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COMPARISON OF SEXUAL ASSAULTS BY STRANGERS AND KNOWN ASSAILANTS IN AN URBAN POPULATION OF WOMEN

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Abstract • Résumé

Objective: To examine the characteristics of sexual assaults by strangers and those by people known to the victims in an urban community-based population of women.

Design: Descriptive study.

Setting: Sexual Assault Care Centre, Women's College Hospital, Toronto.

Participants: All 677 women who presented to the centre between June 1, 1991, and Sept. 30, 1993, and for whom the victim-assailant relationship was known.

Outcome measures: Assailant's relationship to victim, sex of assailant, number of assailants, number, type and location of assaults, use of weapons, type of coercion and extent of physical trauma or injury.

Results: Sexual assault by a person known to the victim accounted for 456 (67.4%) of the assaults reported. In 344 cases the person was known more than 24 hours; 99 (28.8%) were current or previous boyfriends or spouses. Assailants who were strangers were more likely to assault the victim more than once (t = -2.42, 355 degrees of freedom [df], p < 0.05), force the victim to perform fellatio ($\chi^2 = 8.63$, 1 df, p < 0.005), use weapons ($\chi^2 = 12.01$, 1 df, p < 0.001) and use physical coercion ($\chi^2 = 4.42$, 1 df, p < 0.05), whereas assailants who were known to the victims were more likely to assault a woman who was sleeping or drugged ($\chi^2 = 10.38$, 1 df, p < 0.005). Sexual assault by a known assailant was more likely to occur in the home of the victim ($\chi^2 = 36.27$, 1 df, p < 0.001) or the assailant ($\chi^2 = 8.46$, 1 df, $\chi^2 = 0.005$), whereas sexual assault by a stranger was more likely to occur outdoors ($\chi^2 = 89.80$, 1 df, $\chi^2 = 0.001$) or in a vehicle ($\chi^2 = 32.81$, 1 df, $\chi^2 = 0.001$). Overall, the mean number of trauma sites was greater among victims assaulted by strangers than among those assaulted by people they knew ($\chi^2 = 0.001$).

Conclusion: Two thirds of the sexual assaults in this urban population were committed by people known to the victims, and over two thirds of these assaults were associated with physical trauma. Improved victim services and prevention strategies should be built on this knowledge.

Objectif: Examiner les caractéristiques des agressions sexuelles commises par des étrangers et celles des agressions commises par des personnes connues de la victime dans une population communautaire urbaine de femmes.

Conception: Étude descriptive.

Contexte: Sexual Assault Care Centre, Women's College Hospital, Toronto.

Participantes: Les 677 femmes qui se sont présentées au Centre entre le 1^{er} juin 1991 et le 30 sept. 1993 et pour qui la relation entre l'agresseur et la victime était connue.

Mesures des résultats: Relation entre l'agresseur et la victime, sexe de l'agresseur, nombre d'agresseurs, nombre, type et lieu des agressions, utilisation d'armes, type de coercition et étendue du traumatisme physique ou de la blessure.

Résultats: Les agressions sexuelles commises par une personne connue de la victime ont représenté 456 (67,4 %) des agressions signalées. Dans 344 cas, la victime connaissait son agresseur depuis plus de 24 heures et 99 des agresseurs (28,8 %) étaient des amis ou conjoints du moment ou du passé. Les

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agresseurs qui étaient des étrangers étaient plus susceptibles d'attaquer leur victime plus d'une fois (t=-2,42,355 degrés de liberté [ddl], p<0,05), de forcer la victime à effectuer une fellation ($\chi^2=8,63,1$ ddl, p<0,005), d'utiliser des armes ($\chi^2=12,01,1$ ddl, p<0,001), et d'user de force physique ($\chi^2=4,42,1$ ddl, p<0,05), tandis que les agresseurs connus de la victime étaient plus susceptibles de s'attaquer à une femme endormie ou droguée ($\chi^2=10,38,1$ ddl, p<0,005). Une agression sexuelle commise par un agresseur connu était plus susceptible de se produire chez la victime ($\chi^2=36,27,1$ ddl, p<0,001) ou chez l'agresseur ($\chi^2=8,46,1$ ddl, p<0,005), tandis que l'agression sexuelle commise par un étranger était plus susceptible de se produire à l'extérieur ($\chi^2=89,80,1$ ddl, p<0,001) ou dans un véhicule ($\chi^2=32,81,1$ ddl, p<0,001). Dans l'ensemble, le nombre moyen de points de traumatisme était plus élevé chez les victimes attaquées par un étranger que chez celles qui ont été attaquées par un agresseur connu (t=-4,29,180 ddl, p<0,001).

Conclusion: Deux tiers des agressions sexuelles commises dans cette population urbaine l'ont été par des personnes connues des victimes et plus des deux tiers des agressions ont entraîné des traumatismes physiques. Il faudrait appuyer sur ces connaissances une amélioration des services aux victimes et des stratégies de prévention.

impulsive act committed by a stranger. Recent research, however, reveals that most sexual assaults are committed by assailants known to the victims. 1-6 This type of assault, which includes "date rape," is identified increasingly as a major social problem and is noted in numerous contexts, most notably college and university campuses. 2 Studies, although often limited to surveys of college populations, have reported rates of sexual assault by known assailants to be 50% to 88% of total identified sexual assaults. 1-7 As a result of these and other findings the victim—assailant relationship in cases of sexual assault has become a focus of investigation in recent years. 2-7

Despite the fact that little was known until recently about sexual assaults committed by people other than strangers, some studies^{8,9} have supported the widely held view that sexual assaults by strangers differ from those by people known to the victims. This view is based on the fact that, in general, external attributions of rape are made only when the assault involves an unknown assailant and the use of violence. 10,11 Sexual assaults by strangers are typically described as being more serious and more violent than assaults by known assailants and are more often associated with weapon use8 and bodily harm or threats of bodily harm.2 Conversely, some of the literature focusing specifically on sexual assaults by people known to the victims characterizes them as being less serious than assaults by strangers. 12-14 These beliefs and reported findings often result in both a minimization of assault sequelae15 and a lack of support from police and medical and mental health care professionals for women who have been sexually assaulted by people they know.16

Recent studies have challenged the notion that sexual assaults by strangers are more serious than those by known assailants. ^{2,16–18} In their study of victim—assailant relationships in sexual assault Ullman and Siegel¹⁷ found few differences in sexual assault experiences based on the type of relationship. Although problems with sexual intimacy were noted more frequently among women as-

saulted by intimates, and fear and anxiety was noted more frequently among women assaulted by strangers, the experience of psychologic symptoms such as depression did not differ between the two groups. Others^{2,16,18,19} have also observed that the occurrence and type of psychologic sequelae are similar regardless of the victimassailant relationship. Sales, Baum and Shore, ¹⁸ for example, argued that it is the "felt threat" of a sexual assault and not the level of violence per se that is linked to victim reaction and that determines victim impact. Similarly, Resick¹⁶ noted that the amount of violence and subsequent physical trauma that a victim experiences does not affect the amount of psychologic trauma experienced later.

It is evident that more research is needed to further document aspects of sexual assaults committed by strangers and known assailants and to clarify some of the noted inconsistencies found in the literature. Much of our current understanding is based on the few studies that examined the characteristics of sexual assaults by known assailants in primarily college populations.^{2,15} Little attention has been focused on the general adult population. In particular, little is known about the amount or nature of violence as determined by the victim—assailant relationship.

We performed a preliminary study as part of a systematic investigation of the characteristics of sexual assaults by strangers and known assailants in a community-based sample of adult women presenting to an urban sexual assault care centre. We wanted to determine whether characteristics of assailants, victims and assaults differed by type of victim—assailant relationship and in what ways. Specifically, we addressed whether the presence of physical violence and coercion, injury and trauma associated with sexual assaults were related to the victim—assailant relationship. We hypothesized that assaults by strangers would differ from other types of sexual assault in some way related to violence and coercion (e.g., more frequent use of weapons and more severe

physical injury). Because of the dearth of empirical studies on sexual assaults by known assailants in a general urban population of women, no specific hypotheses were formulated with respect to other measures.

METHODS

The study was conducted at the Sexual Assault Care Centre at Women's College Hospital, Toronto. The centre provides medical, psychologic and social assessment and treatment to female and male sexual assault victims in downtown metropolitan Toronto. It services over 360 clients per year.

Female clients who presented to the Sexual Assault Care Centre between June 1, 1991, and Sept. 31, 1993, were eligible for inclusion in the study. Those who did not indicate their relationship to the assailant and all male clients were excluded.

Variables describing the characteristics of the sexual assaults were obtained from the centre's database. This database includes coded medical and client information as well as information about assault characteristics. Information recorded by intake and treatment personnel at the hospital's emergency department and at the centre was obtained from hospital records.

The centre's database is maintained by a research assistant skilled in data management. Accuracy and reliability of data collection were assessed by the research assistant and one of us (L.E.S.) independently and the results compared approximately every 6 months. Data collection procedures were revised until 100% agreement was obtained.

Information collected included the victim's age, marital status and relationship to the assailant(s), the sex and number of assailants, the number, location and types of sexual assault, the use of weapons, the types of coercion, whether the victim was admitted to hospital and the types of trauma and injury incurred (soft-tissue injury, laceration or abrasion, internal injury, tenderness, or pain). Although the actual site of injury was noted, this information was not included in our analysis, neither did we determine the extent or seriousness of the trauma and injury from the data.

Statistical analyses of continuous variables involved analysis of variance for comparisons of more than two means and t-tests for comparisons of two means. Discrete variables were analysed with the use of the χ^2 test. Analyses were carried out using an SPSS data analysis program (SPSS/PC+, version 4.0.1, SPSS Inc., Chicago).

RESULTS

Of the 737 subjects who presented to the Sexual Assault Care Centre during the study period 677 were

eligible for inclusion in the study. The subjects ranged in age from 14 to 87 (mean 26.53) years. Most (497 [73.4%]) were single. Those assaulted by strangers did not differ significantly from those assaulted by known assailants in terms of age and marital status (Table 1). Young adult women, aged 16 to 25, in both groups were at highest risk for sexual assault, accounting for 343 (50.7%) of the subjects.

Most (456 [67.4%]) of the women were assaulted by people known to them (Table 2). Of these, 344 (75.4%) knew the person more than 24 hours; in most cases it was a friend or acquaintance (213 [61.9%]) or a current or previous boyfriend or spouse (99 [28.8%]).

Table 1: Characteristics of female patients seen at the Sexual Assault Care Centre, Women's College Hospital, Toronto, from 1991 to 1993

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	Victim-assailant relationship; no. (and %) of patients			
Characteristic	Stranger $n = 221$	Known assailant $n = 456$		
Age, yr		8184		
≤ 15	7 (3.2)	11 (2.4)		
16–25	104 (47.1)	239 (52.4)		
26–45	93 (42.1)	188 (41.2)		
46–60	15 (6.8)	17 (3.7)		
> 60	2 (0.9)	1 (0.2)		
Mean age, yr	27.48	26.08		
Marital status				
Single	165 (74.7)	332 (72.8)		
Married or common law	29 (13.1)	59 (12.9)		
Divorced	27 (12.2)	65 (14.3)		
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Relationship	No. (and %) of patients	
Stranger (1997)	221	(32.6)
Known assailant	456	(67.4)
Known < 24 hours	112	(24.6)
Known > 24 hours	344	(75.4)
Acquaintance or friend	213	(61.9)
Current or previous boyfriend or spouse	99	(28.8)
Relative	18	(5.2)
Friend's relative	5	(1.5)
Employer	4	(1.2)
Client	3	(0.9)
Therapist or physician	1	(0.3)
Unknown	1	(0.3)

Assault characteristics

In both groups almost all of the assailants were male. Several features differed significantly between the two groups (Table 3). Most (84.3% [563/668]) of the victims were assaulted by one person, although the mean number of assailants was significantly higher in the group assaulted by strangers (t = -4.16, 314 degrees of freedom [df], p < 0.001). Strangers were more likely than known assailants to assault the woman more than once (t =-2.42, 355 df, p < 0.05). Most (65.6% [410/625]) of the cases, however, involved a single assault only. Victims of assaults by strangers were more often forced to commit

Table 3: Characteristics of assi	aults by victim-assail	ant relationship*	
oninanoinaismonalka saasi	Victim-assailant relationship; no. (and %) of patients		
	01	Known	
Characteristic	Stranger	assailant	
Sex of assailant	n = 220	n = 455	
Male	218 (99.1)	450 (98.9)	
No. of assailants	n = 217	n = 451	
1 (8 (3) 95() (1.5)	161 (74.2)	402 (89.1	
2	32 (14.7)	33 (7.3	
≥ 3	24 (11.1)	16 (3.5	
Mean no.	1.39	1.16†	
No. of assaults	n = 205	n = 420	
1 80.85 84	122 (59.5)	288 (68.6)	
2	49 (23.9)	88 (21.0)	
≥ 3	34 (16.6)	44 (10.5)	
Mean no.	1.63	1.45§	
Type of assault	n = 221	n = 456	
Vaginal	174 (78.7)	369 (80.9)	
Oral	51 (23.1)	64 (14.0)	
Anal	16 (7.2)	55 (12.1)	
Location of assault	n = 206	n = 373	
Victim's home	34 (16.5)	174 (46.6)	
Assailant's home	41 (19.9)	132 (35.4)	
Vehicle	51 (24.8)	34 (9.1)	
Park/outdoors	80 (38.8)	33 (8.8)	
Type of coercion	n = 220	n = 454	
Verbal	83 (37.7)	179 (39.4)	
Physical	78 (35.5)	125 (27.5)	
Confinement	137 (62.3)	242 (53.3)	
Victim sleeping/drugged	7 (3.2)	47 (10.4)	
Use of weapons	n = 212 51 (24.1)	n = 445 59 (13.3)	

Variable analyses were based on differing denominators as determined by missing data. $\pm n < 0.005$

fellatio than were victims of assaults by people known to them ($\chi^2 = 8.63$, 1 df, p < 0.005). There was a trend toward known assailants being more likely than strangers to commit anal assault ($\chi^2 = 3.69$, 1 df, p < 0.055).

Assaults by strangers occurred more frequently outdoors and in vehicles than did assaults by known assailants $(\chi^2 = 89.80, 1 \text{ df}, p < 0.001)$, whereas the latter occurred more often in the victim's home ($\chi^2 = 36.27$, 1 df, β 0.001) or the assailant's home ($\chi^2 = 8.46$, 1 df, p < 0.005).

Several characteristics revealed the presence of violence. Weapons were used in both types of assault (Table 3) but were used more frequently by strangers (χ^2 = 12.01, 1 df, p < 0.001). The type of coercion was also found to be related to victim-assailant relationship: strangers used physical coercion ($\chi^2 = 4.42$, 1 df, β < 0.05) and confinement ($\chi^2 = 4.84$, 1 df, p < 0.028) more frequently, whereas known assailants were more likely to assault women who were sleeping or drugged (χ^2 = 10.38, 1 df, p < 0.005).

Although most (451 [66.6%]) of the victims suffered some form of trauma or injury the mean number of trauma sites overall was greater among those assaulted by strangers (t = -4.29, 180 df, p < 0.001) (Table 4). Victims of assaults by strangers also suffered more softtissue trauma (t = -3.42, 675 df, p < 0.001), lacerations and abrasions (t = -2.45, 354 df, p < 0.015) and tenderness (t = -2.84, 373 df, p < 0.005). This is consistent with the finding that weapons and physical coercion were used most frequently by strangers. A small number of victims (12 [5.4%] of those assaulted by strangers and 28 [6.1%] of those assaulted by known assailants) reported experiencing other physical pain, but the difference was not significant between the two groups. Injuries necessitating admission to hospital occurred in 10 (4.5%) of the cases invoving assaults by strangers and 14 (3.1%) of those involving assaults by known assailants; again, the difference was not statistically significant.

Discussion

Our findings showed that even in a community-based urban population sexual assault by people known to the victims occurred twice as frequently as sexual assault by strangers. As in previous studies6 the victims of both types of assault in our study tended to be young, single women. Of the victims who knew their assailants approximately 28% were assaulted by current or previous boyfriends or spouses and not acquaintances or dates as is commonly thought.

In examining the characteristics of the sexual assaults we found both similarities and differences between the two groups. As reported in previous research with different samples⁷⁻⁹ several variables differed significantly be-

tween the groups, including frequency of more than one assault, the number of assailants, the performance of fellatio, the location of the assault, the use of weapons, nonverbal forms of coercion and the types of injury or trauma. Variables that did not differ significantly included the age and marital status of the victim, the occurrence of one assault only, the commission of vaginal assaults and the use of verbal threats.

Our results indicate that sexual assaults by strangers may involve greater violence and result in more injury than those by known assailants. Although most of the reported sexual assaults involved some form of physical coercion such as restraint or confinement, strangers used physical means of coercion as well as weapons more frequently than did known assailants and thus caused more physical injuries. This finding must be interpreted with

Table 4: Characteristics of physical trauma resulting from sexual assault, by victim-assailant relationship* Victim-assailant relationship; no. (and %) of patients Known Stranger assailant Characteristic n = 221n = 456Overall no. of trauma sites 54 (24.4) 172 (37.7) 1 51 (23.1) 105 (23.0) 2 36 (16.3) 75 (16.4) ≥3 80 (36.2) 104 (22.8) Mean no. 2.07 1.46† Soft-tissue trauma, no. of sites 0 99 (44.8) 285 (62.5) 1 70 (31.7) 89 (19.5) ≥ 2 52 (23.5) 82 (18.0) Mean no. 0.90 0.63‡ Lacerations/abrasions, no. of sites 142 (64.3) 319 (70.0) 1 49 (22.2) 107 (23.5) ≥2 30 (13.6) 30 (6.6) Mean no. 0.55 0.39§ Tenderness, no. of sites 142 (64.3) 344 (75.4) 1 51 (23.1) 77 (16.9) ≥2 28 (12.7) 35 (7.7) 0.53 0.35§ Injuries necessitating hospital admission, no. of patients

10

*Variable analyses were based on differing denominators as determined by missing data.

‡p < 0.005

(4.5)

14

(3.1)

caution because of the lack of information about the nature or seriousness of specific injuries. The total number of injuries may not accurately reflect the actual extent of injuries.

Few victims reported pain specifically, although the victims who did were equally likely to have been assaulted by a stranger or someone known to them. This raises a question about victims' subjective experiences of sexual assault. Are the psychologic sequelae of assaults by strangers different from those of assaults by known assailants? As indicated earlier, research supports the different perceptions of assaults by strangers and known assailants, but little systematic research exists about victims' own experiences. Some studies of assaults by people known to the victims¹⁵ have indicated that they are traumatizing and have serious effects on the victims. Further research focusing on the sequelae of assaults by strangers and known assailants and on victims' treatment needs is clearly needed.

Although we found several assault characteristics that differed significantly between the two groups, it is important to consider clinical as well as statistical significance. Our findings indicate that although assaults by strangers involved more and different types of violence, most of the victims of assaults by people known to them also resulted in physical injury and coercion. The nature of the victim-assailant relationship may result in different forms of threats and coercion. Only a minority of assaults by known assailants involved the use of weapons; however, the results show that weapon use does occur and may have serious consequences.

Our study has several limitations. The sample was drawn from a large urban centre. It is not known how victim, assault and assailant characteristics in an urban setting differ from those in other settings. Furthermore, it is not known what motivates victims to go to a sexual assault crisis centre following an assault. Although some victims receive help from specialized, hospital-based centres, others receive help from family physicians or counsellors, and still others do not report their assaults to anyone.

Our findings have a number of implications for physicians. It is well known that many victims of sexual assault see a physician for care following an assault and are users of the health care system for various lengths of time.20-22 It is also documented that such women have an increased likelihood of having a variety of health-related problems including chronic diseases, medically explained and unexplained somatic symptoms, and functional limitations.23 A recent commentary in the Journal of the American Medical Association²⁰ noted that physicians often fail to recognize injuries as stemming from abuse and are apt, therefore, to treat injuries only symptomatically. It is important that misconceptions about the nature and sequelae of sexual assaults do not interfere with offered treatments and care. The tendency to view sexual assaults by known assailants as "less serious" than those committed by strangers has led to a lack of appropriate services for some victims. Approximately 25% of the assaults by people known to the victims in our study were committed by current or previous boyfriends or spouses, and these assaults may be as serious as those committed by strangers.

The finding that a large proportion of the sexual assaults were committed by people known to the victims has a number of implications. The terms "acquaintance rape" or "date rape" may, in fact, not represent a significant proportion of victims who are assaulted by people they know well. These terms may also discourage women from reporting assaults by sexual partners and others close to them because their experiences have not been accurately identified and named.

The nature of the victim—assailant relationship is known to influence perceptions of the seriousness and sequelae of the sexual assault. Although some of the assault characteristics of the two groups in our study differed significantly, similarities also emerged. It is important for health care providers in sexual assault crisis units and in community-based offices to know about all aspects of sexual assaults.

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