experience insomnia, anxiety, and/or social dysfunction and suffer from a range of mental health disorders including depression, suicidal ideation, and posttraumatic stress disorder (Astin, Ogland-Hand, Coleman, & Foy, 1995; Becker, Stuewig, & McCloskey, 2010; Campbell, 2002; Mechanic, Weaver, & Resick, 2008). The duration and severity of IPV may determine the extent of physical and emotional health issues experienced by the victim (Bonomi, 2006).

The most devastating consequence of IPV is severe injury resulting in the death of one or more victims. Nearly half of homicides among females that occur annually in the United States are committed by a current or former partner of the victim (Guth & Pachter, 2000). The leading cause of death for African American women between the age of 15 and 34 years is murder at the hands of a current or former intimate partner (Amar & Cox, 2006). Risk factors that increase the risk of IPV incidents culminating in homicide include an abuser's lack of employment, abuser's access to a firearm, abuser's use of illicit drugs, having a child in the home that is not the abuser's biological child, previous threats of violence with a weapon, forced sex, and separation from the victim after cohabitating (Campbell et al., 2003). As many as 70% of female, IPV-homicide victims aged 18 to 50 years were physically assaulted by the intimate partner who killed them, prior to the fatal incident (Campbell et al., 2003).

Although the aforementioned data clearly show the widespread prevalence and nature of IPV victimizations experienced by adults, it is less clear how often, and to what extent, children are exposed to IPV. The National

Crime Victimization Survey (NCVS), a self-report survey that gathers crime data from a nationally representative sample of households in the United States, reports that children are residents in 35% of households where IPV was reported to have occurred (Catalano, 2007). The extent to which these children witnessed or were exposed to this violence is not reported. Studies that utilize law enforcement reports of IPV to determine the nature and involvement of child exposure report that 43% to 80% of all IPV incidents occur in households containing children and that many of these children experience some form of sensory exposure to the violence (Fantuzzo, Boruch, Beriama, Atkins, & Marcus, 1997; Fusco & Fantuzzo, 2009). Children under the age of 5 years have been found to be disproportionately represented in these homes (Fantuzzo et al., 1997). In 20% of homes where IPV is known to have occurred, children were identified as being a causative factor in the eruption of the dispute between the suspect and victim (Fantuzzo et al., 1997).

This study was designed to provide a unique look at IPV by utilizing data collected directly from the scene of the incident by responding law enforcement officers. Much of our existing knowledge concerning IPV is derived from nationally distributed, retrospective, anonymous surveys or from surveys completed by victims at domestic violence shelters (Ascione, 1998; Black et al., 2011; Tjaden & Godeke, 2000). This study is distinct in that it provides real-time descriptive views of these incidents of violence as reported by victims on the scene and observed by responding law enforcement officers. The objectives of the current study were (a) to identify IPV incidence rates; (b) to quantify specific risks and common characteristics of these incidents and suspect–victim pairs; (c) to determine how often children are present for, or injured during, these events; and (d) to identify differences in victim reports of IPV to law enforcement officers at the scene of the incident compared with previously published reports of IPV from retrospective, anonymous surveys and domestic violence shelter interviews. It is our hope that thoughtful inspection of these data will identify areas for future research to aid in the development of successful multidisciplinary prevention and intervention strategies.

Method

Study Design

This study is an analysis of domestic violence officer information sheets collected by law enforcement officers responding to domestic violence incidents in Marion County, Indiana. The data available at the time of this study were collected from December 25, 2012, through December 2, 2015.

Study Population

Marion County, with a population of 903,393, is the largest county in the state of Indiana (U.S. Census Bureau, 2010). It encompasses Indianapolis, the state's largest city, and several smaller unincorporated towns. The Indianapolis Metropolitan Police Department (IMPD), with a jurisdiction that covers approximately 92% of the county population, is the primary law enforcement agency operating in Marion County (U.S. Census Bureau, 2010). Additional law enforcement agencies with jurisdiction in Marion County include the Lawrence Police Department (5% of county population), Beech Grove Police Department (2%), and Speedway Police Department (1%; U.S. Census Bureau, 2010).

Data Source

In 2011, IMPD, in collaboration with the Marion County Prosecutor's Office, Indiana Department of Public Safety, and various domestic violence centers, shelters, and organizations, developed a Coordinated Community Response to domestic violence that included the adoption of the data collection component of the "Baker One" project. The Baker One project, developed by the Baker One District of the Charlotte-Mecklenburg (NC) Police Department in 2002 (NC Police Department, 2002), promotes a heightened response system to domestic violence incidents, provides individuals involved in these incidents with access to supportive services, and allows for the identification of individuals considered at risk for perpetrating domestic violence (Domestic Violence Network, 2014). A prior assessment of the effectiveness of the Baker One project revealed a decrease in repeat calls of domestic violence by 98.9% in seven target locations (NC Police Department, 2002).

An important component of the Baker One project is data collection. A standardized domestic violence officer information sheet, adapted from the *Lethality Assessment Program Maryland Model for First Responders* (Maryland Network Against Domestic Violence, 2010), was completed by responding law enforcement officers at every domestic violence incident. This form provides key information regarding victims, suspects, and witnesses of these incidents in Marion County (Domestic Violence Network, 2014). In addition to data relating to the current incident, information is also gathered concerning past episodes of violence in the home. These data are gathered from the victim at the scene of the incident and include information such as prior threats of violence made to victims, suspect history of strangling the victim, suspect history of using a weapon against the victim, and harm perpetrated by the suspect against household pets.

In 2014, changes were made to the IMPD domestic violence officer information sheet, including the addition/removal of selected questions and a shift from a paper form to an electronic form. A period of overlap existed while old forms were being phased out and access to the new form was made available; however, each incident during this period was only recorded on one form or the other. This descriptive study will utilize data collected from both the original (December 25, 2012-January 28, 2015) and updated information forms (September 11, 2014-December 2, 2015). No data were available for law enforcement agencies operating in Marion County that do not participate in this program; however, these agencies serve less than 1% of the county population (U.S. Census Bureau, 2010).

Measures

Many of the questions appearing on the domestic violence officer information sheet were adapted from a first-responder questionnaire developed as part of the *Lethality Assessment Program Maryland Model for First Responders* (Maryland Network Against Domestic Violence, 2010). The Lethality Assessment Program–Maryland Model (LAP) was created based on several bodies of research conducted at the Johns Hopkins University School of Nursing (Maryland Network Against Domestic Violence, 2010). The 11-question LAP survey, completed by first responders to domestic violence scenes, was developed as a measure of "lethality." Victims who responded "yes" to any of three questions ("Has he or she ever used a weapon against you or threatened you with a weapon? Has he or she threatened to kill you or your children? Do you think he or she might try to kill you?") were determined to be at high risk of suffering severe or fatal injury and considered to be in need of a referral for victim services. Victims who did not respond "yes" to any of those items, but provided affirmative responses to any four of the remaining eight questions, were also referred for victim services (Maryland Network Against Domestic Violence, 2010). In addition to the LAP questionnaire, questions were developed for the domestic violence officer information sheet based on recent trends in domestic violence incidents occurring in Marion County.

Domestic violence officer information sheet responses were recorded as a "yes," "no," or "unable or unwilling to respond." As some incidents involved more than one victim or suspect, a "yes" response indicates an affirmative response relating to *at least one* suspect or victim involved in the incident. Questions on the form that did not have any response indicated were recorded as "unknown" responses. Data provided directly by the responding law enforcement officer (i.e., suspect arrested, visual signs of strangulation,

weapon seized, suspect under the influence, victim medical treatment, and threats heard by officer) are indicated.

Analysis

This study was approved by the Institutional Review Board of Indiana University. Data from both the original and updated domestic violence officer information sheets were combined, and descriptive analysis was performed using IBM SPSS Statistics 23. Missing responses were categorized as unknown, and instances where the victim was unable or unwilling to provide a response to law enforcement on the scene were indicated accordingly. Reported percentages indicate the proportion of affirmative responses to each question, when a "yes" or "no" answer was recorded. Chi-square goodness-of-fit test was used to compare observed and expected incidents by month and day of week. Expected values for months were determined by calculating the total number of days for each month and multiplying by the per day average of incidence over the course of the study. Expected outcomes for day of week were determined by calculating total counts of each day of the week during the study and multiplying by the average number of incidents per day over the course of the study. Statistical significance was defined as a p value < 0.05.

Results

Demographic Descriptions for IPV Suspects, Victims, Witnesses, and the General Marion County Population

A total of 9,355 IPV incidents were documented during the study period (n = 4,972—original form; n = 4,383—updated form) involving 9,406 suspects; 9,420 victims; and 7,591 witnesses. Eighty-eight percent of the victims in this study were female, and 88% of the suspects were male (Table 1). Forty-four percent of victims and 41% of suspects were between the ages of 20 to 29 years. Seventy-five percent of the witnesses to these events were 19 years old or younger. Over half of the non-adult (under age 18 years) witnesses to these events were children under the age of 5. There was a disproportionately high representation of African Americans in the study population as witnesses (56%), victims (51%), and suspects (59%), compared with the overall county population (26%; U.S. Census Bureau, 2010).

In 87% of incidents, the suspect was male and the victim was female. The majority of the remaining reports involved female suspects and male victims (10%), although there were also several instances of violence involving

Table 1. Study/County Population Demographics.

	Victim (%)[a] *n* = 9,420	Witness (%)[a] *n* = 7,591	Suspect (%)[a] n = 9,406	Marion County Population (%)[b] *n* = 903,393
Gender				
Male	12	48[c]	88	48
Female	88	52[c]	12	52
Age				
Below 5 years	0	37	0	8
5-9 years	0	19	0	7
10-14 years	0	12	0	7
15-19 years	6	7	3	7
20-29 years	44	10	41	17
30-39 years	29	5	29	15
40-49 years	14	4	16	13
50-54 years	4	2	5	7
55+ years	3	3	4	21
Ethnicity[c]				
White	46	40	38	60
African	51	56	59	26
American				
Hispanic	2	3	2	9
Other	1	1	1	5

[a]Incidents may have more than one victim, witness, or suspect.
[b]Data from the U.S. Census Bureau (2010) Census.
[c]Data from updated domestic violence officer information sheet.

same-sex partners (3%). Suspect–victim pairs most commonly reported relationship durations of fewer than 24 months (43%; Figure 1). Twenty-one percent of victims reported their relationship with the suspect ended on the day of the incident; it is unclear from the data provided whether the incident occurred before or after the victim had reached this decision. Cohabitating suspect–victim pairs most often reported having lived together for 12 months or less at the time of the incident (42%; Figure 2).

IPV Incidence and Seasonality

During the study period, the annual IPV victimization report rate to law enforcement in Marion County was 441 incidents per 100,000 population aged 12 years and older, as compared with the reported U.S. national average of 240 annual victims per 100,000 population aged 12 years or older (Bachman & Coker, 1995). IMPD submitted the vast majority of Marion County IPV

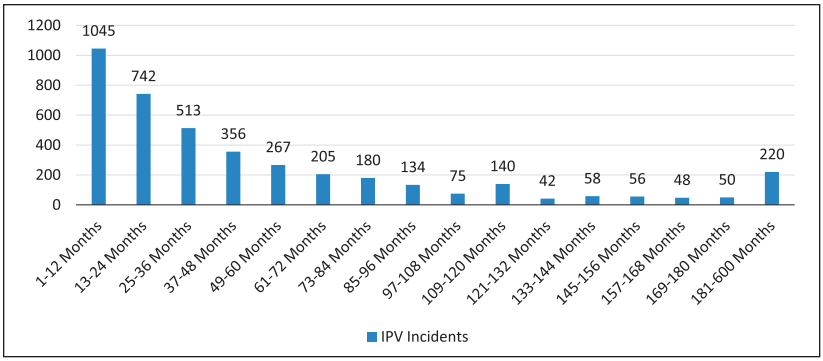

Figure 1. Length of victim–suspect relationship.
Note. IPV = intimate partner violence.

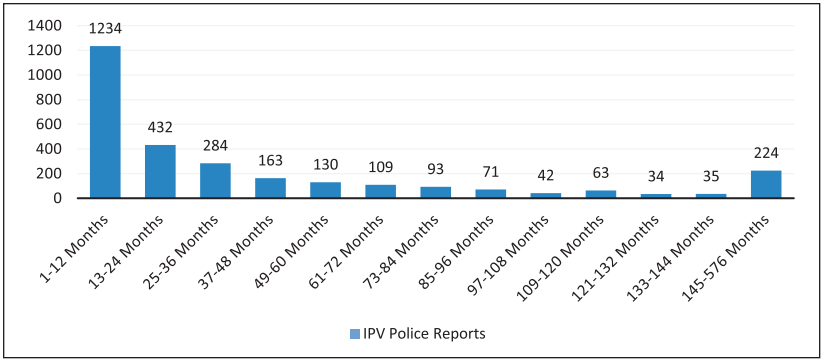

Figure 2. Length of victim–suspect cohabitation.
Note. IPV = intimate partner violence.

reports (96%). There was a statistically significant variance in incidence of IPV by month ($\chi^2 = 513.32$, $p < .0001$) as well as by day of the week ($\chi^2 = 176.370$, $p < .0001$)—with an elevated incidence of 10 or more police reports of IPV per day occurring in May through August (Figure 3). There was also an elevated incidence of reporting on Saturdays and Sundays (Figure 4).

Suspect and Victim Characteristics

Forty-eight percent of suspects were unemployed at the time of the incident and 51% had a known history of alcohol/drug abuse or mental illness (Table 2). Nine percent of all female victims reported being pregnant at the time of the incident; however, when both the suspect and victim were under the age of 30

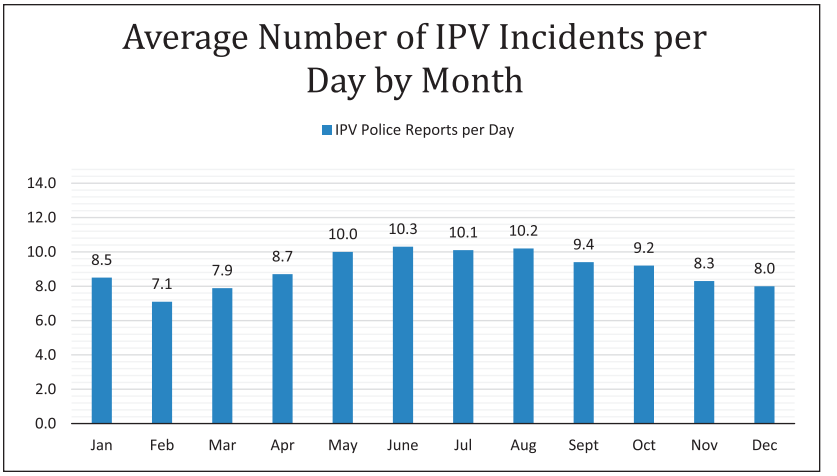

Figure 3. IPV police reports per day by month.
Note. IPV = intimate partner violence.

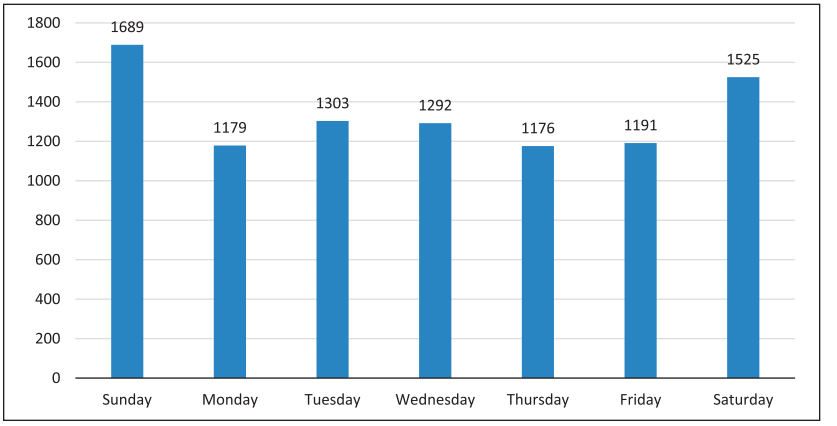

Figure 4. IPV incidents by 1 day of the week.
Note. IPV = intimate partner violence.

years old, 16% of adult female victims reported pregnancy. Only 20% of all suspect–victim pairs were married at the time of the IPV incident. When the victim and suspect were both 25 years old or younger, the suspect–victim marriage rate dropped to 5%. Thirty-three percent of suspect–victim pairs reported

Table 2. Suspect/Victim Characteristics.

	Affirmative Response Among Those Who Answered Yes or No (%)	Yes	No	Unwilling or Unable to Respond	Unknown
Suspect/victim characteristics					
Suspect unemployed[a]	48	249	270	82	4,371
Suspect history of drug/alcohol abuse or mental illness[b]	51	1,813	1,717	853	0
Suspect threatened/ attempted suicide in past	14	1,032	6,331	1,766	226
Suspect has easy access to gun	35	2,625	4,810	1,723	197
Victim pregnant	9	715	7,587	770	283
Suspect–victim relationship characteristics					
Suspect–victim current cohabitants	38	3,429	5,675	0	251
Suspect–victim former cohabitants	10	923	8,181	0	251
Suspect–victim married at time of incident	20	1,816	7,288	0	251
Suspect–victim child in common	33	3,041	6,063	0	251
Victim has child, suspect knows is not theirs	26	2,137	6,153	789	276
At least one minor in household/ home	59	5,530	3,825	0	0
Suspect–victim violence history					
Prior unreported IPV incidents	64	5,922	3,321	0	112
Existing protective order	5	478	8,265	333	279

(continued)

Table 2. (continued)

	Affirmative Response Among Those Who Answered Yes or No (%)	Yes	No	Unwilling or Unable to Respond	Unknown
Suspect follows or spies on victim	49	3,870	4,004	1,252	229
Suspect is jealous/ controls most daily activities	63	4,951	2,956	1,119	329
Suspect has ever forced victim to have sex[b]	9	279	2,958	1,146	0
Suspect history of abusing household pets[b]	3	107	3,309	967	0
Suspect history of strangling victim	54	4,369	3,745	1,001	240
Suspect ever threatened victim with weapon	31	2,442	5,385	1,042	486
Suspect ever threatened to kill victim or their children	38	3,022	4,878	951	504
Recent death threats by suspect to victim	23	1,483	5,076	525	2,271
Victim fears suspect may kill them	42	2,894	4,018	1,933	510

[a]Responses from original domestic violence officer information sheet.
[b]Responses from updated domestic violence officer information sheet.

having at least one child in common, and 26% of victims reported having at least one child the suspect knew was not his or her biological child.

Children as Witnesses to IPV Incidents or Members of Household

Minors (under age 18 years) were indicated as having either been present in the home during the incident or a member of the household in 59% of

responding law enforcement officer reports. Minors were even more likely to be in the home during the incident or a member of the household when suspect–victim pairs had formerly cohabited (70%) or were both younger than 30 years old (67%). Among incidents where minors were indicated in the police report, 41% involved two or more minors. In all, 5,376 minors were included in these IPV reports and at least 71% (3,828 minors) were physically injured and/or directly witnessed these incidents. It is unclear from the data provided how frequently child protective services were contacted concerning incidents involving minors.

Contextual Characteristics

The majority of suspect–victim pairs (64%) indicated previously unreported IPV incidents (mean of 10 prior incidents for suspect–victims pairs reporting a history of IPV; Table 2). Of those willing to answer the law enforcement officer's questions, 63% of victims reported the suspect had a history of jealousy and controlled the majority of the victim's daily activities. Fifty-four percent of victims reported a history of having been strangled by the suspect, and 38% reported that the suspect had threatened to kill them and/or their children in the past. Questions that law enforcement officers most commonly reported victims to be "unable or unwilling to respond to" covered topics such as suspect history of suicide attempts or threats, suspect access to a gun, the suspect following or spying on victim, forced sex, and fear the suspect will kill them.

IPV Incident Characteristics

Suspects were still on scene at the time the law enforcement officer arrived in 7% of all incidents. When the suspect and victim were both women, however, suspects were more than three times as likely to remain on scene (24%). Fifty-five percent of all suspects appeared to be under the influence of alcohol or drugs when interviewed by law enforcement (Table 3). Of suspects who had fled the scene of the incident but were able to be located by law enforcement officers, 59% appeared to be under the influence of alcohol or drugs. Intoxicated suspects were more likely than not to have prior unreported incidents with the current victim (67%) and more likely to be arrested by the responding law enforcement officer (60%).

Suspects strangled and/or used a weapon against the victim in 44% of all incidents. Twenty-nine percent of victims reported allegations of strangulation during the current incident (32% among female IPV victims). Of the 2,605 victims who alleged strangulation by the suspect, 60% had visually observable signs that were documented by law enforcement (e.g., bruising, swelling, abrasions, subconjunctival hemorrhage). Only 14% of victims who

Table 3. IPV Incident Details/Outcomes.

	Affirmative Response Among Those Who Answered Yes or No (%)	Yes	No	Unwilling or Unable to Respond	Unknown
IPV incident details					
Suspect on scene[a]	7	325	4,647	0	0
Non-English language assistance needed	4	333	8,815	0	207
Paramedics on scene	19	1,776	7,579	0	0
Threats heard by officer	3	267	8,988	0	100
Strangulation alleged[b]	29	2,605	6,314	189	247
Weapon used during incident[b]	17	1,437	7,255	191	472
Suspect under influence (alcohol or drug)	55	2,113	1,743	0	5,499
Victim under influence (alcohol or drug)	17	985	4,891	0	3,479
IPV incident outcomes					
Victim received medical treatment on scene only	3	247	7,497	0	1,611
Victim received medical treatment at hospital	11	820	6,924	0	1,611
Victim moved to temporary location	24	2,248	6,984	0	123
Suspect arrested[c]	37	1,574	2,678	0	131

[a]Responses from original domestic violence officer information sheet.
[b]Responses provided by victim, all other responses in table provided by responding law enforcement officer.
[c]Responses from updated domestic violence officer information sheet.

reported strangulation received medical treatment (3% first aid on scene, 11% transported to hospital), and 84% of strangulation victims reported prior incidence of strangulation by the suspect. Thirty-one percent of pregnant IPV victims reported strangulation during the current incident. Seventeen percent of these pregnant strangulation victims received medical treatment.

In 17% of all incidents, a weapon was used by the suspect against the victim. Reported weapon use doubled, however, to 35% when a female was the suspect and a male the victim in the incident. Weapons most commonly used by suspects against victims were firearms and knives (51%). Other objects reportedly used as weapons against victims included baseball bats, belts, chairs, hammers, scissors, screwdrivers, pipes, bricks, lamps, tire irons, and motor vehicles. Only 1% of weapon-wielding female suspects used a firearm against a male victim compared with 24% of weapon-wielding male suspects against female victims. Law enforcement officers seized the weapon in 9% of incidents involving weapons.

Medical treatment, defined as transport to a hospital or receiving first aid on scene, was provided for 14% of victims. Although medical treatment was often offered to victims, particularly those with allegations of strangulation, victims often reportedly refuse these services. Victims were moved to a temporary location in 24% of the IPV incidents. These locations most commonly included medical facilities and domestic violence victim assistance shelters. Twenty-five percent of all female victims were moved to temporary locations after the IPV incident compared with 16% of male victims; however, male victim relocation rates increased to 30% when the suspect was also male. In 37% of IPV incidents, at least one suspect was arrested, either on scene or after being located at another location. Of incidents not resulting in an arrest, the primary reason cited by law enforcement officers in 85% of cases was "no suspect on scene." During the course of this study, female suspects were more often arrested (41%) than male suspects (37%).

Discussion

This study not only confirmed some previously known characteristics of IPV but also brought to light new and critical information concerning this pervasive form of violence. IPV is prevalent in Marion County, Indiana, with 3,296 incidents reported annually to law enforcement. Females aged 20 to 39 years, unmarried adults, and African Americans were disproportionately represented as victims of IPV in this study. Largely unreported prior to this study is the finding that IPV incidents were significantly more likely to occur on Saturdays and Sundays and during the months of May through August. This

study also found that the duration of relationships for suspect–victim pairs were most often less than 12 months, while cohabitating-pairs had often lived together for 12 or fewer months at the time of the incident.

Suspect risk factors known to be associated with an increased likelihood of IPV incidents culminating in homicide were also prevalent among this study sample (e.g., unemployment, access to firearms, and history of threatening a victim with a weapon; Campbell et al., 2003). Furthermore, 44% of the incidents in this study involved strangulation and/or weapon use, characteristics that are definitive of "severe intimate partner violence" according to previously published standards (Domenech del Rio & Garcia del Valle, 2016; Government Office Against Gender Based Violence, 2015). Similar to findings in other studies, minors were frequently members of these households in which IPV occurred (Fantuzzo et al., 1997), particularly when both the suspect and victim had a history of cohabitation (70%). Few IPV incidents culminated in arrests in this study (37%); however, this rate is higher than previously published IPV arrest rates (22%-32%; Bachman & Coker, 1995). Only 9% of all weapons were confiscated by law enforcement officers in this study.

Although the reported incidence rate of IPV in Marion County, Indiana, is high, this number may still underestimate the actual IPV rate. Due to the high rate of prior unreported IPV incidents among the suspect–victim pairs in this study, 3,296 annually reported incidents may represent more than 20,000 prior unreported incidents. Although Federal reports indicate that IPV victimization is declining in the United States (Truman & Langton, 2015), the alarming rate at which it continues to occur in Marion County exemplifies the difficulties in accurate data collection and potential danger in making IPV population generalizations. National IPV survey results may be skewed due to low survey-response rates among men and women under the age of 30 years and among African Americans, both population groups that were overrepresented in the current study. Survey results that include a small proportion of African American women (10%) and female adults under the age of 30 years (19%), such as the *National Violence Against Women Survey*, may not accurately reflect IPV incidence and the true nature of many of the IPV incidents occurring in the United States (Tjaden & Godeke, 2000).

Determining seasonality trends of IPV has historically been difficult due to potential reporting inaccuracies by victims in retrospective, anonymous surveys—a common method of collecting IPV data. Victims may often not be able to accurately remember the day of week or time of year the incident occurred, particularly if they are reporting on multiple or past incidents. By utilizing police reports to track the occurrence of IPV, the exact day of the

incident is recorded and trends can be more accurately analyzed and reported. During the course of this study, IPV incidents were significantly more likely to occur on weekend days and during late spring and summer months. These days and months are particularly concerning because they represent time periods when children are less likely to be in school and, therefore, more likely to be in the home. IPV intervention and prevention programs may benefit greatly by utilizing these findings to target these specific days and months as being critical periods when IPV victimization may be more likely to occur.

This study also identified important information regarding relationship characteristics of suspect–victim pairs that may be of great benefit in designing prevention/intervention strategies. Many of the couples involved in this study were unmarried at the time of the incident and reported relationship and/or cohabitation durations of fewer than 12 months. The first year of a relationship or cohabitation may serve to be a critical period for researchers and prevention programs to target and work to reduce the likelihood of IPV.

Forty-four percent of all IPV incidents reviewed in this study would be considered severe IPV according to previously published standards (Domenech del Rio & Garcia del Valle, 2016; Government Office Against Gender Based Violence, 2015). Consistent with prior studies (Catalano, 2007), female suspects were more likely to use a weapon against male victims than male suspects against female victims; however, male suspects were much more likely to use a firearm against victims than female suspects. While other studies have estimated that 10% of female IPV victims are strangled by the suspect during the incident (Glass et al., 2008), this study reported a strangulation rate of 32% among female IPV victims during the current incident. This high rate of strangulation is extremely concerning, particularly when considering more than half of these strangulation victims had observable physical signs of strangulation documented by law enforcement officers. Only 14% of these strangulation victims agreed to receive medical treatment. Of additional concern is the fact that 31% of pregnant IPV victims reported strangulation during the current incident and only 17% received first aid or medical treatment on scene or at a medical facility. Strangulation can be associated with a wide range of symptoms and medical findings, including a loss of consciousness, fractured trachea, internal bleeding, neurological abnormalities, loss of memory, posttraumatic stress disorder, and death (Glass et al., 2008).

Consistent with prior studies that utilized data collected by law enforcement officers, minors were present in the majority of households in which IPV occurs (Fantuzzo et al., 1997). First, responders and investigators must be aware of the high likelihood that children are living in homes where IPV occurs and understand that they may be either directly exposed to and/or

physically injured during these incidents. The high risk of harm for children in homes when IPV is known to have occurred (as much as 60 times the rate of child abuse or neglect compared with the general population; Thackeray, Hibbard, Dowd, The Committee on Child Abuse and Neglect, & Committee on Injury, Violence, and Poison Prevention, 2010) mandates multidisciplinary collaboration among law enforcement, child protective services, and medical/social service providers to better ensure the safety and well-being of these young, vulnerable victims.

While suspect arrests have been shown to reduce the likelihood of future incidents between victim–suspect pairs, only 37% of the reported IPV incidents in this study resulted in an arrest. Law enforcement officers often reported the suspect no longer being on scene as the chief reason for a lack of arrest. These fleeing suspects can present considerable risks of harm to members of the household upon their return, as well as to members of the surrounding homes and communities during their flight. This risk is likely to increase substantially if the suspect is impaired by alcohol or drugs, as was the case in 59% of incidents involving suspects who fled the scene of the IPV incident and were later located by law enforcement officers.

Responses on the information sheet indicating that victims were frequently "unable or unwilling to respond" warrant concern. Reluctance to answer questions such as "does the suspect often follow or spy on you," "does the suspect have a history of strangling you," "has the suspect ever forced you to have sex," and "do you think the suspect may kill you" could indicate a reluctance by the victim to discuss certain high risk details with law enforcement officers due to a fear of suspect-retaliation or an overall lack of trust in law enforcement. Controlling factors often present in relationships where IPV occurs should thus be strongly considered when evaluating a victim's lack of response to questions that could potentially further jeopardize their safety.

This study shows a clear difference in reporting details of the IPV incident to law enforcement officers by victims at the scene of these incidents compared with data gathered from retrospective, nationally distributed surveys or in domestic violence shelters. While national surveys report that 80% of IPV victims are female (Catalano, 2015), nearly 90% of IPV victims were female in this study. This difference could indicate that males are more likely to report IPV when completing an anonymous survey but less likely to contact law enforcement during an incident. Also, while surveys report that women who are victimized by IPV will experience seven incidents of physical violence at the hands of their partner (Tjaden & Thoennes, 2000), this study reported an average of 10 prior incidents of violence between suspect–victim pairs reporting a history of IPV. Given the short study period and the fact that many of the couples included in this study reported being together for less

than one year, the discrepancy in the number of prior IPV incident reports between anonymous victim survey reports and victim reports directly to law enforcement officers is likely to be even greater over the continued course of the relationship.

Only 2% of victims in this study reported that the suspect intentionally harmed pets in the home; however, as many as 50% to 70% of female pet owners interviewed in domestic violence shelters report a history of abuser violence or threats of harm against their pet (Ascione et al., 2007). This discrepancy could be due to a number of reasons including the manner of questioning, a reluctance to disclose the information in the presence of the suspect, or an indication of when IPV-related animal violence is more likely to occur in the timeline of IPV events. Conversely, when reporting involvement of minors in IPV incidents, data collected on scene by law enforcement officers indicate that IPV incidents are much more likely to involve minors than often indicated in self-reported, retrospective IPV victim surveys (Catalano, 2007). These discrepancies by method of reporting among IPV victims have important implications for investigators and intervention/prevention program designs. Victims appear to be more likely to report fewer prior IPV incidents and less involvement of minors in retrospective, anonymous surveys than when they report directly to law enforcement during or shortly after the incident (Catalano, 2007; Tjaden & Thoennes, 2000). Victims may also be more likely to understate the nature and extent of violence once removed from the incident as opposed to being on scene and in the presence of a law enforcement officer.

Limitations

Limitations of this study include the manner in which the data were collected. The shift from a paper form (often filled out on clipboard while talking to victim on scene) to electronic form (completed on laptop computer) created a greater reliance on the memory of the responding law enforcement officer to record victim responses. While officers were more easily able to complete a paper form on a clipboard while talking to the victim, doing so with laptop computer may have been more cumbersome and led to delayed data entry. In addition, at particularly chaotic or violent scenes or at ones in which the suspect is unable to be located, law enforcement officers may feel as if their safety is compromised while sitting in their car at the scene completing the data report. The importance of accurate data collection regarding these events mandates the development of a system that will allow for timely data collection while optimizing safety for all involved individuals. The incorporation of a compact electronic device or audio recording device for law enforcement

officers responding to these scenes may help to meet this need and should be considered for all responding law enforcement agencies.

Due to identifiers being removed from the data set, it was impossible to determine if individual suspects or victims were involved in more than one incident. The value "0" was programmed as the default value in the data collection form. When a response of "0" was indicated for both months and years, it was not possible to differentiate between a relationship/cohabitation lasting less than one month from a failure to fill out the form; therefore, these values were excluded from the study.

The current study was limited to a single geographic area. Further study in other geographic regions is necessary to determine the generalizability of the reported findings. However, the data collection tool employed in this study has already been shown to be effective across multiple jurisdictions and could be used by other agencies in need of a standardized system for collecting IPV data or as an additional vantage point for data collection.

Future Research

Future studies must continue to build on the current work to further identify characteristics of households in which IPV occurs. More specific and descriptive information regarding the presence of minors and level of their involvement in these incidents must also be accurately and fully documented. The differences in data reported by victims to law enforcement officers compared with anonymous, retrospective surveys or at domestic violence shelters require additional research to determine why these disparities exist and how it should guide future data collection efforts.

This study identified several differences in characteristics of IPV incidents based on the gender of the victim or suspect. These differences must be further explored to better identify risk factors particular to specific suspect–victim gender combinations. Once identified, these factors will hopefully help guide interventions more likely to be appropriate for specific gender pairings.

It is believed that only 27% of women and 14% of men who are physically assaulted by their intimate partner ever report these incidents to law enforcement (Black et al., 2011). These findings appear to be consistent with the high number of prior unreported incidents indicated by victims in this study. As public awareness of the substantial danger and threat of harm in homes where IPV occurs increases, IPV reports to law enforcement may also increase, creating additional strain on departments that may already be overworked and underfunded. The development of multidisciplinary teams to help provide assistance to families and work to prevent initial and recurrent IPV incidents

is therefore imperative to better ensure the safety and improved quality of life for these vulnerable family structures.

Conclusion

This study provides a unique perspective of IPV by utilizing data collected directly from the scene of the incident by first responders. Previously published characteristics of IPV were confirmed, but this study also brings to light new and critical information concerning this prevalent form of violence. Study findings relating to incidence, seasonality, severity, disproportionately affected populations, and child exposure were discussed.

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