6 Literature Review

This provides an overview of the sexual assault research, practices, and protocols that were reviewed by the Task Force. Consistent with our tasking, this review focuses upon information of direct relevance to care for victims of sexual assault. There is an equally large body of relevant sex offender research that was is not included, given the time limitations and the Task Force mandate to address victim care. The literature reviewed and discussed here is intended to be illustrative rather than exhaustive.

Definition

In the 1970s and 1980s, extensive rape reform laws were enacted throughout the United States, and the legal definition of "rape" changed dramatically. Currently, the Illinois criminal sexual assault statute is considered a national model. The statute has the following characteristics:

- Rape is defined as "gender neutral," to include men as well as women.
- It includes acts of sexual penetration other than vaginal penetration by a penis, such as oral or anal penetration.
- Types of sexual abuse are distinguished on the basis of the degree of force or threat of force used similar to the "aggravated" versus "simple" assault distinction with physical assaults.
- Threats as well as overt force are recognized as means to overpower the victim.
- A new category of rape victim is included, entitled "taking advantage of an incapacitated victim." Incapacitation may include mental illness, victims under the influence of drugs, and alcohol intoxication.

Prevalence

General Population

There are several national surveys that provide information about the prevalence of sexual assault within the United States. The National Crime Victimization Survey (NCVS) is conducted annually by the Department of Justice. Using in-person and telephone interviews, information on reported and unreported crime is collected from a representative sample of approximately 40,000 households. All individuals in the household ages 12 and over are sampled. In 2002, there were 240,730 rape/sexual assault victimizations among U.S. residents age 12 and over. In the NCVS, rape includes forced oral, anal or vaginal penetration by the offender. Sexual assault covers a wide range of victimizations distinct from rape or attempted rape that generally include completed or attempted attacks involving unwanted sexual contact. Sexual assault may not involve force and includes such things as grabbing, fondling or verbal threats. The rate of all types of sexual assault (i.e., rape, attempted rape, and sexual assault) was 110 per 100,000 persons. Averaging across 2001 and 2002, the annual rates of rape/attempted rape and sexual assault were 70 and 40 per 100,000 persons, respectively (Rennison and Rand 2003). Some researchers believe that the

methodology used in the NCVS may underestimate the actual prevalence of rape/sexual assault (Fisher et al. 2000).

The National Violence Against Women (NVAW) survey was conducted in 1995 and 1996. A total of 8000 women and 8000 men, age 18 and over, were interviewed over the telephone about their lifetime and annual experiences of attempted rape/rape, physical assault and stalking. Approximately 18% of women and 3% of men surveyed reported that they had experienced rape/attempted rape at some point in their life. This equates to 17.7 million women and 2.8 million men. With respect to the prior 12 months, one-third of one percent of women and one-tenth of one percent of men reported experiencing a rape or attempted rape. Projecting to the U.S. population, 302,091 women and 92,748 men experienced rape/attempted rape in the prior 12 months (Tjaden and Thoennes 2000). Although direct comparisons are difficult due to substantially different methodologies, it is possible that the NVAW survey may have resulted in higher rates of rape/attempted rape than comparable-year NCVS data because the NVAW survey used a greater number and more specific screening questions, both of which are thought to increase disclosure.

The National Women's Study (NWS) consisted of a national household probability sample of 4008 women who were interviewed by telephone initially and twice later, at one and two years. Rape was defined as nonconsensual sexual penetration of any kind that involved force or threat of force. It was consistent, as defined, with the legal definition of forcible rape in the U.S. Code. An estimated 12.1 million women reported being raped at some point in their life. Over half (56%) reported being raped once, while 39% reported more than one rape and 5% were unsure how many times they were raped (Kilpatrick 1997).

The Federal Bureau of Investigation (FBI) reports annually on crime reported by state and local law enforcement agencies. Forcible rape, as defined in the Uniform Crime Reporting (UCR) program, is defined as carnal knowledge of a female forcibly and against her will. It includes assault or attempts to commit rape by force or threat of force. Rapes by force and attempts or assaults to rape are included, regardless of the age of the victim. Carnal knowledge is not otherwise defined in published materials. In 2002, there were 95,136 forcible rapes/attempted rapes reported by law enforcement agencies. This constitutes a rate of 33 rapes/attempted rapes per 100,000 population. However, given that the UCR does not include the rape/attempted rape of males in rape numbers, it is perhaps more representative to calculate UCR prevalence rates using female population figures. As such, the 2002 rate of reported rape/attempted rape is 64.8 per 100,000 females. Of the total, 91% were classified as rapes, with the remainder classified as attempted rapes (FBI 2002).

Military Population

While not necessarily representative of the current active duty population, research with veterans provides one source of information about sexual assault within military populations. In one study, a random sample of over 2100 women veterans who served in the Vietnam and Persian Gulf eras were selected from the Department of Veterans Affairs women's health care registries (Sadler et al., 2003). For the purposes of this study, rape included any act of attempted or completed sexual penetration without the individual's consent, involving the use or threat of force.

Of the 558 women who were then interviewed, 28% experienced one or more rapes/attempted rapes during military service. Over one-third of these women indicated they experienced rape/attempted rape at least twice while serving. There was no significant difference in the occurrence of rape/attempted rape between the two eras of service. Given that 66% of the sample had a service-connected disability, it is important to note that respondents may not have been representative of female veterans as a whole or of those currently serving in the military. It was unclear in the study to what extent disability status varied for those who were and were not sexually assaulted while serving in the military.

Since 1992, federal law has authorized the Veteran's Administration (VA) to provide counseling and treatment for military sexual trauma. By definition, this includes both sexual harassment and sexual assault occurring during military service. Sexual harassment is defined as any repeated, unwelcome sexual behavior such as offensive sexual remarks, unwanted sexual advances, or pressure for sexual favors occurring in the workplace. Sexual assault is defined, as any sort of sexual activity in which one person is involved against his or her will, with or without physical force. Of the almost 3 million veterans screened between March 2002 and October 2003, approximately 20.7% of females and 1.2% of male veterans screened positive for a history of military sexual trauma (Veterans Administration, unpublished data).

In another study of over 3600 female veterans (mean age of 48 years) who had at least one ambulatory visit at a VA facility between July 1994 and June 1995, 55% of the women reported they were sexually harassed while in the military, while 23% reported that they were sexually assaulted (Skinner et al. 2000).

Although anonymous survey data within the military is limited, the Armed Forces 2002 Sexual Harassment Survey provides at least preliminary information on the prevalence of sexual assault among military personnel (Lipari and Lancaster 2003). Active duty respondents were asked if they experienced at least one incident of sexual assault involving military personnel, civilian employees or contractors in the prior 12 months. Sexual assault included both attempted and completed sexual assault. Attempted sexual assault was defined as "attempted to have sex with you without your consent or against your will, but was unsuccessful" whereas sexual assault was defined as "had sex with you without your consent or against your will." Across DoD, 3% of females and 1% of males reported experiencing at least one incident of sexual assault in the prior 12 months. Given differences in definition and survey methodology, comparisons with civilian survey data are not possible and would be irresponsible.

Using 1995 DoD sexual harassment survey data, Harned and others (2002) reported that 4.2% of the over 22,000 active duty women surveyed reported experiencing sexual assault by workplace personnel. The most common type of sexual assault was attempted rape (2.5%), followed by attempted and completed rape (1.3%) and completed rape (.4%).

In a study of Navy recruits who were initially surveyed during basic training and then followed for two years, 7.5% of females reported experiencing behaviors that constituted rape within 6 months of entering the Navy. Active duty members were reported to have perpetrated over 80% of these rapes. Among males , 2.6% admitted to behaviors that

constituted rape within 6 months after entering the Navy, with 27% of those rapes perpetrated against active duty victims (L.L. Merrill, unpublished data).

In response to this Task Force, the Services were asked to provide the total number of alleged sexual assaults involving service member victims reported to criminal investigations for 2002 and 2003. Sexual assault included rape, forcible sodomy, indecent assault, and any attempts of these offenses. The Services reported a total of 1007 victims in 2002 and 1113 in 2003. This translates to prevalence rates of 69.1 and 70 alleged sexual assaults per 100,000 active duty members for 2002 and 2003, respectively. Again, because of differences in sampling and definition, comparisons with civilian crime reports are not possible and would be irresponsible.

Risk Factors for Sexual Assault

Age

Research has consistently demonstrated that youth are at greater risk of sexual assault. In the 2002 NCVS, the rates of rape/sexual assault for ages 12-15, 16-19 and 20-24 were 210, 550 and 290 per 100,000 persons, respectively. In contrast, the rates of rape/sexual assault for persons ages 25-64 varied from 20 (ages 50-64) to 60 (ages 25-34) per 100,000 persons. Examining NCVS data for 1992 to 1994, minors (i.e., ages 12-17) represented 10% of the population, but 20% of rape/sexual assault victims. Individuals who were 18-24 represented 12% of the population, but 35% of rape/sexual assault victims (Perkins 1997). Analyzing NCVS data from 1995-2000, Hart (2003) found that the average rate of rape/sexual assault among college students was almost 3 times higher than the average overall rate of rape/sexual assault for those same years. Notably, the rate of rape/sexual assault among college students was not higher than non-students, ages 18-24.

In the National College Women Sexual Victimization (NCWSV) study, a random sample of almost 4500 women attending two or four-year colleges were interviewed during the spring of 1997. Using behaviorally specific screening questions similar to the NVAW survey, around 2.8% of the sample experienced rape/attempted rape sometime during the academic year. This constituted a rate of 2770 victims per 100,000 female college students. Higher rates of victimization were thought to be attributable to the use of more behaviorally specific questioning. Notably, when data was collected in a comparison sample using a method similar to NCVS, only .34% of the sample reported rape/attempted rape during the academic year, which translated to a rate of 340 per 100,000 female college students (Fisher, Cullen, and Turner 2000). Nevertheless, the comparable rate for rape/attempted rape in the 1997 NCVS was 90 per 100,000 persons age 12 and older.

In the NWS, approximately 62% of the women surveyed reported that they were under the age of 17 at the time of the rape, 22% were between the ages of 18 to 24 and 12% were 25 and older (Kilpatrick 1997). Likewise, 54% of female and 71% of male respondents to the NVAW survey were age 12-17 at the time of their first rape, while 29% of females and 17% of males were ages 18 to 24 (Tjaden and Thoennes 2000).

In response to the Task Force, the DON and Air Force provided frequency data for the age of the victim for cases reported in 2002 and 2003. On average, victims, age 17-24,

represented 87% of all Air Force active duty victims and 85% of all DON active duty victims for 2002 and 2003. The mean age of Army victims for 2002 and 2003, respectively, was 22 and 23 years.

Victim-Offender Relationship

Contrary to the stereotype, sexual assault is more likely perpetrated by an acquaintance than a stranger. Friends or acquaintances perpetrated a little over half (52%) of the rape/sexual assaults against males in the 2002 NCVS, with the remainder perpetrated by strangers. In the case of female victims, 57% of the rapes or sexual assaults were perpetrated by friends or acquaintances, while 10% were perpetrated by intimate partners, 2% by other relatives, and the remainder (28%) perpetrated by strangers (Rennison and Rand 2003). Women were significantly more likely than men to be a victim of attempted rape/rape by an intimate partner during their lifetime. In this study, intimate partners included current and former spouses, cohabiting partners, boyfriends/girlfriends and dates (Tjaden and Thoennes 1998).

Among college students, an average of 74% of rapes/sexual assaults were perpetrated by offenders known to the victim from 1995 to 2000 (Hart 2003). According to NCWSV data, college women who experienced rape/attempted rape knew 9 in 10 of the offenders. For over two-thirds of the completed rapes, the offender was a classmate or friend. In almost 24% of the completed rapes, the offender was a current or former boyfriend (Fisher, Cullen, and Turner 2000).

Among Navy female recruits who reported a pre-military history of rape and male recruits who reported pre-military perpetration of rape, the most common relationship reported between the victim and perpetrator were boyfriend/girlfriend or acquaintance (L.L. Merrill, unpublished data).

Alcohol Use

Research with different samples (e.g., convicted rapists, community samples, college samples) has found that approximately half of sexual assaults are associated with alcohol use by either the perpetrator or victim (Abbey et al. 2003). In most research, perpetrator and victim alcohol use are typically strongly and positively correlated. Other research has indicated that drinking by both the offender and victim may be more common in sexual assaults where victims are less well acquainted with the perpetrator prior to the assault (Ullman and Brecklin 2000). In the NCWSV study, one of several factors that consistently increased the likelihood of each type of sexual victimization for college women was frequent drinking to intoxication (Fisher, Cullen, and Turner 2000).

Data provided by two of the Services indicated that the use of alcohol was associated, on average, with 50% of alleged sexual assault cases involving service member victims during 2002 and 2003. For the available data from CENTCOM AOR, the percentage ranged from 20% to 26%.

Aside from the presence of alcohol use in sexual assault, the relationships between alcohol use and other assault characteristics and outcomes are complicated. When offender and victim drinking are examined as discrete variables, findings are mixed with respect to the relationships between variables such as alcohol use, perpetrator aggressiveness, rape

completion, and injury. Findings also vary depending upon whether males or females are studied.

Examining data from the NVAW survey, Brecklin and Ullman (2002) found that offender drinking was associated with an increased likelihood of rape, but was unrelated to physical injury or medical care outcomes. Neither victim alcohol use at the time of the incident nor during the past-year was significantly related to the assault outcomes examined. After reviewing the literature, Abbey and others (2003) have suggested and tested the hypothesis that the quantity of alcohol consumed may have a curvilinear relationship to different assault variables. However, they found perpetrator alcohol use to be positively and linearly related to aggressiveness, but curvilinearly related to the type of assault committed. That is, the likelihood of more severe sexual assault outcome was associated with moderate alcohol use (i.e., 4-9 drinks) by perpetrators. Victim alcohol consumption during the assault (as reported by the males) was linearly and positively related to the severity of sexual harassment.

Prior Sexual Assault

A substantial body of research studying different populations has consistently found that women who report adult sexual victimization are more likely to report a history of childhood sexual abuse (Siegel & Williams 2001). In the NVAW survey, Tjaden and Thoennes (1998) found that 18% of respondents who indicated that they had been sexually abused as children were victims of rape/attempted rape as adults, in contrast with 9% of women who denied childhood sexual abuse.

Among female Navy recruits, those who experienced childhood sexual abuse prior to age 14 were five times more likely than those who did not to report experiencing adult rape prior to entering the military (Merrill et al. 1999). Childhood sexual abuse was defined as sexual contact with a person at least 5 years older than the participant at the time of the abuse. Male recruits who experienced childhood sexual abuse (CSA) were twice as likely to report that they committed rape prior to the military as those who did not report CSA. Participants who reported committing rape did so by indicating that they engaged in behaviors consistent with legal definitions of rape. However, those who experienced both childhood physical and sexual abuse were four to six times more likely to report committing rape prior to the military than those who reported neither form of child maltreatment (Merrill et al. 2001).

Likewise, women veterans who joined the military before the age of 20, who were of enlisted rank (regardless of age) or who experienced childhood physical or sexual violence prior to the military were at least twice as likely to experience rape during their military service (Sadler et al. 2003).

A history of prior sexual assault was found to increase the likelihood of all types of sexual victimization for college women (Fisher, Cullen and Turner 2000).

Military Workplace Factors

Using causal modeling techniques, one study examined several theoretical antecedents of sexual assault and sexual harassment among over 22,000 active duty women. It was found that low sociocultural power (i.e., age, education, race/ethnicity, marital status) and low organizational power (i.e., pay grade and years of active duty service) were associated with an

increased likelihood of both sexual assault and sexual harassment. However, the organizational climate (defined as perceived efforts by the military to enforce harassment policies, to provide services to victims, and to provide training on harassment) and the degree to which respondent's job was traditional, were not directly related to sexual assault. (Harned et al. 2002).

In a retrospective study of women veterans, the likelihood of rape during military service increased for those who:

- reported hostile work environments (six fold increase)
- experienced unwanted sexual advances, remarks or pressure for dates in sleeping quarters (three fold increase)
- observed the heterosexual activities of others in military sleeping quarters (three fold increase for Viet Nam era; four fold increase for Post Gulf War era)

In addition, when ranking officers or immediate supervisors engaged in quid pro quo behaviors and initiated or allowed sexually demeaning comments or gestures toward female soldiers, the likelihood of rape during military service increased (Sadler et al. 2003).

Prevention

Although a plethora of prevention programs have been designed to decrease the prevalence of sexual assault in college populations, few programs have been empirically evaluated. Most common are psychoeducational programs that use formats directed toward female-only, male-only or mixed gender groups.

In a 1999 review of research in this area, Yeater and O'Donohue concluded that there were a number of methodological and conceptual problems in the literature. These problems included, among others, the lack of information on type of programming and length of time changes are expected to last, failure to evaluate the verbal competence of participants, and the lack of replication. Perhaps most important, however, was the lack of outcome research demonstrating that the likelihood of sexual assault decreased for participants. Only one prospective study reviewed at the time demonstrated a reduction in sexual assault among participants. In particular, Hanson and Gidycz (1993) demonstrated a statistically significant decrease in rates of sexual assault over a nine-week period for college women who did not report a prior history of sexual victimization. The intervention was also noted to be effective in increasing knowledge regarding sexual assault and altering dating behaviors found to be highly correlated with rape.

In a meta-analytic review of 72 studies, traditional gender role beliefs, adversarial sexual beliefs, needs for power and dominance, aggressiveness and anger predicted rape acceptance, which was generally higher in men (Anderson, Cooper, and Okamura 1997). It was also noted that cognitive predispositions toward perpetrating rape were also strong predictors of rape acceptance Another meta-analysis of 39 studies found that masculine ideology was related to sexual aggression, with the largest effect sizes found for hostile masculinity and hyper-masculinity (Murnen, Wright, and Kaluzny 2002).

Experts whom the Task Force consulted recommended gender-segregated, small-group educational programs that include information on recommended actions for people who

have been sexually assaulted. Programs should also be experiential, variable in format to appeal to different adult learning styles, and developmentally appropriate to the audience. Programs should focus on socialization and positive messages about healthy relationships. Efforts that are intensive, long-term and periodically repeated to reinforce the message are best. Programs with young men should include victim empathy, consent modeling and bystander intervention components. Finally, any programs developed should include outcome evaluation.

Finally, there is growing opinion that sexual violence should be viewed and addressed as a public health problem (Basile 2003). A public health approach typically includes four steps of:

- surveillance (to better understand the incidence, prevalence and associated risk factors)
- identifying causes,
- development, and evaluation of programs,
- dissemination and implementation.

An ecological approach toward prevention is recommended that focuses upon personal history of each individual involved, the microsystem of the victim-offender, the social structures and institutions in which the relationship is embedded (i.e., exosystem), and the larger society and culture (i.e., macrosystem). Basile noted that most preventive efforts to date have focused on the individual and microsystem levels only and that there is generally a lack of evaluation with respect to what does and does not work.

Reporting

Sexual assault is probably the most underreported crime in America. From 1992 to 2000, NCVS data indicated that a majority of rapes and sexual assaults against females were not reported to police. About a third of all rapes and attempted rapes were reported to the police, in contrast with roughly a quarter of sexual assaults, as defined in the prevalence discussion. When rape was reported, the victim most often made the report. When victims of rape, attempted rape or sexual assault did not report the crime to police, the most commonly cited reason was that it was a personal matter. Fear of reprisal was another common reason for not reporting to police. There was a negative relationship between the closeness of the victim-offender relationship and the likelihood the crime would be reported to police. In other words, sexual assaults by strangers were most likely to be reported to police (Rennison 2002).

Analyzing NCVS data from 1992 to 1994, incidents were more likely to be reported to police if they resulted in physical injury or the offender used a weapon (Backman 1998). In 2002, 54% of the rape/attempted rape and sexual assaults reported by NCVS participants were reported to the police (Rennison & Rand 2003). Given the fluctuation in rape reporting from year to year by NCVS respondents, it is difficult to know whether this represents a trend toward increased reporting.

In a national sample of college women, less than 5 % of the rapes/attempted rapes were reported to law enforcement. However, in about two-thirds of the rapes, victims told someone, most often a friend. Incidents that were most likely to be reported to police or

authorities if the assault had characteristics that made them more believable, such as the use of a weapon or involving a stranger perpetrator and were less likely to be reported if substances were involved (Fisher et al. 2003b).

Reasons these women commonly cited for not reporting the incident included not wanting family or others to know, being unclear that the rape/attempted rape was a crime, not thinking it was serious enough to be reported, and fear of reprisal by the assailant or others. Likewise, roughly two-thirds of women raped within the past five years reported concerns about their family or others knowing, about their name being published and about being blamed for the rape (Kilpatrick 1997).

Notably, only 46% of college women who were victims of rape labeled their experience as rape. While some might conclude that college women generally mislabel their sexual victimization experiences, further analysis did not suggest a tendency to label a victimization experience as rape when in fact the experience did not constitute rape (Fisher et al. 2003a).

In a national survey of organizations providing crisis counseling to rape victims, recommended actions and activities to increase women's willingness to report rape to police were as follows:

- Educate the public about acquaintance rape.
- Pass laws protecting confidentiality and disclosure of victims' names.
- Expand counseling and advocacy services.
- Provide mandatory HIV testing for indicted defendants.
- Provide free pregnancy counseling and abortions.
- Provide confidential, free testing for HIV and STDs (Kilpatrick, Edmunds, and Seymour 1992).

In a recent review of sexual assault programs on college campuses, Karjane, Fisher and Cullen (2002) found that 84% of the institutions offer sexual assault victims confidential reporting options and 46% offer anonymous reporting.

Given the privacy concerns of many sexual assault victims, the Department of Justice (2002) has concluded that there is a critical need to protect a crime victim's confidential counseling communications. Victim counselors and advocates are typically not covered in most states by the testimonial privilege that is extended to psychotherapists and their patients. As a result, DOJ has proposed model legislation that covers "…any communication, either written or spoken, between a victim and a victim counselor that is communicated in private in the course of the counseling relationship or in the presence of a third party who is present to facilitate communication or further the counseling process." In 2002, more than half of the states have passed laws extending privilege to sexual assault and domestic violence counselors. The extent to which the communication is privileged under existing state laws falls into one of three categories including absolute (i.e., protects virtually all communications), semi-absolute (i.e., authorizes disclosure in limited situations such as when disclosure is in the public interest), and qualified (i.e., authorizes disclosure if appropriate when the court uses a balancing test to determine relevance).

Response

Medical Care

NCVS data for 2002 indicated that a weapon was least likely to be used in the commission of rape and sexual assault, compared to the other categories of violent crime. A weapon was used in 7% of the rapes/sexual assaults reported in 2002, with a firearm used in 4% of the incidents and a knife used in 2% (Rennison 2003). A weapon, mostly commonly a knife, was used in 5% of the rapes and sexual assaults perpetrated against college students from 1995 to 2000 (Hart 2003). Despite the fact that the perpetrator may not use a weapon during the sexual assault, almost half of the NWS respondents surveyed indicated that they feared serious injury or death during the rape (Kilpatrick 1997).

With respect to injury, women were twice as likely as men (32% vs. 16%) to self-report that they sustained an injury other than the rape itself. Almost three-quarters of male and female victims who reported injury sustained relative minor injuries such as scratches, bruises and lacerations. However, more serious injury (i.e., broken bones, head or spinal cord injuries or internal injuries) was reported in at least 14% of rape victims (Tjaden and Thoennes 2000).

Analyzing NCVS data from 1992 to 2000, Rennison (2002) found that 39% of attempted rapes and 17% of sexual assaults against female victims, on average, resulted in injury. By definition, all rape victims were considered injured. Minor injury constituted 33%, 26% and 9% of the rapes, attempted rapes and sexual assaults, respectively. Likewise, minor injury was reported in 24% of the NWS respondents who were raped, with serious injury reported in 4% (Kilpatrick 1997). Notably, the risk of injury increased for female rape victims if:

- the perpetrator was a current or former intimate partner and used drugs or alcohol at the time of the rape
- the rape occurred in the victim's or perpetrator's home
- the rape was completed
- the perpetator used a weapon or threatened to harm or kill the victim or someone close to them

The risk of injury decreased for female rape victims if the victim used drugs and/or alcohol at the time of the incident (Tjaden and Thoennes 2000).

Data from several sources indicated that only about one-third of injured sexual assault victims seek medical treatment for their injuries. Outpatient treatment in a hospital was most common (Rennison 2002; Tjaden and Thoennes 2000). It was estimated that hospital emergency departments treated approximately 130,000 female rape victims in the preceding 12 months (Tjaden and Thoennes 2000). Victims who reported a rape to police (59%) were more likely to receive medical treatment than those who did not (17%). The same trend was true for injuries sustained during attempted rape and sexual assault (Rennison 2002).

Despite the fact that most female victims do not seek medical treatment, about half of them report medical concerns in relation to the recent rape, such as fear of contracting HIV/AIDS (42%), contracting STDs (49%) and unwanted pregnancy (51%) (Kilpatrick 1997). In a small sample of women (N=62), just over 90% of rape victims reported at least some degree of initial fear of contracting HIV, with 72% reporting extreme fear or concern.

Not surprisingly, extremely fearful women were more likely to have been raped by strangers. The degree of fear was not a function of the intensity of their post-traumatic stress symptoms at the time (Resnick et. al 2002).

In another study, factors associated increased the likelihood of receiving post-rape medical care included the degree of fear of death or injury experienced during the assault and fear of contracting STDs or HIV/AIDS. Use of drugs or alcohol decreased the likelihood of post-rape medical care (Resnick et al. 2000).

With respect to sexual assault forensic examination, reported rates of genital injury may vary depending upon the mechanism used for genital examination. In a review of the literature, Sommers et al. (2001) reported that rates of genital and nongenital injury after rape vary from 5% to 87%. The use of direct visualization results in the lowest rates of injury (5% to53%) while the use of colposcopy resulting in the highest rates (68% to 87%). Colposcopy allows the examiner to visualize microscopic genital injury that is missed with direct visualization. The authors discussed the most common locations for genital injury in sexual assault and noted that anal penetration and age was positively associated with higher rates of injury. Several studies reviewed found that nongenital injury (e.g., of the extremities, trunk, face, head, neck) was more common than genital injury. With respect to practice implications, the authors noted that:

- sexual assault examinations need to include examination of the entire body for injury in addition to gynecological examination
- examination of the external genitalia is perhaps more important than internal examination following sexual assault
- direct visual examination does not provide sufficient detail needed for forensic examination
- illumination and magnification with colcoscopy is the technique of choice

Policy and research implications were also discussed by Sommers and others.

As noted above, sexual assault victims have typically received medical services in hospital emergency departments, where they have often been subjected to long waits and chaotic environments that may compound the victim's trauma and result in deteriorated evidence. In response and as the science of forensic examination has improved and become more specialized, communities have increasingly developed Sexual Assault Nurse Examiner Programs (SANE) (Ledray 2001; Ahrens et al. 2000). SANE programs were developed to improve the treatment of sexual assault victims through explicit, sensitive attention to victims' medical, emotional and legal needs. While there is little controlled research demonstrating the efficacy of SANE model, much anecdotal information exists to suggest that SANE programs improve the community response to sexual assault (Little 2001). For example, one study suggested that the presence of forensic evidence doubled the likelihood of prosecution (Lindsey 1998).

Several protocols and reports with respect to collection, preservation and analysis of forensic evidence have been published (FBI; Gaennsslen and Lee 2002). In accordance with the Violence Against Women Act, the DOJ is in the process of developing a National Protocol for Sexual Assault Forensic Exams. The goals of the protocol are to ensure that all victims

receive the same high quality medical and forensic exam, while being treated with respect and compassion. The protocol is currently being vetted within DOJ and is expected to be available in final form within the next few months.

Emotional and Psychological Support

It is widely believed that rape is perhaps the most traumatic of violent crimes on victims (excluding murder). Some research has focused on perceived support of the victim when informal and formal support is sought. For example, in a relatively small sample of sexual assault victims (N=155), researchers found that tangible aid and information was more commonly reported by victims with respect to support received from formal support providers, such as rape crisis centers, police and physicians. Emotional support and validation was more commonly reported by victims disclosing to rape crisis centers, when compared to telling informal supports such as friends and relatives. However, emotional support from friends was related to better recovery than when emotional support was received from others. In contrast, feeling blamed, being treated differently and being discouraged from talking about the sexual assault were more common responses reported by victims with when disclosing to physicians or the police (Ullman 1996).

In another study, a majority of rape survivors who reported their assault to the medical system did not receive needed services in terms of information about pregnancy prevention or information about STDs, although they did receive antibiotic treatment. In contrast, victims who sought services through contact with the mental health system, rape crisis centers or through their religious community generally perceived those services as beneficial (Campbell et al. 2001).

Ahrens and Campbell (2000) found that when victims disclosed a sexual assault to their friends, those friends reacted positively, did not blame the victim, were not distressed by helping, felt that their efforts to assist the victim were effective and believed their friendship with the victim grew closer. However, this positive picture did not hold true for all friends studied.

In a national survey of women, roughly a third of rape victims reported that they had contemplated suicide or experienced Post-Traumatic Stress Disorder (PTSD) or Major Depression, in contrast with less than 10% of women who were not victims of crime. Thirteen percent of rape victims attempted suicide, in contract with 1% of non-crime victim women (Kilpatrick 1997). Other research has suggested that 94% of all rape victims reporting a recent rape to authorities will meet criteria for PTSD two weeks the rape (Rothbaum et al. 1992.)

Given the prevalence of PTSD in association with sexual assault, there are several behavioral and cognitive behavioral treatments that have been empirically evaluated and found to be effective. Stress inoculation training is designed to treat fear and anxiety associated with sexual assault. It consists of three phases, education, skill building and application and has been found in a controlled study to reduce PTSD symptoms (Foa et al. 1991). Prolonged exposure has also been found to be an effective treatment for rape victims with PTSD (Foa et al. 1991).

Investigation and Prosecution

For 2002, the UCR program reported that approximately 44% of forcible rapes or attempted rapes toward females were cleared by arrest or exceptional means (i.e., the offender was identified and sufficient evidence was gathered to support an arrest, but circumstances outside the control of law enforcement prohibited arrest). There were roughly 28,300 arrests for forcible rape in 2002.

In 2000, there were 31,500 felony convictions in state courts for rape/other sexual assault. Of those convicted, 84% were sentenced to incarceration in prison or jail. The average maximum sentence for rape was 136 months for those sentenced to prison and 8 months for those sentenced to be incarcerated in jail (Durose and Langan 2003). Analyzing 1990 data from six states, felony prosecution was sought for 80% of those arrested for rape. Of those, 48% resulted in conviction. Forty percent were convicted of a felony offense, while 6% resulted in misdemeanor conviction. Of the 32% not convicted, 29% were dismissed, while 2% were acquitted (Greenfield 1997). In 1992, the average sentence for those convicted of felony rape varied from 139 months, when a guilty plea was entered, to 292 months, when conviction resulted from a jury trial. In contrast, the average sentence for all convicted rapists was 128 months in 1990 and 124 months in 1999. The percentage of sentence served for 1990 was 46%, in contrast with 53% in 1999 (Greenfield, unpublished data).

Of the nearly 10,000 sex offenders released from state prisons in 1994 and then followed for three years, rapists and sexual assaulters had lower rates of re-arrest than non-sex offenders. However, among violent offenders, the relative likelihood of re-arrest for the same offense was highest for sex offenders (Langan 2003).

Notably, there is some research to suggest that intoxication by the victim or offender may influence police evaluation of the incident and jurors' perception of guilt. Schuller and Steward (2000) provided vignettes of acquaintance rape to 212 police officers. The officer's perception of the victim's intoxication influenced evaluation of the assault, particularly for male officers. However, the only factors related to the likelihood of charging the alleged offender were the victim's credibility and the likelihood of conviction. In another study, participants were provided a description of a sexual assault trial in which the intoxication of the parties was varied. When the victim was sober and the defendant was intoxicated, harsher judgments were rendered, particularly when the defendant was extremely intoxicated. However, when the victim was reported to be extremely intoxicated, defendant intoxication did not exert any discernable impact on participant judgments (Wall and Schuller 2000).

In a study of charging decisions, Spohn and Holleran (2001) found that prosecutors were less likely to file charges in acquaintance rape cases if there were questions about the victim's character or behavior at the time of the incident. Charges were more likely to be filed in stranger rape cases if the offender was armed or the victim was Caucasian.

Team-based Approaches

It is generally recognized that the response to sexual assault is most effective when there is a coordinated community response. The Sexual Assault Response Team (SART) is generally recognized as a model. At a minimum, the SART includes a SANE or medical provider who

is trained in the collection of forensic evidence, an advocate, a law enforcement officer and a prosecutor. Other members may include domestic violence victim advocates, state crime laboratory personnel, clergy, and social services staff. While specific implementation of these response teams may vary, integrated approaches like SART are thought to best meet the needs of victims, while insuring the best possible collection of forensic evidence and more effective prosecution. Although little controlled research exists on the efficacy of the SART model, there is considerable testimonial and anecdotal information to suggested that coordination increases effectiveness (Ledray 2001).

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Acronyms

AFOSI	Air Force Office of Special Investigations
AOR	Area of Responsibility
C2	Command and Control
CAIB	Community Action Information Board
CENTCOM	U.S. Central Command
CJTF-7	Combined Joint Task Force 7
COCOM	Combatant Command
CONUS	Continental United States
CSH	Combat Support Hospital
DIBRS	Defense Incident Based Reporting System (DoD)
DoD	Department of Defense
DoD(IG)	Department of Defense Inspector General
DON	Department of the Navy (refers to Navy and Marine Corps)
EO	Equal Opportunity
ER	Emergency Room
FAP	Family Advocacy Program (All Services)
FLETC	Federal Law Enforcement Training Center
GMT	General Military Training
IDS	Integrated Delivery Services
IHE	Institutions of Higher Education
JAG	Judge Advocate General
JAGC	Judge Advocate General Corps
MCM	Manual for Courts-Martial
MOU	Memorandum of Understanding
MRE	Military Rule of Evidence
MVP	Mentors in Violence Prevention
NCIS	Naval Command Investigative Services
NCO	Non-commissioned Officer
OASD(HA)	Office of the Assistant Secretary of Defense for Health Affairs
OASD(RA)	Office of the Assistant Secretary of Defense for Reserve Affairs
OCONUS	Outside the Continental United States
OEF	Operation Enduring Freedom
OGC	Office of the General Counsel
OIF	Operation Iraqi Freedom
OPTEMPO	Operational Tempo
OSD(LA)	Office of the Secretary of Defense, Legal Affairs
OSD(PA)	Office of the Secretary of Defense, Public Affairs
OUSD(FAP)	Office of the Undersecretary of Defense Family Advocacy Program
OUSD(P&R)	Office of the Undersecretary of Defense for Personnel and Readiness
PACOM	U.S. Pacific Command
POC	Point of Contact
RCM	Rule for Courts-Martial
RAINN	Rape, Abuse, and Incest National Network

SA	Sexual Assault
SAFE	Sexual Assault Free Environment (an Air Force program in Kunsan)
SANE	Sexual Assault Nurse Examiner
SARB	Sexual Assault Review Boards
SART	Sexual Assault Response Team
SAVI	Sexual Assault Victim Intervention (a Dept of Navy Program)
SITREP	Situation Report
SJA	Staff Judge Advocate
UCMJ	Uniform Code of Military Justice
USACID	United States Army Criminal Investigations Division (CID for short)
USACISL	United States Army Criminal Investigation Laboratory
USAMEDCOM	United States Army Medical Command
USUHS	Uniformed Services University of Health Sciences
VWAP	Victim Witness Assistance Program